The AusIMM Awards Recipients

Contents

The Institute Medal President's Award Honorary Fellowships Beryl Jacka Award Mineral Industry Operating Technique Award (MIOTA) Renamed Mineral Industry Technique Award (MITA) OH&S Award (Introduced in 2001) Jim Torlach Health and Safety Award Professional Excellence Award G B O'Malley Medal **Branch Service Award** AusIMM Service Award Institute or Minerals Sector Service Award Institute or Resources Sector Service Award New Professional Award Distinguished Speaker Exchange Program Sir Willis Connolly Memorial Medal Sir Frank Espie/Rio Tinto Leadership Award AusIMM EEF Postgraduate Research Scholarship Epiroc (formerly known as Atlas Copco) Scholarship Best Paper prizes 2005 Special Award

The Institute Medal

- 1935 *Guillaume Daniel Delprat*, in recognition of eminent services in the advancement of mining and metallurgical science and practice and particularly regarding his work of Broken Hill and in the establishment of the steelworks of Newcastle, New South Wales.
- 1936 **William Edward Wainwright**, for outstanding service in the development of mining and milling practice on the Broken Hill field and for untiring public service in many directions associated with mining and metallurgy.
- 1937 **Leslie Bradford**, for his work in connection with the development of the flotation process at Broken Hill and in connection with the development of the steel industry in Australia.
- Hyman Herman, in recognition of his services to the Commonwealth and the States of Victoria and Western Australia in the development of their mineral resources; for his achievements in connection with the brown coal deposits of Yallourn, Victoria, and generally for long and valuable services to the mining industry and to this Institute.
- Sir Herbert Gepp, in recognition of his serves to mining and metallurgy and particularly in connection with the development of flotation processes in the treatment of complex sulphide areas and with the establishment of the electrolytic zinc industry in Australia.
- 1940 **Essington Lewis**, in recognition of his outstanding work in the development of the steel and allied industries in Australia, his personality, vision and organising ability as applied to this work; and for his national service.
- Adam Alexander Boyd, in recognition of his services in the development of underground mining methods at Broken Hill, coal mining in New South Wales, gold and copper mining at Mount Morgan, and generally for outstanding contributions to mining practice over a period of fifty years.
- George Kenneth Williams, in recognition of the outstanding merit of his contributions to the science of lead metallurgy, make through the invention, development and application of his process for continuous and full refining of silver-lead bullion, at the lead smeltery of the Broken Hill Associated Smelters, Port Pirie, South Australia. His process is the only method of continuous refining practised in the world of lead metallurgy today.
- 1943 **Russell Mervyn Murray**, in recognition of his outstanding services in the development of the mining and metallurgical practices at Mount Lyell, Tasmania.
- Joseph Franklin Thorn, in recognition of eminent services rendered to the mining industry by his contribution to the mining and metallurgical practices as applied to the ores of Western Australia.
- Andrew Fairweather, in recognition of his long and efficient service to the mining industry, his valuable contributions to the industrial phase of Broken Hill operations, and for the splendid work he has done in guiding and introducing mining students to the profession.
- Julius Kruttschnitt, in recognition of his outstanding served in connection with the development of mining and ore treatment in Australia and New Guinea, and particularly at Mount Isa, Queensland.
- 1947 *Frederick George Brinsden*, in recognition of his contribution to the metallurgical treatment of sulpha telluride gold ores and for his outstanding services towards securing continuity, stability and harmonious industrial relations in the mining industry of Western Australia.

- *Frank Leslie Stillwell*, in recognition of his contributions to the geology of many Australian mineral fields and to the science of mineragraphy in which he has established an international reputation.
- **William Sydney Robinson**, in recognition of distinguished services to the base metal and gold mining industries in Australia and the British Commonwealth, and to the Empire and Allies during the two World Wars.
- *Francis Richard Hockey*, in recognition of his long and outstanding service in the development of the raw material requirements of the steel industry, of his contributions to metalliferous mining and of his splendid work in the training of young men for Australian industry.
- Harry Hey, in recognition of his contribution to research in, and the development of, the electrolytic zinc and associated industries, including the utilisation of by-product sulphur, and to his work in their organisation and administration.
- **George Mason Hindmarsh**, in recognition of his services in the progressive development of the coal mining industry of Australia.
- *Frank Fancett Espie*, in recognition of his professional work in Burma and in Western Australia and his leadership in the safe transference of the Burma Corporation staff in 1944 through Japanese occupied territory.
- No award was made for The Institute Medal in 1954
- **Maurice Alan Edgar Mawby**, in recognition of his contribution to exploration and to non-ferrous metallurgy and of his continuous public service in many directions associated with mining and metallurgy.
- 1956 No award was made for The Institute Medal in 1956
- **Godfrey Bernard O'Malley**, in recognition of the invaluable services he has rendered to The Institute, and through it, to the mining and metallurgical industries over a long period of years, and of his valuable contribution to education and research.
- **George Read Fisher**, in recognition of his services to the base metal industries of Australia, and to the growth of the Mount Isa Mineral field and integrated industries.
- **Ian Munro McLennan, CBE**, in recognition of his long service to the steel industry both in production and in utilisation, of his national service in many phases of the Australian economy and of his contribution to the welfare of The Institute.
- J Malcolm Newman, CBE, in recognition of his long service to the mineral industries, gold and copper mining in Western Australia, Queensland and New Zealand, and tin mining in Malaya and Australia, and for his national services in many fields of primary industry.
- J Neill Greenwood, in recognition of his outstanding services to metallurgical education in Australia, of his eminence in metallurgical research, and of his contributions, directly and through his graduates and research groups, to the development of Australian industry.
- **G Lindesay Clark, CMG**, in recognition of his leadership in the exploration, development and extraction of a wide range of Australia's mineral resources, including notably gold in Western Australia and Victoria, lead-silver-zinc and copper in New South Wales; and for his personal part in the establishment of a major aluminium complex.
- 1963 Asdruebal James Keast, CBE, in recognition of his outstanding record in the building and reconstruction of major mining and metallurgical enterprises, including lead-silver-zinc,

aluminium and uranium in Australia and gold in Canada; also, for his personal initiation of improvements in industrial and social welfare in these industries.

- Sir Harold Raggatt, CBE, in recognition of his outstanding contribution to the exploration and development of Australian mineral resources, including notably water and petroleum, and of his leadership in the establishment of the Bureau of Mineral Resources, Geology and Geophysics.
- 1965 No award was made for The Institute Medal in 1965
- 1966 **Heywood Wilkinson**, in recognition of his services to the coal industry, including his work in the introduction of mechanised mining practises and his great contribution to the development of human relations.
- James Donald Campbell, in recognition of his outstanding contribution to the exploration of many Australian mineral fields notably gold, and silver-lead-zinc, aluminium and nickel, and to the science of structured geology in which he has established international repute.
- 1968 *Eric Aroha Rudd*, in recognition of his outstanding work in the application of geological methods to the search for oil and minerals and to engineering in Australia, and of his contribution to the teaching of geology.
- 1969 No award was made for The Institute in 1969
- Nils Emil Nilsen, in recognition of his outstanding services to Australian exploration, mining and metallurgical operations particularly those in Western Australia also equally for his contributions to community service and the economic well-being of Fiji with accent on the combined operations of the gold mines at Vatukoula.
- 1971 **William Matheson Morgan**, in recognition of his distinguished services to the mining and metallurgical industries of Australia and particularly to the development of the nickel industry of Western Australia.
- 1972 **James William Foots**, in recognition of his contribution to the technical and administrative aspects of base metal mining in Australia.
- 1973 **Haddon Forrester King**, in recognition of his great contribution to the science and practice of geology and particularly to the exploration for and discovery of ore deposits in Australia and New Guinea.
- 1974 **John Seymour Proud**, in recognition of his leadership in the exploration and development of Australian mineral resources and particularly his contribution to the mining industry in the Northern Territory.
- 1975 **Keith Addison Rowell**, in recognition of his contribution to the development of Australian resources, particularly iron and manganese ores and petroleum, and of his work with the Aborigines at Groote Eylandt.
- 1976 Laurence Charles Brodie-Hall, CMG, in recognition of his service to the development of the mineral industry, particularly in Western Australia, and including his outstanding contribution to education and to community service
- 1977 **Howard Knox Werner**, in recognition of his contribution to the mineral industry and the profession, particularly in the academic, research and process development fields and of his outstanding public service.

- 1978 **Sir Brian Massy-Greene**, in recognition of his outstanding service to the metallurgical and mining industries of Australia and particularly in the development of a mining house with wide geographical and product base.
- 1979 *Cornelius Harris Martin*, in recognition of his outstanding service to the coal industry of Australia, for his leadership and his contribution to modernisation of coal mining technology.
- Sir Frank Espie, OBE, in recognition of his leadership in the mining industry in Australian and his contribution to Papua New Guinea through his work in the development of the Bougainville Project including the sociological aspects.
- 1981 **Charles Wooller Marshall, AO**, for his pioneering work in exploration and development in Papua New Guinea, his contribution to the Australian coal mining industry, his leadership as a mining engineering consultant, and his services to The Institute.
- Sir Russel Madigan, OBE, for his leadership in Australian Mining and metallurgical developments, particularly the iron ore industry, for his great contribution to relations with Japan and for his outstanding service to The Institute.
- Sir Arvi Parbo, for his services to the mining industry, particularly in Western Australia, and his active role in business and government relationships at both the national and international level.
- Roy Woodall, AO, in recognition of his success in the application of original geological concepts in exploration resulting in major mineral discoveries in Australia and for his professional competence and outstanding leadership qualities which are acknowledged worldwide.
- David James McGarry, AM, for his significant contribution to geological and petroleum engineering leading to the discovery of the Moonie, oilfield, Australia's first commercial producer, his public leadership of the Australian petroleum exploration industry, his contribution to many government and other petroleum and energy studies, his continued interest and encouragement of professional technical education, and his administrative skills and personal ability in leading, for many years, the company Australian Oil and Gas Corporation Ltd.
- 1986 No award was made for The Institute Medal in 1986
- John Philip Morgan, in recognition of his outstanding contribution to the mineral industry and the profession, particularly in a pre-eminent capacity as an educator of Australian mining engineers and as a leader in research into mining methods and machinery.
- 1988 **Donald Sinclair Carruthers**, in recognition of his outstanding contribution to exploration in Australia and the South Pacific and for his managerial skills, but particularly for his contribution to coal and copper.
- 1989 **Brian Thorley Loton AC**, in recognition of his vision and outstanding contribution to the development of steel, petroleum and other minerals in Australia and overseas.
- John Kenneth Allister McLeod (deceased), in acknowledgment of an outstanding career as a mining engineer from the mine face to board chairmanship with leadership in the professional and ethical aspects of base metal, gold and coal mining and a dedicated long continuing association with The Institute from Student member to President.
- 1991 **Dr Thomas G Callcott AM**, in recognition of his prominent services to the coal mining industry and associated metallurgical industry.

- James Richard May, in recognition of his outstanding contribution to the initiation and management of mineral research and technology through his role as Chief Executive Officer of the Australian Mineral Industries Research Association (AMIRA) and involvement with research organisations throughout Australia.
- 1993 **Professor Alban J Lynch AO**, in recognition of his outstanding personal contribution to mineral processing and his leadership in research and education as the first Director of the Julius Kruttschnitt Minerals Research Centre, former Head of the Department of Mining and Metallurgical Engineering, University of Queensland, and leader in the development of the Sir James Foots School of Mineral Resources.
- 1994 No award was made for The Institute Medal in 1994
- 1995 Roger Andrew Geoffrey Vines, for his outstanding contribution to the mining industry of Australia as Manager of Alcoa of Australia's bauxite mining and refining operations in Western Australia from 1982 to 1994. The operations are now the world's largest source of alumina and a major contributor to the Australian economy. Also, for his contributions to work place safety, technological research, education, environmental management, and mine site rehabilitation.
- Charles H Warman, (deceased 01) for his achievement of an international reputation for the design and manufacture of slurry pumps which have dominated the Australian and international markets for 50 years, being the subject of many international patents and sold in over 100 countries. He continues his creative work through his own research company, which continues innovative engineering design and supports student education and development.
- 1997 **John Joseph Toomey**, for his eminent services over 40 years to the Mineral, Mining and Metallurgical industries and in his role as Research Manager and Director of the BHP Coal Special Research Program.
- John T Ralph AC, in recognition of his long and distinguished service to the mining and manufacturing industries, for his major contribution to a large and diverse range of professional, governmental, educational, business and community organisations and for his service to and leadership of The Institute.
- 1999 No award was made for The Institute Medal in 1999.
- 2000 **Dr Sydney M Richards**, for leadership in research and technology in the Australian minerals industry over a forty-year career encompassing outstanding research and commercial achievement and especially for unstinting and visionary support for Australian science and technology organisations.
- 2001 **Mr Hugh Morgan AC**, for his contribution to the development and growth of the Australian Minerals Industry and his leadership in meeting the major internal and external challenges to the Industry in Australia and overseas.
- Robert Cameron, for his outstanding leadership in the Australian coal mining industry, the enhancement of its reputation in the communities within which it operates and his strong business ethic delivering not only appropriate rewards for all stakeholders in his Company but also of the strongest of recognition from his competitors.
- 2003 **Dr. Robin Batterham,** for his distinguished academic credentials, high-level industry career and prominent public-sector service which present an unparalleled record of eminent achievement at the highest levels in academia, industry and the public sector at both the local and international level.

- Bruce Hobbs, for his research and leadership, which have had a profound impact on the discipline of structural geology, the mechanics of the earth and its applications not only in Australia but also world-wide to serve the strategic needs of the industry. Bruce is a scientist of international standing, a research strategist without peer who has been instrumental in building capabilities of generations of Australians through the generosity of his ideas and energy.
- 2005 **Owen Hegarty**, for his achievements in a distinguished career in the Australian mining industry, for his inspirational leadership, his dedication to delivery, performance, his passion for resources and his role in rebuilding the innovative, mid-sized mining corporation in Australia.
- Robert Bryan, for his lifetime commitment and leadership in the mining industry, and his driving passion to see quality outcomes in education and research in this sector. This has seen Bob Bryan drive four public companies from explorer status to producer and has also led to the establishment of the WH Bryan Mining Geology Research Centre at the University of Queensland.
- 2007 lan Gould, for sustained service to the minerals sector, through Chairmanship and participation in industry representative organisations, for continuing passionate advocacy and strong representation, and as a Chair, previous Chief Executive and Non-Executive Director, lan has shown leadership over and above the call of duty.
- 2008 **Richard Leigh Clifford AO**, for his outstanding leadership of the Minerals Industry globally through his eminent contribution to the CRA/Rio Tinto Group, active promotion of professional development, the advancement of indigenous employment in the Australian mining industry and recognition of the importance of sustainable development.
- Zimi Meka, for his remarkable capacity for developing new opportunities through technical innovation and culturally sensitive business practices. Zimi has demonstrated this as the CEO and co-founder of Ausenco Limited, which specializes in designing, constructing and commissioning mineral processing plants throughout the world, including some in difficult and remote locations.
- 2010 **Peter Coates AO,** in recognition of the key role he played in the development of industry leading workplace reporting and governance standards, for numerous joint venture partnerships and other UK and Australian listed companies.
- 2011 lan Smith, in recognition of his extraordinary leadership of the minerals sector in its response to potentially damaging government policy and taxation measures and in the development of Newcrest Mining Ltd as Australia's pre-eminent gold company. His leadership was crucial in extended discussions with government and a community information program which resulted in withdrawal of the proposed tax and renegotiation of its scope and application.
- 2012-2013 **Dr Megan Clark,** in recognition of her leadership, and work in sustainability and research within the mining industry.
- Andrew Forrest FAusIMM(CP), in recognition of Andrew "Twiggy" Forrest's outstanding leadership and support of the Australian Minerals Industry. He is a passionate advocate for the industry and is at the forefront in addressing the challenges it faces. His personal contribution is recognised and his philanthropy and endeavour to eliminate indigenous disadvantage and global slavery.

- Sam Walsh FAusIMM(CP), in recognition of Sam's contributions and leadership within the industry. Sam is currently Chief Executive Officer of the Rio Tinto Group. Prior to this he was Chief of Rio's Iron Ore Group and Rio Tinto Australia, during which time he oversaw mining operations and expansion in the Pilbara. He spent 20 years in senior positions at GM and Nissan before joining Rio Tinto. From his automotive industry background, Sam brought a deep understanding of production systems and productivity tools. He was instrumental in introducing techniques such as Six Sigma and Lean Manufacturing into the Australian aluminium and iron ore industries. These initiatives were responsible for the increased automation in Rio Tinto's Pilbara mines, including the development of autonomous loading, haulage and train operations. Sam is a leader among mining industry chief executives. He maintains his membership as a Fellow and Chartered Professional of the AusIMM and has provided support to AusIMM events and projects, including major AusIMM publications.
- 2016 Charles (Charlie) Sartain FAusIMM, in recognition of his commitment to the global minerals industry spans 35 years. He spent the early part of his career in a variety of mining engineering and management roles at the Mount Isa Mines complex in north Queensland, Australia. He then held several general manager and executive roles in Australia and overseas before being appointed Chief Executive of Xstrata Copper and a member of Xstrata plc's Executive Committee in January 2004. Over the subsequent years Xstrata Copper grew to become the world's fourth largest copper producer. Charles left the Xstrata Group upon the completion of the merger with Glencore plc in May 2013.

As his career progressed, Charles developed parallel philanthropic and corporate activities that enhanced research, promoted social responsibility and recognised the importance of the minerals industry in a global context.

Charles is a Fellow of the AusIMM and the Australian Academy of Technological Sciences and Engineering. He is currently serving on numerous Boards and committees and is involved in charitable works through the Sartain Foundation.

Joe Pease FAusIMM, Joe has had an eminent career working in technology and applied research over his 36 years of membership. He is a gifted teacher and has been a mentor to many minerals professionals globally and authored and presented countless technical papers throughout his career.

Following operational and management roles in Mount Isa, Joe spent 12 years as Chief Executive of Xstrata Technology, later Glencore, leading the development and marketing of technologies to improve the efficiency of grinding, flotation, smelting, refining and leaching. His services delivered significant financial and technical benefits to the Australian and global minerals industry, and without the successful commercialisation of these key Australian processing technologies many operations would not have survived or ever made it to production.

Joe has made many contributions to industry via volunteer research and education leadership roles. He is Chair of the Coalition for Energy Efficient Comminution, and has held positions with the AMIRA Board, the CRC Ore Board, the Ian Wark Research Institute and JKMRC Advisory Boards, the MCA and the Minerals Education Partnership Steering Committee.

James (Jim) Askew FAusIMM, Jim has made a significant contribution to the global minerals industry, accumulating an impressive record of achievements by founding and leading numerous mining and mining services companies, assembling and leveraging management teams and enhancing long-term shareholder value. He is a seasoned executive and mining engineer, with over 45 years of international mining and business experience, spread across base and precious metals and industrial minerals. Jim has been a director or CEO for a wide range of Australian and internationally listed companies including Golden Shamrock Mines Ltd (which co-founded Ausdrill Ltd), Rayrock Ltd, Yamana Gold Inc, Golden Star Mines Inc, Sino Gold Ltd, OceanaGold Corp and Evolution Mining Ltd, which has become the second largest ASX listed gold miner.

Jim began his mining career in 1974 at The Zinc Corporation in Broken Hill. In 1981 he founded the consultancy firm now known as AMC Consultants. He has also been involved globally with private equity, plus angel investing in mining technology start-ups. Jim is currently non-executive chairman of Syrah Resources and OceanaGold Corp, plus a board member of Evolution Mining Ltd and Endeavour Mining Corp.

Jim's leadership and dedication to innovation and excellence in the global minerals sector is unsurpassed and makes him well-suited to receive the highest honour the AusIMM can bestow.

- 2019 Dr Harry Parker FAusIMM (CP), Dr Harry Parker has an international reputation as an expert in the estimation and Public Reporting of Mineral Resources and Ore Reserves. Harry has been published widely and is a member of 11 professional organisations. As a consultant, he has provided Competent Persons reports, Mineral Resource modelling and conducted independent audits for an extensive range of mining companies throughout the world in a variety of minerals. Harry has multiple degrees from Stanford and Harvard University. Harry brings an international perspective to the requirements for Mineral Resource and Ore Reserve reporting under various regulatory regimes and is well versed in the similarities - and differences - of these requirements. His contribution to the industry has been immense and includes being a member of the Committee for Mineral Reserves International Reporting Standards (CRIRSCO) for more than 12 years, representing the Society for Mining, Metallurgy and Exploration (SME) of the USA. Harry was Chairperson of SME in 2015-16, and his expertise and knowledge have enabled him to provide exceptional contributions to this body. In recent years, Harry has played a pivotal role in assisting potential members to meet the criteria for membership of CRIRSCO, such as Mongolia, Brazil, Kazakhstan and Turkey. He continues to assist India and China in this regard. Harry's position in the minerals sector in the estimation and Public Reporting of Exploration Results, Mineral Resources and Ore Reserves is world-renowned and makes him an ideal recipient for the Institute Medal.
- 2020 **Professor Bruce Hebblewhite FAusIMM**, Professor Bruce Hebblewhite has more than 40 years of international experience in mining and has made a long-standing commitment to the resources sector through his leadership in teaching, training and research.

Bruce has held senior positions with Australian Coal Industry Research Laboratories Ltd (ACIRL) between 1977-1995, and served as the University of New South Wales (UNSW) Kenneth Finlay Chair of Rock Mechanics between 1995-2002. Bruce was appointed Head at UNSW's School of Mining Engineering between 2003-2014.

Bruce has produced more than 200 academic publications, and numerous industry and consultancy reports. Much of Bruce's focus has been in improving mine safety and efficiency in design, productivity and other operational improvements. His leadership in research led to significant improvements in health and safety in the Australian mining sector.

Bruce was actively involved in adapting risk-based management systems into the Australian coal industry. He led research to evaluate the effectiveness of this approach, and risk management is now embedded across the Australian mining industry and Australia is a world leader in this space. Bruce was also a member of an international research team that developed the UNSW Pillar Design Procedure which has helped save many lives.

Bruce has supervised 18 students through to successful PhD completion at UNSW and is still active in teaching and research at UNSW.

Belonging to various national and international professional bodies, Bruce has been recognised nationally and internationally as a leading academic in mining research and education.

2021 **Mark Cutifani FAusIMM**. Throughout his career, Mark Cutifani has shown a clear commitment to safety and exemplary leadership under adversity.

Mark is the current chief executive of Anglo American and former CEO of AngloGold Ashanti. Shortly after joining AngloGold Ashanti, Mark introduced the 'Safety is our first value' campaign. Research into fatalities at the company had shown that 70% were caused by sub-standard operations or actions. To address this, Mark aimed to change the company's culture and improve communication. During his tenure, the fatality rate was reduced by 50%.

Mark was appointed Anglo American CEO in 2013, the first mining engineer to hold the role. Since that time, Anglo American have reduced fatal incidents by 87%, with exposures to health hazards and environmental incidents both reduced by more than 90% as well. In 2015, when the resources sector was in a downturn, Mark needed to radically streamline the company and improve its performance. While today having fewer mines than in 2012, Anglo American's 2019 output was 12% higher and unit costs were 29% lower. Aided by higher commodity prices, the company's share price is up more than 1200% from its 2016 nadir. Mark is described as a top-quality leader who is approachable and grounded. He has maintained a balance of making the tough decisions to keep a business afloat while also being keenly aware of the fact that people make a business. He is a role model for young professionals in how you can be a successful and admired leader.

Mark has been an AusIMM member for 29 years and a Fellow since 1997. He received AusIMM's Atlas Copco (now Epiroc) scholarship in 1981, and went on to be an active and supportive member of AusIMM. Mark remains an ambassador for our organisation and our industry.

- 2022 Dr lan Runge FAusIMM(CP). Dr lan Runge is a pioneer of the mining equipment, technology and services (METS) industry, and has contributed enormously to the resources sector through his technical insight, entrepreneurial leadership and teaching. His ground-breaking work in mining technology, software, and mining economics in the 1970s significantly helped lay the foundations for Australia's pre-eminent position as a global leader in mining technology. The company that Ian started, now called RPMGlobal Holdings Limited, is the world's largest publicly listed mining technology enterprise with 22 offices in 15 countries. The application of RPMGlobal Software products over 40 years has resulted in dramatic improvements in mine equipment productivity, mine planning, and financial analysis. During his long career in the mining industry, Dr Runge has delivered lectures, presented keynotes at conferences, student seminars and professional development courses. He continues to be exceedingly generous in sharing his experience and learnings with students at the University of Queensland through his positions in the School of Economics (Industry Fellow), School of Mechanical and Mining (Adjunct Professor) and through seminars and workshops at the Sustainable Minerals Institute. Ian's textbook Mining Economics and Strategy is the global reference book for undergraduate teaching on the subject, and his book Capital and Uncertainty - The Capital Investment Process in a Market Economy, is a reference used by industry researchers in the subject throughout the world. Ian was Chair of the AusIMM Southern Queensland Branch in 1991, Conference Chairman for the AuslMM 3rd Large Open Pit Mining Conference in 1992, Chair of the Parents and Friends Association of Brisbane Boys College 1999-2001, and Development Chair of St Andrews Hospital in 2002. He was Chair of the Brisbane Institute from 2008-2010, and continued as a Director until 2013. He has been a member of the Advisory Board for Queensland Leaders since 2008. He retired from the board of RPMGlobal Holdings Limited in 2018 after 41 years with the company.
- 2023 **Louis Rozman FAusIMM(CP)**. Louis is a recognised leader in the resources sector, particularly in small to mid-tier organisations, and has given exceptional service to AusIMM for 25 years. He received a Beryl Jacka Award in 2014.

As an operator, executive and pioneer, he is known for developing projects and growing smaller companies into mid-tier organisations. Noteworthy leadership positions include Chief Operating Officer with Delta Gold/AurionGold, growing to become Australia's biggest gold producer in 2001, with gold and platinum projects in Australasia and Zimbabwe; and CEO of CH4 Gas Ltd, leading the development of the Moranbah coal seam gas project, a pioneer in CSG in Queensland. In 2006 Louis co-founded the Pacific Road Capital private equity funds along with Paul Espie, here he had a global investment mandate and was on many resource company boards. Louis was instrumental in revitalising the Sydney Branch in 2008-10; during his time as Chair, attendances at events and membership grew and the Branch increased its relevance to members. Louis has played a mentoring role for subsequent committee members and served on the Committee until 2021.

Louis led the VALMIN Committee from 2009-2021, including the VALMIN Code 2015 revision and developing and facilitating the VALMIN Code Reporting Course in 2021; was Deputy Chair of the JORC Committee for the 1999 and 2004 revisions of the JORC Code and contributed to the

2018 JORC Code Reporting Course and the 2020 JORC Essentials Course; was a member of the Chartered Professional Board from 2005-2009 and took part in AusIMM's compliance review in 2017-18. He has assisted the selection panel of the Education Endowment Fund Sir Frank Espie/Rio Tinto Leadership Award. Louis has been a mentor to many and continues that role to this day, his global multi-commodity experience and knowledge have helped others develop their skills and reach their full potential.

President's Award

- **Dr Richard Limon Stanton,** for his original and largely independent research into patterns of ore genesis in layered rocks and for his publications including the volume Ore Petrology,1972, these achievements representing a contribution at an international level to the geology of ore occurrence.
- **Dr Gordon John Williams,** for his achievements in the field of education and authorship particularly, in compiling and editing two volumes on the Economic Geology of New Zealand, 1965 and 1974, and in the former case for his work in writing the greater part of the volume.
- **Dr Elliott Sylvester T O'Driscoll,** in recognition of his original work in the development of tectonic models demonstrating principles of geological deformation and the application of these to the tectonics of ore deposits and to continental tectonic patterns.
- **George Watherston Hills,** for his achievement in the field of engineering design and construction in the development of major mining and metallurgical operations in Australasia.
- **Dr Alban Jude Lynch,** for his achievements in primary metallurgical research, its application in industry, dissemination of research results, and promotion of post-graduate education.
- **Dr Norman Henry Fisher AO,** for his contribution to the basic geological knowledge of Australasia providing the framework for discovery and development of mineral resources, and in recognition of his part in enhancing Australia's reputation internationally in the geological field.
- **James Thorpe Woodcock,** in recognition of his contribution to the publications of The Institute and his services as Honorary Editor since 1965.
- **Albert Arthur Charles Mason,** in recognition of his achievement in the development and management of mining operations in Australia, particularly gold, tin and tantalum and his dedication to the mining profession.
- *Ivan Edgar Newnham, AO, MBE,* for his personal achievements in research and development for the mineral industry and his leadership in these fields.
- **Bruce Stanley Rawling**, for his significant contribution to the development of modern analytical and flotation plant control techniques.
- Clement Leslie Knight, for his major contribution to discovery of the McArthur River leadzinc deposits, the development of the 'source bed' concept for exploration and for his role as Editor-in-Chief of The Institute's 1975 volume Economic Geology of Australia and Papua New Guinea.
- 1985 No award was made for the President's Medal in 1985.
- *Francis Everard Hughes DFC*, for his major contributions to mineral discovery in Australia, iron deposits at Mount Tom Price in the Hamersley and diamonds at Argyle in the Kimberley, by means of his eye for detail, his persistence, his patience and diligence in the field serving as a model for his fellow geologists.

- 1987 **Dr Thomas Ronald Albert Davey**, in recognition of his contribution to the metallurgical industry and technological developments that resulted in improved processing of several base metals, not only in Australia but also Europe and USA, his contribution to education in universities in Australia and the USA and the stimulation he gave those he leads in research activities in operating plants, the CSIRO, and universities.
- Henry James Evans OBE, for his contribution to early oil and gas exploration in all areas of Australasia, as well as his recognition of the significance of the Weipa bauxite deposits.
- 1989 **Ross Raymond Large**, for his outstanding contribution as an economic geologist particularly for his work on Tennant Creek orebodies and the Canadian Archaean base metal deposits and for his ability to combine the practical application of geology with leadership in teaching that science.

Kenneth Elliot Mathews, in recognition of his services to the development and mining of the Mount Isa orebody and particularly for his contribution to stopping methods.

- Michael Andrews Eager, for his outstanding contribution to the planning, construction and commissioning of the Hellyer Project in Tasmania. This included the overall concept from underground mining of a major multimetal orebody, through mineral processing of material difficult to separate by conventional processing to the arrangements for disposal or shipment of mill output. The project, with several innovations in flowsheet and equipment use, was built in an environmentally sensitive area, and completed within budget constraints of time and costs.
- No award was made for the President's Medal in 1991.
- Robert James Crew, for outstanding contribution to the development of the world class copper/uranium orebody at Olympic Dam as Mine Superintendent and Resident Manager from 1980 to 1991. In this period the exploratory shaft and underground development was accomplished, a metallurgical pilot plant and feasibility studies were completed, and the full-scale mine, concentrator, hydrometallurgical plant, smelter and refinery were successfully commissioned.

Nicholas Francis Robinson, for personal contribution to the success of the Electrolytic Manganese Dioxide project at Newcastle. This included taking the process from the Laboratory through commercial planning and engineering design stage of both the pilot scale and the production plant. Responsibilities included economic and market studies with securing of overseas sales contracts for 95 per cent of production.

- 1993 **Dr Bill Johnson**, in recognition of being a major force behind mineral processing research at Mount Isa for the past decade including treatment of the complex Hilton orebody and the even more difficult separation problems of McArthur River ore and gaining an international reputation for his work in developing technologies to improve plant processes.
- Dr Raymond Ernest Smith, in recognition of his outstanding contributions advancing exploration practice in regolith-dominated terrain in Australia. This has included the transference of research findings into application through substantial and successful research projects at CSIRO funded by AMIRA and individually by companies. Over the last decade, he has led his research team into a comprehensive three-dimensional approach to regolith geology resulting in the discoveries of world-class gold deposits. The work has significantly changed the exploration strategies of the Australian industry through his and his team's development of new approaches thus opening vast new areas to exploration.
- 1995 **Dr Kevin Rosengren**, for his contribution to the practice of mining and geotechnical engineering in Australia and overseas with reference to slope stability in open pits and the selection of stopping methods in underground mining.

- **Dr John Millice Floyd**, for the invention, development, proving and the successful commercialisation of the top-submerged lancing smelting system, a technology with worldwide impact on smelting.
- **Denis Rodney Brooks**, for his eminent service in the advancement of environmental management in the Minerals Industry over many years. A pioneer of numerous rehabilitation techniques now used widely throughout the Industry. He has also served on numerous industry and Government committees, working groups and task forces, and is recognised by his peers as a leader in environmental management.
- **Professor Graeme John Jameson,** for his eminent services to the mineral, mining and metallurgical industries and in recognition for his contribution to the engineering of froth flotation through the invention of the Jameson flotation cell.

Dr Andrew White, in recognition of his dedication to the development and teaching of mineral exploration management practice especially through short courses and publications in Australia and overseas.

Henry B Muller, for his contribution and leadership in mineral processing including the development and implementation of the process flowsheet at Olympic Dam and his ongoing commitment to the development of younger metallurgists.

Peter Dent, in recognition of his contribution to the Mining Industry in mine safety, testing and research and in the reorganisation of the safety role of the Queensland Department of Mines and Energy and the establishment of SIMTARS. In addition, for his on-going commitment to the education of young engineers and his major role in the creation of the Mineral Industry Safety and Health Centre at the University of Queensland.

- **Professor lan M Ritchie** is acknowledged by his peers in the profession as one of the top hydrometallurgical researchers in the world. In the AJ Parker CRC, he has created the world's pre-eminent hydrometallurgical research organisation.
- **Don Berkman,** for extraordinary contribution to the Institute publications, especially the Field Geologists Manual which is the Institute's most successful publication.
- Norman Miskelly, for consistent commitment shown by Mr Miskelly over many years to improved reporting standards for Resources and Reserves by mining companies has been instrumental in the development and wide acceptance of the JORC Code and in the development and likely acceptance of international reporting standards.
- **Professor Don McKee,** for his leading role in the development of the Sustainable Minerals Institute which is a world class educational, research and training facility. Its standards are acknowledged as reflecting the highest aspirations in sustainable, economic, social and environmental development.
- Clive Bell, for his involvement in soil chemistry and mine rehabilitation research for the past 30 years and contribution as author or co-author of over 180 publications. Clive has successfully supervised 57 PhD and master's students, many of whom have found employment in the mining industry as environmental officers or in industry-related regulatory or consulting positions.

Alan Broome AM, in recognition of more than 25 years of important contributions to the development of the Australian mining supply sector, including leadership of research

activities, export development, commercialisation of innovation, assistance to companies to harness e-business processes and advice to government organisations on the development of Australia's mining equipment, services and technology sector.

- John Collier, for his success as a leader of exploration in the CRA/Rio Tinto Group and as a pioneer of new commodities in new geological settings. His recognition, discovery and championing of the potential of the WIM mineral sands deposits in the Murray Basin was the initiating step, leading to development of a new and world class Australian mineral province and operations.
- 2006 **Barry Brady and Ted Brown AC**, for their international recognition as expert practitioners in the field of Rock Mechanics and Geotechnical Engineering during distinguished careers as teachers, researchers, consultants and publicists."
- 2007 Paul Heithersay, for his pivotal role in developing and implementing the PACE initiative in SA, in recognition of the outstanding reputational and exploration success which it has generated and for demonstrating the critical importance of public-sector vision and leadership in the discovery process.
- 2008 **Professor Eric Grimsey,** for his significant contribution to mining education in Australia and to The AusIMM. Eric has spent most of his professional career teaching and researching extractive metallurgy at Murdoch University and Curtin University of Technology, where he served as Director of the WA School of Mines. He has also been Vice President and a Councillor of The AusIMM and is currently Chair of The AusIMM Ethics Committee.
- Derek Carter, for his work in taking a leading role in demonstrating the exceptional perspectivity of South Australia through his formation and guidance of the Minotaur group of companies. This work has highlighted not only the Gawler Craton through the discovery of the Prominent Hill orebody (now an established world class copper-gold operation), but also the geothermal potential in the Flinders Ranges (by Petratherm) and accessing copper/nickel opportunities in the little explored and remote Musgrave Block (by Mithril). Derek was the initiator of Toro Energy, which is engaged in the development of the Wiluna uranium deposits. Through these activities, and his earlier discovery of the Los Santos tungsten orebody in Spain, he is universally recognised as an innovative and successful explorer.
- 2010 **Dr Tony Christie and Dr Robert (Bob) Brathwaite**, in recognition of notable achievement in the industry. They were joint editors and lead or contributing authors for 20 of the 47 papers in AusIMM Monograph 25 "Geology and Exploration of New Zealand's Mineral Deposits". Along with AusIMM Monographs 4 and 13 "Economic Geology of New Zealand", this ranks as a milestone publication in documenting part of Australasia's mineral occurrences.
- 2011 Professor Tim Napier-Munn, in recognition of his contribution to research and development within the minerals industry. Tim has spent his career in applied R&D for the mineral industry, working for De Beers in South Africa and for universities in England and Australia. He joined the JKMRC in 1985 becoming its Director in 1997 and inaugural MD of JKTech Pty Ltd in 2001. Tim has given his professional development course on Statistics for Metallurgists over 125 times around the world and is writing a book on the subject.
- 2012-2013 **Geoff Loudon,** in recognition of his eminent leadership and success in exploration and development of minerals deposits in Australasia, Asia and South America. Geoff has devoted his life to the minerals industry and has exceeded every exploration geologist's dream by discovering at least two gold mines and a copper mine. Geoff is probably best known for his

association with the discovery and development of the Lihir gold mine in PNG.

- 2014 **Dr Robert Johnson FAusIMM**, in recognition of his contributions back to the industry through the development of the Maptek modelling and analysis software. In 2011 Maptek celebrated 30 years of service to the mining industry.
- Peter Stoker HonFAusIMM(CP), in recognition of new and significant contributions to the Institute and industry since being awarded the Honorary Fellowship in 2011. Key achievements include the development and delivery of a major revision to the JORC Code, significant contributions to AusIMM's Monograph 30 publication and promotion, and increasing the recognition and uptake of the JORC Code by the Chinese minerals sector.
- Denby Ward FAusIMM, Denby Ward has been instrumental in developing new metallurgical technologies, leading research and engineering teams, and mentoring young metallurgists and chemical engineers. As Research Superintendent at the Broken Hill Associated Smelters Pty Ltd at Port Pirie, Denby helped develop several innovative technologies. He then spent a period as General Manager of the Port Pirie works, before transferring to Melbourne in the 1980s as General Manager Technology of Wimmera Industrial Minerals. Denby also spent some years as a Research Fellow in the Department of Chemical Engineering at Monash University, where he contributed considerably to student development and research.
- Dr Hua Guo FAusIMM, Hua has made outstanding and sustained scientific and technological contributions to mining over the last 30 years. At Pasminco's underground operations at Broken Hill and BHP's iron ore surface operations in the Pilbara, he was instrumental in developing and implementing advanced mine geotechnical programs that significantly contributed to safety and efficiency.

 At the CSIRO, Hua and his team have developed new insights into the dynamics of complex mechanical-fluid interactions during mining, cutting-edge numerical modelling and mine monitoring techniques, and integrated mine planning methodology and processes. Hua and his team also developed coal mine methane capture technologies that have delivered major safety, environmental, and economic benefits to coal mining in Australia and China. In 2016, Hua led Australia's successful bid to host the 26th World Mining Congress in Brisbane in 2021. This is the first time Australia will host the Congress. Hua worked tirelessly to secure strong support from industry, government, service industries and research organisations to create this major opportunity to profile Australia's mining industry and
- Dr Peter Lilly FAusIMM, Peter has given extraordinary and sustained service to the AusIMM, notably as President in 2006 and as a board member from 2001-2008. Peter has also been an active member of the Education Endowment Fund Board; the Audit and Risk Management, Education, Publications, Events and MinSoc committees; and the Kalgoorlie, Perth and Southern Queensland Branches.

expertise.

Over the past three years, Peter has dedicated his time and energy to leading the AusIMM Royal Charter and By-Laws Taskforce, which was charged with reviewing and modernising AusIMM's governing documents. The scale and scope of this important task cannot be overstated.

The updated Charter and By-Laws were voted on favourably by members in August 2017 and in December 2017 the Governor-General of Australia granted a supplemental Royal Charter and new By-Laws, confirming AusIMM's incorporation in Australia. This Charter came into effect on 1 January 2018. An incorporated model was established in New Zealand through AusIMM NZ Limited.

It took great determination and commitment from Peter and his small group to achieve this task, which has helped to ensure the future of the AusIMM. Since completion of the Charter

and By-Laws Review Taskforce work, Peter has also taken on the role of Chair of the Compliance Review Taskforce, tasked with reviewing AuslMM Complaints and Ethics processes.

2018 **Emeritus Professor James (Jim) Galvin FAusIMM(CP)**, Jim has shown longstanding commitment and made outstanding contributions to the mining industry by improving the health and safety of all mine workers through effective ground control and advocacy of risk management processes.

During his time in operations in the 1980s, Jim was instrumental in improving mine design standards in Australian coal mining and in pioneering new mine management structures, leading one of the largest underground coal mines in Australia from a 'prescriptive legislative' mindset to a 'duty of care' mindset. His contributions in pillar design, pillar extraction practices, mining technology and to industry bodies resulted, for example, in a near 15-fold reduction in fatalities associated with pillar extraction.

After joining UNSW in 1993, Jim developed industry training programs in coal pillar and roadway mechanics and extraction and established the UNSW Mining Research Centre. Subsequently, he introduced and oversaw the development of virtual reality training that is now embedded at all mines rescue stations in NSW.

As a leading global expert on mine stability and subsidence engineering, Jim has conducted numerous independent reviews for industry and government and has sat on several government commissions of inquiry and planning assessment panels.

2019 Chris Carr FAusIMM(CP), Chris first joined AusIMM in 1984 and continues to make an outstanding contribution to the Institute. Chris was an AusIMM Director from 2007–12 and has been a member of numerous AusIMM Committees. Chris was a member of the Chartered Professional (CP) Board from 2009–17, including the role of Chair from 2012–15 when the Chartered Professional reform process first began.

As Project Manager for the CP program in 2017 and as a member of the Professional Accreditation Advisory Taskforce, Chris strongly contributed to the reformation of the CP scheme. In addition, Chris has been involved in AusIMM Conferences and Events Committees, was a group leader of the Education Endowment Fund (EEF) Field Trip in 2015 and has been part of the AusIMM Mining Society and North West Queensland Branch Committees.

Most recently and notably, Chris has been a member of the AusIMM Investment Committee from 2008–18, and chaired the Committee since its inception. In this important role, Chris has made a particularly strong contribution to the financial stability of AusIMM. The President's Award rightfully acknowledges Chris' involvement and leadership.

2019 **Mike Spreadborough FAusIMM**, Mike has been a member of AusIMM for 34 years. He is currently Managing Director of Nusantara Resources Limited and a non-executive director of CleanTeQ Limited.

Mike was an AusIMM Director from 2003–08, and his continued involvement and key contributions within AusIMM have been extensive. Of particular note is his work as a Member of the Complaints Committee, now Professional Conduct Committee, since 2015 and as Chair since 2016. Mike has also been instrumental in driving the new processes for the AusIMM Ethics and Complaints Committees through instigating the Review Taskforce in 2017

In addition to Mike's respected contributions to AusIMM committees and review of integral organisational processes, Mike was part of the initiators of what is now the New Leaders' Conference in 1995; the International Mine Management Conference in 2016; and most recently was Chair of the Global Mining Leaders Conference in 2018. Mike initiated the new direction and concept of this highly successful and well-regarded event for global leaders in resources.

John Gooding FAusIMM, John Gooding is a mining engineer with more than 40 years' experience in gold and base metals. He has held many executive and leadership roles across his career, both in Australia and overseas.

John commenced his career in Broken Hill with CRA, 10 formative years which provided him with the opportunities and grounding for a lifelong career in Australia's mining industry. John's career led him to some of this country's largest hard rock operations, working for almost 12 years as Executive General Manager Operations for Normandy Mining Ltd; Executive General Manager of the Mount Isa Business Unit (including UK operations); CEO of Xstrata's Australian copper and zinc business; Executive General Manager Downer Mining Group; Technical Services Executive at Ok Tedi in Papua New Guinea (PNG); and until his retirement in 2016, almost 10 years as MD of Highlands Pacific working in PNG. He now holds several non-executive director roles in the resources sector.

John is well known and well respected throughout the industry. He leads by example and finds common ground between parties wherever possible. He is genuinely committed to the industry and especially to the men and women who work in the sector. He also respects and has a history of supporting the resources communities where his operations were located. John has been instrumental in leading, championing and mentoring a number of now prominent men and women in mining and is proud of their success. John has continued to be a thoughtful and generous mentor and an excellent sounding board for professionals across the resources sector.

2021 **Peter Munro FAusIMM,** Peter Munro is a true legend of the resources sector. His unrelenting dedication to professional excellence and contribution to our industry's knowledge make him a worthy candidate for the President's Award.

Peter has worked across production, technical, research and leadership roles, most notably with Mount Isa Mines (MIM). Later in his career, he co-founded the specialised minerals consultancy. Mineralis, to provide expert advice to operations globally.

Peter has developed an unrivalled understanding of the resources industry over the past 50 years, and is a world-class specialist who shares his knowledge for the benefit of others in the complex and niche fields of concentrate marketing, smelter and refinery constraints and metals markets.

Peter led the charge for the first ever Mill Operators' Conference which was held in Mt Isa in 1978 and celebrated its 40th anniversary in 2018. Peter continues to support this and other technical events and conferences.

Over the course of his career, Peter has inspired and mentored thousands of metallurgists, mineral processors and chemical engineers all over the world.

He has always been a well-known champion for AusIMM – when students or graduates arrived to MIM he would immediately provide them with the membership form if they were not already Members. He has been an AusIMM member for more than 50 years and a Fellow since 2011.

The world of mineral processing would be poorer without Peter in it. His impact has been, and continues to be, profound and far-reaching.

Bob Vassie FAusIMM, Bob Vassie is a highly respected executive, role model and thought-leader in the resources industry. A mining engineer, CEO and board director with 35 years' international experience across a number of commodities and functions, his expertise includes mine operations, resource development, feasibility studies, strategy, corporate restructuring and business improvement. During his time as Managing Director and CEO of St Barbara (2014-2020), he led the company through a major transformation and achieved a remarkable turnaround of the company, which restored the balance sheet and set a platform for growth. Bob has been a champion for diversity in all forms. Bob led St Barbara to become the only mining company to be recognised as an Employer of Choice by the Workplace Gender Equality Agency (WGEA), and introduced safety audits in Papua New Guinea that focused on safety issues for women. He has also worked with peers and

suppliers to workshop shared learnings on diversity and inclusion for the benefit of the industry. Bob has volunteered his time on the AusIMM Council for Diversity and Inclusion since its inception in 2018, and has provided invaluable input and perspective into AusIMM's inaugural Reconciliation Action Plan launched in 2021.

Bob is held in the highest esteem by AusIMM for his commitment to the mining industry, and his passion to see Australian mining professionals positioned as global leaders operating to the highest professional and ethical standards.

2023 Deborah Lord FAusIMM, Deborah Lord has shown notable leadership and achievement in progressing, communicating and upholding the professional standards that underpin our industry. As an AusIMM Fellow since 2012 and with 30+ years of industry experience. including as Head of Resource Governance at BHP, Deborah brings a strong technical risk and governance focus to assessing and valuing mineral deposits. Deborah is the current chair of VALMIN, having served on the Committee since 2011. She was a major contributor to the 2015 VALMIN Code update, including negotiating with both ASX and ASIC. Deborah is also participating in the current JORC Code update via the working groups. She has been a member of the AusIMM Professional Conduct Committee since 2017, highlighting her commitment to promoting and driving continuing professional development. She has also shared her expertise with industry through co-developing and facilitating the AusIMM VALMIN Code Reporting Short Course. In addition to her achievements in the professional standards space, Deborah has been a champion for women in mining. She was an early advocate for flexible working arrangements and was a mentor in the International Women in Mining program. Deborah is generous in sharing her thoughts and opinions, providing professional guidance to those who seek it, as well as being called on as an expert in her field. Deborah continues to play a leadership role in the resources industry as a director of consultancy VRM, non-executive company director of Lunnon Metals and E79 Gold Mines and board member for the Centre of Exploration Targeting at the University of WA.

Honorary Fellowships

- Lloyd E Elkins, a distinguished and highly respected Research Executive in the Petroleum Industry, President for 1962 of the American Institute of Mining, Metallurgical and Petroleum Engineers; and an honoured guest at the 1962 Annual Conference of The Institute.
- 1974 **Dr John Convey,** for his contribution in the fields of research and development of Canadian mineral resources and metals, including the development of controlled atomic energy.
- 1975 **Sir George Fisher**, in recognition of his valuable services to science and industry.
- 1976 Nil
- 1977 Nil
- 1978 **Wayne L Dowdey**, for his distinguished record in the mineral industry of the United States of America and for his services to the American Institute of Mining, Metallurgical and Petroleum Engineers.
- Sir lan McLennan, in recognition of his long and dedicated service to The Institute and its members, to the support and enhancement of the professions represented by the membership of The Institute, and to the development of the mining and metallurgical industries.
- 1980 **Sir Henry Somerset**, for his distinguished services to education, research and industry especially in Tasmania, and for his outstanding contributions to the work of The Institute.
- 1981 Nil

1982 Nil

1983 Nil

Sir James Foots, for his dedicated and fruitful leadership in the affairs of The Institute as a Councillor over 27 years, including his outstanding contribution in reviewing the structure and organisation of The Institute, also his festering of close relations with international kindred societies as a representative of The Institute and for his contribution to the mining industry throughout Australasia.

1985 Nil

1986 **Osmar Julius Blau**, in recognition of his long and on-going contribution to the affairs and advancement of The Institute and geoscience professions, and for active participation in forwarding education in the minerals industry and his lengthy services to the community.

Lloyd Samuel Jones, for his long and dedicated involvement in the affairs of The Institute, particularly the New Zealand Branch where he has been Chairman or Secretary since its foundation in 1966; and his significant contribution to the mineral industry in New Zealand from his former Mines Division position of Chief Mining Engineer (Minerals) and Chief Inspector of Mines, Quarries and Petroleum.

1988 **Professor Geoffrey Blainey**, in recognition of his services in recording and presenting the history of Australian mining and for his contribution in raising the awareness of the heritage of the profession.

Sir Frank Espie, for his committed leadership to The Institute and the mineral industry and for his wise advice and guidance to the affairs of the Council and this Institute.

Sir Laurence Charles Brodie Hall, in recognition of his long service to The Institute, his consistent support for mining education, especially in the Western Australian School of Mines, Kalgoorlie, and his significant contribution to the mining industry.

John Campbell Jenkins, for his dedication to the activities and traditions of The Institute and his significant career in the copper industry; also, for the great personal contributions he has made to the careers of many people.

Professor Eric Aroha Rudd, in recognition of his continued enthusiasm, over many years, for education in the geosciences resulting in his elevation to Emeritus Professor, and for his long-held belief that commercial discoveries of oil and gas would be made in this country, and for his contribution to the growth of The Institute.

Professor Howard Knox, in appreciation of his continuing search for creative means of improving metallurgical efficiency and for his model career in academia and industry.

John Funnell, in recognition of his services to lead and zinc production and his management of diverse professionals in the industry.

John Laurence Liebelt, in recognition of his service to the management of the mineral industry and for his council and leadership of the affairs of The Institute.

1990 Nil

1991 **Sir Russel Madigan**, for his dedicated service to the mining industry and The Institute including terms as President, Vice-President, Councillor and member of various Committees. Also, for his active involvement with overseas kindred bodies.

Jack Gilroy Symons, for his contributions to mining from both industry and government, and his outstanding service to The Institute over 58 years, including Tasmanian representative on Council for 14 years and as Vice-President and President.

James Thorpe Woodcock, in recognition of his long contribution to mineral chemistry research at CSIRO acknowledged by his authorship (or co-author) of more than 150 papers published in Australia and overseas and his continuing years of service to The Institute as Consultant Editor of Monographs and other volumes issued by The AusIMM.

Associate Professor Michael H Buckenham, in recognition of his service to the mining industry particularly in the field of education and his service to The Institute as a Member of various Committees, especially his 28 years continuous service as a Member and former chairman of the New Zealand Branch.

Donald F Fairweather, in recognition of his active association with The Institute throughout a distinguished career, including service as Councillor, Vice President, Chairman of the Membership Committee, Chairman of the Organising Committee of the Third International Mine Water Congress and membership of various Committees.

William Joseph Fisher AM, in recognition of his long and dedicated service in many capacities to the Australian mining industry and to his leading role, through the Darwin Branch of The Institute, in the creation of informed, public debate on issues of the day, notably multiple land use, uranium mining and Aboriginal land rights as they influence the development of Northern Australia.

Bruce Phillip Webb AM, in recognition of his outstanding service to The Australasian Institute of Mining and Metallurgy and particularly in his role as President in 1986, Councillor from 1977 to 1991, Chairman of the Publications Committee from 1989 to 1991 and as an active member of various Committees during this term as a Councillor.

John Kenneth Allister McLeod, for his long and dedicated service to The Institute as a Councillor for 24 years, Vice President 1975/1976 and his role as President in 1978 and in 1993 during The Institute's Centenary Year.

John Oswald Reynolds OAM, in recognition of his active participation in the affairs of The Institute over many years and for his outstanding contribution to the revitalisation of the Victorian minerals industry.

1996 **David Cowper Tennent**, in recognition of his long and dedicated service to The Institute as a President in 1985 and a Councillor for 15 years. Also, in recognition of his role as a founding member of the Mineral Industry Consultants Association (MICA) and founding Trustee of The AusIMM Education Endowment Fund.

Dr Don Oswald Zimmerman, in recognition of his contribution to the mining industry and The Institute as President in 1987 and Councillor from 1980 to 1988. Also, for the encouragement and assistance given to the development of the careers of other members of the profession.

- Sir Arvi Parbo, in recognition of his unique contribution to the leadership of the Australian Mining Industry, specifically to science and technology, and particularly his outstanding role in the development of the Australian Nickel and Alumina industries to their current World standing. Also, in recognition of his contribution to The AusIMM as Councillor and President.
- 1998 **Dr A J Hargraves,** in recognition of his leading contribution to the objectives of The Institute for many years in his capacity as Councillor, Branch Chairman, Branch Honorary Secretary, Branch Committee member, editor and author. His relentless efforts to further the development of mining technology through both operational and academic research has

gained him recognition and admiration on a worldwide basis. He is regarded as a role model for Institute members, and his enthusiasm has encouraged many others to actively participate in Institute affairs.

- Dr Soetaryo Sigit, for sustained, devoted and meritorious service to the professions of applied and economic geology and mining for a period of over 40 years involving Indonesian national and international interests, and for his contributions to the development of the Contract of Work concept resulting in Indonesia's world recognised system for foreign investment in mining projects in Indonesia.
- John Travers Brady: During a distinguished career as a mining engineer and manager he contributed widely to the development of the minerals industry in his various roles. In addition, Jack was a tireless worker for The Institute being a Councillor, Chairman of the Executive, the Education and Accreditation and Unemployment Committees, and President in 1991.
- Dr David Mackenzie, for excellent, dedicated, selfless service to the Institute and the minerals sector commanding the respect of colleagues and members over forty years, particularly in studies and publications on ore deposits and the JORC Code. For being an outstanding role model, generous with time and effort, applying acumen and integrity for the Institute and the profession in so many areas.

Sir Bruce Watson: in recognition of his long and distinguished career in the Minerals Industry and The Institute, as President in 1992. Also, for his life-long contribution to the professions, to education and research, to the arts, and to charity organisations.

2002 Nil

2003 Nil

John (Jock) Campbell Braithwaite has shown outstanding leadership in mineral exploration and development in metallic, precious and non-metallic mineral, and petroleum sectors in New Zealand. His technological contribution to alluvial gold mining is recognised internationally. Throughout his career he has maintained the highest levels of ethical, personal and professional conduct.

Alastair H Blaikie, for his service to The AusIMM including the Melbourne Branch Committee, The AusIMM Council, the Publications Committee, his significant contribution as Editor of Monograph 17 and The AusIMM Proceedings and his role as Electoral Officer over the past five years.

Alban Lynch AO, in recognition of his outstanding contribution to the Minerals Industry over many years which has previously been recognised through 50 years membership in 2004, The Institute Medal (1993), President's Award (1978), Distinguished Speaker Exchange Program (1989), President of The AuslMM (1989) and the Sir Willis Connolly Medal in 1991.

James Whitehead, for his service to The AusIMM including the Melbourne Branch Committee as Honorary Secretary, The AusIMM Council, as Chair of the Mineral Heritage Committee, his involvement in several conferences and symposia and his role as Electoral Officer for many years.

Leslie (Lee) **Wedgwood Parkin AO**, for his contribution to the promotion of the mining and petroleum industries and to the ideals and aspirations of The AusIMM as well as his profound influence on those engaged in the minerals industry.

John Graydon Eddy, in recognition of significant contribution to The AusIMM Perth Branch activities and as a voice of wise advice in the industry.

2006 **Charles Copeman AM,** for his significant contribution over many years to the minerals sector in Australia and to The AusIMM since joining as a Student in 1949 and then serving as a Councillor from 1983 to 1989 and currently on the Sydney Branch Committee.

Norton Jackson, for his contribution to the Adelaide Branch of The AusIMM as a distinguished leader in the minerals sector in South Australia. He continues to enjoy the highest respect from his professional associates.

- 2007 lan Goddard, for his contribution to The AusIMM during his 40 years' membership. He was on the Committees of three Branches, Councillor and Director for 14 years and elected President for 2002 and 2003. Ian has been a member of many AusIMM committees; led a review of the VALMIN Code; was on the Government's Action Agenda for Mineral Exploration; Chairs the ASMV; and is a member of JORC and CRIRSCO.
- Michael Lawrence, for his committed and continuing service over more than 40 years to the mining industry and The AusIMM. Michael is dedicated to promoting professional ethics and consultancy standards, particularly in the mineral valuation and dispute resolution fields. He has published more than 90 technical papers and actively participated in activities beyond the NSW Branch with an involvement in New Zealand Branch Annual Conferences. Michael has served as AusIMM President and Councillor and as Chair of the VALMIN and Alternative Dispute Resolution Committees.
- Don Morley, for his dedicated service to The AusIMM. Don has been a member for more than 40 years and was President in 2000. Don was a Councillor from 1992 to 1996, Honorary Treasurer from 1987 until 1996 and a Director in 2000 and 2001. He received the Beryl Jacka Award in 1997. Don played a significant role in managing the Institute's finances through difficult times and was heavily involved in the major changes which were made to The AusIMM's structure. In a long and distinguished career, he was an Executive Director of WMC and served on industry bodies, such as the World Gold Council and as Treasurer of the International Council of Mining and Metallurgical Institutions (CMMI).

Eric Garner AM, in recognition of his distinguished and continued service to The AusIMM over many years. His contributions have included lengthy terms as a Councillor representing overseas members; Chair of the Membership Applications Committee; Chair of the Complaints Committee; and involvement in and valued advice to various Membership task forces, the Board and Chief Executive, and in negotiations with the ACCC and the revision of the Institute by-laws in 2004.

Dr Brian White, for his dedicated service to The AusIMM. Brian has been a stalwart member of The AusIMM for more than 30 years. During this period, he has continuously contributed at a significant level through his membership of numerous Branch committees and with other important Institute roles, including the Chartered Practising Status Working Party. Brian has also worked tirelessly at a grass roots level, particularly around tertiary education, to further the standing of The AusIMM. Brian received the Beryl Jacka Award in 1998 and has maintained a very active involvement in the Institute's affairs. He continued as a Councillor until 2000, served as a Director of the Board and became a member of the Interim Joint Board of AusIMM/IEAust in 2001. He has chaired the University Liaison Committee and was actively involved with the Australian Student Mineral Venture (ASMV) Executive Committee for many years from its outset. Brian is a current member of the Awards Committee, the Ethics Committee and the Mining Society Committee, and an erstwhile member of the Complaints Committee.

2010 **Richard (Dick) Carter,** in recognition of his outstanding contribution to The AusIMM through his chairmanship of the Education Endowment Fund Board of Trustees, of which he has been a member since 2005. His distinguished career in the minerals industry and contribution to the Institute has been recognised previously with the Sir Willis Connolly Award in 2001 and Beryl Jacka Award in 2002. Dick is a former Councillor and President (1998) of

The AusIMM and led the review and corporate restructure which laid the foundations for the Institute's growth and success. He has also chaired the Ethics Committee (2005-2006) and was a member of the Corporate Support Taskforce in 2005.

Rod Elvish, for his sustained service to The AusIMM and the industry. Rod began his association with the Institute as a student member and progressed to Branch, Council and Board representation, and then to the position of AusIMM President in 2002 and 2003. He continues to serve on the Emerging and Strategic Issues and Heritage Committees, and on the Metallurgical Society committee and Sydney Branch committee and has also served on the VALMIN and Awards Committees. Rod received the Beryl Jacka Award in 2003. He is a member of the International Mineral Processing Council and was instrumental in the organisation and delivery of IMPC 2010 in Brisbane. He also mentor's student members and supports several initiatives for international students through The AusIMM.

- David Pollard, for his dedicated service to advancement of knowledge and skills in metallurgy. David has been a Member of The AusIMM for 53 years and a Fellow since 2008. In that time, he has taken leading roles in the industry and the Institute, particularly in the education and development of students and the advancement of knowledge and skills of his fellow minerals industry professionals. David lectured metallurgy for 14 years at the University of Melbourne and for seven years with the South Australian Institute of Technology (now the University of South Australia). He was Education Manager for the Australian Mineral Foundation from 1988 until 2000, was a member of the AusIMM Education and Accreditation Committee from 1993 until 2007 and was also a member of the South Australian Chamber of Mines education committee from 1988-1993. David participated in the Australian Academy of Science school chemistry project and developed a minerals module for the Victorian HSC Chemistry course.
- 2012 **Peter Stoker,** in recognition of his work as chair of the Joint Ore Reserves Committee (JORC) since 2005 and has led the committee through periods of consolidation and change, including a review of the JORC Code and a reassessment of the relationship between the JORC Code and the ASX Listing Rules. Appropriately, his areas of expertise are audit and due diligence studies of Mineral Resources and Ore Reserves and he provides advice to improve standards in mine geology and improve minerals investment return.
- Dr Sandra Close, for her extensive contribution to The AusIMM and to industry. Dr Close has been an active member of The AusIMM for 47 years and has served as Member and/or Chair of many Committees, as a Branch Chair and, for seven years in the 1990s, as an AusIMM Councillor. Dr Close has applied the knowledge and experience drawn from her extensive career in the resources industry, including geology, banking, finance and general management roles, to explain and promote the minerals industry and engage the wider community. The leadership and tenacity she has displayed over her long career serves as an example for both men and women in the industry. She wrote "The Great Gold Renaissance The Untold Story of the Modern Australian Gold Boom 1982-2002, the first comprehensive work on the Australian gold sector for about a hundred years. Dr Close is a recognised expert on the international gold sector and she continues to be an enthusiastic exemplar and advocate in many facets of the minerals industry. Dr Close's pioneering role as a professional woman in several fields, her achievements in her career and her on-going leadership, for almost half a century, are worthy of special recognition.
- Prof Eric J Grimsey HonFAusIMM(CP), for his extensive contribution to The AusIMM. Eric received the President's Award in 2008 for his contributions to minerals education and for his service to The AusIMM as Vice President and Councillor. In 2003 Eric served as Chair of the Code of Ethics Review Committee and since 2007 he has been Chair of the Ethics Committee. Eric played a major role in refining the complaints process and publicising the work of the committee in The AusIMM Bulletin and at Congress. The Code of Ethics exists to ensure that all AusIMM members uphold and enhance the honesty, honour, integrity and

dignity of their profession. Member awareness of the Code of Ethics and associated codes is an important function of the Ethics Committee and Eric Grimsey is a leader in this process.

The Hon Ian Macfarlane MP, Minister for Industry. The AusIMM Board is pleased to award the title of Honorary Fellow to the Hon Ian Macfarlane MP, Federal Minister for Industry. Minister Macfarlane is the longest-serving Australian Minister for Resources since the portfolio was created in the early-1980s. He served as Minister for Industry, Tourism and Resources from November 2001 till December 2007 when the Howard Government lost office. He held the shadow portfolio for much of the period 2008-13 and was appointed to the super-portfolio of Industry (including Resources) in September 2013 on the election of the Abbott Government. Mr Macfarlane is recognised by the resources industry and the many stakeholders who deal with him as a passionate and effective advocate for the industry. He has had an enduring impact on the policy and politics of the resources portfolio and in conjunction with his counterparts across the political spectrum, has built and maintained a bipartisan approach to resources policy that is rare, if not unique in Australian federal politics.

- 2015 **Peter Lyle McCarthy HonFAusIMM(CP)**, in recognition of his exceptional leadership and contribution to the Institute over many years. Throughout his career, he has demonstrated outstanding professionalism and technical excellence, as well as unstinting dedication to preserving the important mining history of Australia.
 - Peter has been a member of the Institute for 45 years, a member of the Board for seven years (2003-2010) and was President of the Institute in 2007 and 2008. He has contributed to several committees over an extended period, including Audit and Risk Management, Awards, JORC, Emerging Issues, EEF Board of Trustees, Remuneration and Consultants Society and three Branch committees. He was instrumental in the rejuvenation of the Heritage Committee in 2008, having previously been a founding member in the 1980s. Peter has always been prepared to tackle difficult tasks with complete
- Greg Chalmers HonFAusIMM(CP), Greg joined the Council of the AusIMM in 1995, and when Council was replaced by an elected Board in 2001 he was elected a Director. He was then elected President of the AusIMM for 2009 and served a second term in 2010, completing an unbroken 12 years of service on the Board with two years as Immediate Past President in 2011-2012. Greg has served on many Branch, conference and Board committees, including the AusIMM's OH&S, Audit and Risk Management, Awards, Investment and Ethics Committees, as well as the Education Endowment Fund Board of Trustees.
- Neil Herbert Cole HonFAusIMM (deceased August 2016), Neil has contributed to the Institute significantly over his 53 years of membership. He was actively involved in AusIMM Sydney Branch activities, chaired symposia, authored papers and represented the Sydney Branch on the AusIMM Council.

Neil was involved in the early development of the JORC and VALMIN Codes and became a foundation member of the Complaints Committee in 2006. He continued to serve on the Complaints Committee for ten years, retiring from it just two months before his death. He gave freely of his time as the Complaints Committee workload increased with more complex ethical and procedural matters that required addressing. Neil's involvement was exemplary, and he drew on his extensive industry and regulatory experience to ensure conclusions and actions were fair and reasonable.

2017 **Geoffrey Sharrock HonFAusIMM(CP),** Geoff has been an outstanding contributor to the Institute since 1968. Elected to the Board in 2011 and then as President in 2013-14, his dedication to the needs of members (championing the Member Assistance Program) and his ability to personally engage with every Branch during his tenure was truly awe-inspiring. His work as Inaugural Chair of the Governance Committee lead to the AusIMM Charter and By-

Laws review. He was also instrumental to AusIMM's reach into Asia and helped establish MOUs with other international kindred bodies. As Immediate Past President he provided support to other Directors and was part of the Awards, Investment and Remuneration Committees.

Geoff was Chair of the Hunter Region Branch for 11 years, completely reinvigorating this region to build the largest regional Branch and initiated the Student Chapter. He was Chair of the AusIMM's OH&S Taskforce (now the H&S Society) for five years, developed the Safety Beliefs and Principles and recommended the creation of an Institute OH&S Award.

Gary Chilman HonFAusIMM, Gary is recognised as a knowledge node in the mineral processing community and an exemplar of information accumulation and sharing. Throughout his 60-year career in technical and management roles at Broken Hill and Amdel (now Bureau Veritas), Gary has been the keeper and disseminator of much knowledge. Despite retiring in 2017, Gary is still on hand to help colleagues and clients at BV. Gary was legendary in Broken Hill, highly proficient across all the diverse processing areas and often played the role of 'conductor of the orchestra' as he pulled major projects together. Gary was well known as the most loyal, hardworking and helpful person you could ever have in a work team. His generosity knew no bounds and his authority grew from the professional way he went about his work and the respect he had for his co-workers, no matter what their role was.

For many people, Gary is the type of person who makes it worthwhile being in the industry. His professionalism and commitment make the awarding of an Honorary Fellowship most fitting.

2018 **Rex Berthelsen HonFAusIMM(CP),** Rex has shown outstanding commitment and devotion to the AusIMM over many years, particularly during his time on the Board and as President from 2015-2016.

Rex served on the Cobar Branch from 1996 and chaired the branch from 2002 until 2010 and continued to serve on this committee – as well as the Lachlan Branch committee – until 2013. He was elected to the AusIMM Board in 2011. Rex has also served on numerous AusIMM Board committees.

Rex was elected President during a particularly challenging time for the Institute, and he had to make some very difficult and courageous decisions. He has showed dedication and determination to ensure the best possible outcomes for all AusIMM members and stakeholders. Rex initiated the transformational changes required for the AusIMM to safeguard our long-term financial sustainability. Much of this could only be achieved at personal and professional costs to Rex.

With his approach of respect, humility and trust, Rex brings the best out of everyone. The energy and commitment Rex invests to the AusIMM is enormous, as he continues to demonstrate the characteristics that make the AusIMM a successful and resilient organisation.

2018 **Dr Ralph Holmes HonFAusIMM(CP),** Ralph has served the AusIMM and the resources industry with extraordinary and sustained service over many years. He has chaired eight biennial iron ore conferences from 2002-2017 and chaired six sampling conferences from 2005-2017, as well as the 25th International Mineral Processing Congress (IMPC), hosted jointly by the AusIMM and CSIRO.

Ralph joined CSIRO in 1971 to work on nuclear techniques for analysis of iron ore, including developing ISO standards and chairing ISO committees for sampling ores and concentrates. Over the last 30 years Ralph has focused on mineral processing research and has managed CSIRO's iron ore processing research for more than 20 years. He has been the Portfolio Leader – Carbon Steel for CSIRO Mineral Resources for the past three years and is in high demand as an international expert in iron ore processing and sampling.

Ralph has received many awards for his outstanding contributions to the development of mineral sampling standards, for developing 'Ironscan' for the on-stream analysis of iron ore, and for excellence in teaching and application of the theory of sampling.

He was awarded a CSIRO Lifetime Achievement Award in October 2015.

- Owen Hegarty HonFAusIMM, Owen has a long and successful history of senior leadership in the resources sector and has been supportive of resources professionals throughout his whole career. Owen has also been a strong supporter of AusIMM. Currently Executive Chairman of EMR Capital Pty Ltd, Owen was an AusIMM Director from 2009–14. He was also a member of the Audit and Risk Management Committee and Chair of the Emerging and Strategic Issues Committee during the same time as his Director position. Owen has previously been recognised by AusIMM when he was awarded the Institute Medal in 2005. Owen is one of our industry's most engaging characters, demonstrating strong leadership and consistent contribution to the sector. Owen is a senior and influential professional who has performed notable, active and sustained service to AusIMM and has advanced our sector's interests at large.
- Rick West HonFAusIMM(CP), Rick has been a member of AusIMM for 63 years, first joining AusIMM in 1956. His contributions to AusIMM since then have been vast and ongoing. An AusIMM Councillor (the precursor to the modern Director position) from 1987–91, Rick was on the Chartered Professional (CP) Board from 2000–15 and was Chair of the CP Board from 2002–04 and 2008–11.

Rick moved the original concept of setting up the CP system and was a prime mover in setting up the original JORC Code, with the AusIMM Council making him a coordinator during that period. Rick was a member of the JORC Committee from 1984-2000, the Complaints Committee from 2005–16, the Membership Applications Committee from 2005–15, the Publications Taskforce from 2005–07 and the Publications Committee from 2010–15. Since Rick first joined AusIMM, he has served with several branches, including Adelaide, Broken Hill and Sydney. Rick has previously been awarded the Branch Service Award in 2003 and the prestigious Beryl Jacka Award in 2010. Rick West is held in the highest regard within the AusIMM community and the extensive contributions he has made continue to be valued across the Institute.

Professor Tim Napier-Munn HonFAusIMM(CP), Tim Napier-Munn is a mineral engineer with almost 50 years of experience in applied research and development. His early work was with De Beers in South Africa, and lecturing at Imperial College London. Tim joined the Julius Kruttschnitt Mineral Research Centre (JKMRC) at the University of Queensland in 1985, being appointed Research Director in 1992 and Director in 1997. In 2001, Tim became inaugural Managing Director of JKTech Pty Ltd (the Commercial Division of the JKMRC). Tim retired from these two roles in 2004 and now works part-time for the JKMRC and as a consultant for JKTech. He was appointed Emeritus Professor at the University of Queensland in 2015.

Tim has delivered professional development courses on statistics for mineral engineers for over 25 years, and consulted to industry on the planning and analysis of plant trials. In 2014 he published his book Statistical Methods for Mineral Engineers – How to Design Experiments and Analyse Data.

Tim has published more than 150 papers and articles, and was the editor of the JKMRC's 'Blue Book' on Mineral Comminution Circuits and the seventh edition of Wills' *Mineral Processing Technology*.

Tim is a recipient of the Futers Gold Medal of the UK Institute of Materials, Minerals and Mining (2009), the AusIMM President's Award (2011) and the AusIMM Sir Willis Connolly Memorial Medal (2015). He was the AusIMM Delprat Distinguished Lecturer in 2016.

2020 **Professor John Ralston AO HonFAusIMM**, Emeritus Professor John Ralston is a physical and colloid chemist, with complementary training in metallurgy, whose research interests cover various aspects of interfacial science and engineering. He investigates how bubbles and particles interact, why and how fast surfaces wet and why particles stick together. During his career, John has been instrumental in establishing and leading a variety of major research programs, blending fundamental and applied research.

In 1984, John was appointed Professor of Chemical Technology at the Australian Institute of Technology (which became the University of South Australia (UniSA) in 1991). In 1994 he established the Ian Wark Research Institute (the Wark) and was Director until his retirement in 2012. Under John's leadership, the Wark became a world-famous institute, employing 180 academic staff and research students over three campuses. His research efforts with his team members have returned over AUD\$1 billion to industry.

In 1999 John led the successful bid for an Australian Research Council Special Research Centre for Particle and Material Interfaces; and in 2006, John was the principal researcher who helped establish the Australian Mineral Science Research Institute (AMSRI). John has also actively supervised 85 PhD research students.

In 2007, John was awarded South Australian of the Year and South Australian Scientist of the Year. In 2008, John was made an Officer of the Order of Australia. UniSA has established the Ralston Medal for Excellence in Physical Chemistry and the John Ralston Chair in Minerals and Resource Engineering in his honour. John also received the Sir Willis Connolly Memorial Lecture Award 2009.

John presently mentors several research teams at UniSA, whilst collaborating with universities, companies and research institutes internationally.

- Dr Tony Christie HonFAuslMM. Tony Christie is one of the most influential economic geologists in New Zealand (NZ), making a significant contribution to academia and the industry through research and organising conferences and events. Tony has published over 24 journal articles, over 40 book chapters, and over 50 abstracts in conference proceedings on mineral deposit studies, geological, geochemical and geophysical mapping, regional mineral resource assessments and prospectivity studies.
 - In 2010, Tony and Dr Robert (Bob) Brathwaite jointly received an AusIMM President's Award for their contributions to the NZ minerals industry through academic and applied research, including editing AusIMM Monograph 25 on NZ mineral deposits and significantly contributing as lead authors or contributing authors. In 2016, Tony edited AusIMM Monograph 31, Mineral Deposits of New Zealand, and was again a lead or contributing author on 30 papers. Tony served on the NZ Branch Committee for 26 years and was Branch Chair from 1999-2001. Tony led several new initiatives including short courses at branch conferences and an annual program of international visiting lecturers who toured NZ delivering lectures and short courses. He has regularly been on conference organising committees including many Branch Annual Conferences; PACRIM 1995, 2015 and 2019; and Gold 2017. He was convenor of the 26th International Applied Geochemistry Symposium 2013 and NZ Branch conferences in 2012 and 2016. All of this work clearly demonstrates Tony's commitment to sharing knowledge with the broader professional community. Tony's sustained leadership, support and activity in international minerals research and AusIMM is worthy of recognition as an Honorary Fellow.
- Professor Alice Clark HonFAusIMM. Professor Alice Clark has a reputation for strong and clear-headed leadership. She has more than 35 years' minerals industry experience including senior leadership positions in corporate, consulting and research institutions, as well as consulting to government and major resources groups. Alice served as AusIMM President in 2011-12 and received the Beryl Jacka Award in 2015.

 Alice has devoted many years of work to the development and maintenance of professional standards in industry. She has been active in the Joint Ore Reserves Committee (JORC) since 1996, and made a leading contribution to the revision of the JORC Code in her position as Deputy Chair from 2007-2013. She is a Commissioner in the NSW Independent Planning commission and a Fellow of the Australian Academy of Technology and Engineering.

Alice's notable academic leadership roles include her appointment to the role of Director for both the Julius Kruttschnitt Mineral Research Centre (JKMRC) and the WH Bryan Mining and Geology Research Centre (BRC) within the Sustainable Minerals Institute at The University of Queensland (UQ) in 2012, overseeing substantial restructuring of those organisations. In her current role as SMI's Deputy Director (Strategy) she has been instrumental in developing a future-focused team, who are breaking new ground in technical innovation. As AusIMM's first female president, the first female Director of JKMRC at UQ, and Mount Isa's first female Chief Geologist, Alice has been a role model for many professionals throughout her career. She remains an ambassador and advocate of the exploration and mining industry.

- 2021 Dr James (Jim) May HonFAusIMM. Dr Jim May established a new paradigm of cooperative mineral industry research and development (R&D) in Australia, which was subsequently taken up globally. Jim's influence on the industry, the research community and the careers of individual researchers has been profound. Australia's world leading mineral research infrastructure owes much to his ability to identify opportunities, broker collaborations and inspire trust. Since joining AusIMM in 1952, Jim has served on many AusIMM committees. In 1992 he was awarded the Institute Medal and in 1995 was AusIMM/AIME Distinguished Lecturer to the USA. In 2016 he was inducted into the Australian Prospectors and Miners Hall of Fame and he has received Honorary Doctorates from the University of South Australia and The University of Queensland (UQ). The Australian Mineral Industries Research Association Limited (AMIRA) was established in 1959, and Jim was appointed its first full time CEO in 1968. Almost singlehandedly Jim created the 'AMIRA model' in which R&D costs and intellectual property were shared by mining companies for mutual benefit, achieving an enormous investment leverage and increasing the rate at which new developments were adopted. Jim also played an important role in the early success of the Julius Kruttschnitt Mineral Research Centre (JKMRC) at UQ, including a long-standing collaborative relationship with Alban Lynch HonFAusIMM. Jim understood AMIRA's brokering role better than anyone and exploited it brilliantly to find consensus from sometimes competing interests and ideologies. This was a function of his warm personality, technical competence and the high regard in which he was held.
- Prof Don McKee HonFAusIMM. Prof Don McKee has had a profound impact in the 2022 resources sector, particularly in education, applied research and commercialisation of research. Don and colleagues established JKTech in 1985 based on a business plan which won an Australian national innovation award. He was Director of the Julius Kruttschnitt Mineral Research Centre from 1990 to 1996, after which he became the Head of Department for UQ's Department of Mining and Metallurgical Engineering. In 2000, Don established the highly successful Sustainable Minerals Institute (SMI) and was its inaugural Director until his retirement in 2007. Don's vision for the SMI was to provide integrated research excellence in technical, social and environmental aspects of mining. He created three entirely new research centres of the SMI: the Mineral Industry Safety and Health Centre (MISHC); the Centre for Water in the Mineral Industry (CWiMI); and the Centre for Social Responsibility in Mining (CSRM). All three have international reputations, a direct consequence of Don's vision and leadership. Since his 'retirement', Don remains involved in some SMI activities, particularly the WH Bryan Mining Geology Research Centre and the JKMRC. Don's remarkable approach involves great planning, excellent networking, persistence, and the ability to bring people together in productive and creative teams. In 2001 Don was awarded the Mineral Industry Operating Technical Award for the successful 'Mine to Mill' integration technique that significantly increased the productivity and cost effectiveness of open-pit mining and comminution operations. In 2003 he received the AusIMM President's Award for his leading role in the development of the SMI and its reputation for reflecting the highest aspirations in sustainable, economic, social and environmental development.

- 2023 John (Steve) Hancock (deceased) HonFAusIMM. Steve Hancock made an exceptional contribution to the resources sector throughout his career. In particular, he was a driving force for the establishment of AusIMM's Social Licence to Operate (later Environmental, Social and Governance (ESG)) Committee, which led the development of the first-ever Social Responsibility (SR) Framework and Statement by a professional institute in the minerals sector. Without Steve's drive and enthusiasm, this would never have happened. Following a career of 48 years, Steve retired from full time work in 2008, but maintained a contract until 2013 to continue to be available to URS (now AECOM) as a Special Consultant. Steve was also a tribunal member for Planning Panels Victoria until 2018. He was concerned that the long-term impacts of projects in relation to ongoing productive land use were seldom addressed, whilst these were the things which materially affected landholders and land custodians. Steve nominated for and was elected to the AusIMM Consultants Society Committee in 2016. Steve was pivotal in the AusIMM achieving 'first mover status' in ESG amongst the world's professional minerals related associations; he was, in effect, an ESG trail blazer. Steve's endless inquiring and passionate, true professionalism drove everybody on the ESG/SR Committee. His wish was for an AusIMM ESG Committee to continue to act on the recommendations coming out of the most recent ESG/SR Forum. The minerals community at large was saddened to learn of the passing of Stephen Hancock in his hometown of Melbourne in early 2022. AusIMM is privileged to recognise his significant legacy through Honorary Fellowship. A detailed account of Steve's life and career can be found in his obituary published by the AusIMM Bulletin.
- 2023 John Murray HonFAusIMM. John Murray has 40 years' experience in resources and executive search, and has an international reputation for adding value to companies. projects, and individuals through his expert advice. John's career in resources started at Alcoa, where he worked in corporate affairs. This ignited his lifelong interest in addressing mining's public image challenges and encouraging bright, young talent into the sector. After several years building a successful career in mining corporates, John set up Swann Global, a specialist mining executive search and advisory firm. Thirty years later, Swann is a truly global business with offices in three continents. John has been involved with the appointment of key executives (including CEOs) to many of the world's leading resources companies, as well as mid-tier and smaller organisations. He has advised senior executives and corporate boards not just on the appointment of individuals but also on structure and strategy. As cofounder of the Melbourne Mining Club, John helped create a respected venue for industry leaders to share their thinking on important issues and for professionals to meet and share ideas. Now in his eighth decade, John Murray has stepped away from the day-to-day running of the Swann Group, but he shows little sign of slowing down. He is a founding investor and non-executive director of Descycle, which brings together academia and business to find cleaner, greener ways to recover recyclable metals and minerals from e-waste and batteries. He continues to encourage the mining industry to enhance perceptions of the sector, thereby helping to inspire people from diverse backgrounds to join the industry.

Beryl Jacka Award

- Sir James Foots AO, in recognition of his dedicated and sustained service to The Institute having been President in 1974, Vice President form 1967 1972, undertook the responsibility of the first major Review of The Institute Structure and Organisation in 1984, Inaugural Chairman of the Executive Committee of Council and membership on several Committees during his 29 years as a Councillor.
- John Lawrence Liebelt, in recognition of his dedicated and sustained service to The Institute, having been President in 1983, Vice President in 1976 to 1979, undertaken a major review of The Institute's Structure and Organisation in 1992, Chairman of the Executive Committee of Council from October 1985 to 1994 and served on several committees during his 26 years as a Councillor, and having been active and held office in the Broken Hill Branch for many years.

- John Travis Brady, in recognition of his major contribution and dedication to The Institute as a member of various Committees, Councillor, President in 1991 and undertaking the role of Chairman of the Executive Committee of Council.
- 1996 No award was made for the Beryl Jacka Medal in 1996.
- Donald Marshall Morley, in recognition of his long association and major contribution to the affairs of The AuslMM, his significant and sustained services to the Minerals and Petroleum Industries, both during his illustrious career with WMC and his involvement at a senior level on the World Gold Council.
- Dr Brian White, in recognition of his significant contribution to The Institute over 20 years. He has been a Branch Officer in Kalgoorlie, Newcastle and Southern Queensland Branches; a Councillor of The Institute since 1995 and a Vice-President since 1996, in addition to his active involvement in Institute Committees, particularly Students and Young Professionals, Ethics, Education and Chartered Practising Status; and is a former Chairman of the Board of Management of the Mineral Industry Consultants Association. Also, for his dedication in furthering the vision of The Institute to be the pre-eminent association serving minerals industry professionals in Australia and the Asia Pacific.
- 1999 No award was made for the Beryl Jacka Medal in 1999.
- 2000 **Lloyd S Jones**, in recognition to his significant outstanding contribution to the New Zealand Branch of The Institute for 33 years, including being Secretary for 32 years, since foundation in 1966. During that time, he has dedicated much time to Institute matters. Also, for his significant contribution to the minerals industry in New Zealand
- Mr Michael Lawrence, in recognition of his extraordinary and sustained contribution to The Institute and his profession over many years. Michael has served The Institute for some 35 years, including nearly 10 years as a Councillor and as President in 1999. During this time, he has actively and assiduously promoted professional excellence, particularly with respect to standards of performance and ethical behaviour. Michael has made major contributions to The Institute's affairs, including inter alia the instigation of Chartered Status, the promulgation of the Valmin Code, and its membership of the Australian Council of Professions. He has also been actively engaged in the affairs of The Minerals Industry Consultants Association (MICA), including the areas of Alternative Dispute Resolution (ADR) and definition of the Expert Witness function.
- 2002 **Dick Carter**, in recognition of his outstanding contribution to the Institute as Councillor and President, in leading the review of the Institute in 1998 and subsequently cementing the change.
- 2003 **Rod Elvish,** for extraordinary and sustained service to The Institute commencing with his active participation as a student representative in 1986 through branch, council and board representation and the many committees and taskforces and culminating in a dedicated and extended period as President and Immediate Past President from 2001 to 2003.
- 2004 *Eric Garner AM*, for his continued service to The Institute over many years including his contribution as a Councillor representing overseas members, Chair of the Membership Committee and various Membership Task Forces over the last decade, and his involvement in negotiations with the ACCC and revision of the By Laws in 2004.
- Vivienne Bull, for ongoing extraordinary and sustained service and selfless work on behalf of The AuslMM at many levels including as a Councillor and Board Member, on the Membership Committee, New Zealand Branch and Conference Committees.

- Michael Eager, in recognition of the significant role he played within The AusIMM as a Councillor, Director and Branch Committee office bearer. He has also been an active member of the Ethics, Audit and Compliance, Membership and By-Laws Committees. He represented the Board on the JORC Committee and as a Trustee of the Education Endowment Fund.
- John Dunlop, for many years of dedicated service to The AusIMM, as a Councillor, Director, Perth Branch Chairman and organiser of conferences. His current involvement includes Chair of MICA, Alternative Dispute Resolutions, Heritage Committee and the Corporate Support Task Force and a driving force for the Mining Society. As Director, he was active in serving the Western Australian Branches. For extraordinary and sustained service to The AusIMM.
- Dr Peter Lilly, for his extraordinary and sustained service to the AusIMM and its members. Peter has served as President (2006) and Board Member (2001 to 2008, inclusive) of The AusIMM, and has been an active member of many committees including the EEF Board, Audit and Risk Management, Awards, Emerging Issues, Education, Publications and Events, Remuneration, Nominations, Mining Society, Kalgoorlie Branch, Perth Branch and Southern Queensland Branch.
- 2009 Peter McCarthy, in recognition of his exceptional leadership in advancing the values of professionalism and technical excellence throughout his career. He has both contributed to and led a range of initiatives aimed at representing the industry through his participation on many AusIMM Committees. These roles have included membership of the Audit and Risk Management, Awards, JORC, Education Task Force, EEF Board of Trustees, Remuneration and Succession Planning Committees and Chair of the Heritage and Emerging and Strategic Issues Committees, and a past MICA Board member. Peter has served as an AusIMM Board Member since 2003 and as AusIMM President in 2007 and 2008.
- Rick West, in recognition of his extensive experience and a long involvement in the mining industry and for more than 45 years has contributed substantially to the work of The AusIMM. Rick joined the Institute in 1956, while studying mining engineering at Adelaide University. During this time, he served as student representative on the AusIMM Adelaide Branch committee. As his career developed, he served with several branches, including Broken Hill and then Sydney. He has been a key member of organising committees for annual and technical conferences and contributed to technical volumes as an author, reviewer and contributor. Rick was an AusIMM Councillor for five years from 1987-1991 and during this time was a key member of the JORC, Membership and Ethics Committees, among others. More recently Rick was chair of the Chartered Professional Board (since 2008).

Roger Gregg, in recognition of his active contribution to The AusIMM, and as member of the New Zealand Branch for more than 40 years. His service includes two terms as an AusIMM Director (2005-2007 and 2008-2010). He was Chairman of the NZ Branch (2001-2003) and a Branch committee member for a large part of his total time as an AusIMM member. Roger has been a NZ Branch conference organising committee member since the early 1990s. He organised joint conferences with the Ministry of Economic Development and was Chairman of the NZ Minerals conferences in 1997, 2000 and 2005. He has made an enormous contribution to the NZ Branch conferences and continues to do so. Roger has secured support and sponsorship from the minerals industry for these conferences, which in turn have made a major contribution to the ongoing financial and mentoring support for NZ university students through the NZ Education Endowment Trust.

Greg Chalmers, in recognition of his extraordinary and sustained service to The AusIMM. Greg has been a member of the Institute for 40 years and was made a Fellow in 1997. He was nominated to join the Council of the AusIMM in 1995 and when Council was replaced by an elected Board in 2001, he was elected a Director of that Board and has continued to

serve on it since that time. Greg was elected President of The AusIMM for 2009 and for a second term in 2010. Throughout his career, Greg has been an active member of The AusIMM and has served on Branch committees for Southern Queensland, Broken Hill, Central Queensland and the Hunter Region. He has served on many AusIMM Board committees, including the Audit and Risk Management Committee and on the AusIMM Education Endowment Fund Board of Trustees. AusIMM committees on which he continues to serve include the OH&S, Awards, Investment and Ethics Committees.

2012-2013 *Rob Ryan,* in recognition of his eminent service in mineral exploration in the Australian minerals industry for 56 years. He has worked continuously in the Australian and international mineral exploration and production industry. He played a key role in the discovery and development of the modern Australian uranium industry, as team leader of the Ranger One uranium deposit discovery in 1969. His technical abilities and inspired leadership produced several "firsts" for Australia and the world. New techniques pioneered for exploration included a range of radiometric geophysical methods, targeted geochemical tools, drilling techniques, and resource estimation methodology.

Rob has served with dedication in many branch positions within the AusIMM and has always been an active member. He was author of BMR Bulletin 6, The geology and mineral resources of the Hatches Creek Wolfram Field, Northern Territory, published in 1961, has been the coordinating editor of AusIMM Monograph 12 (Field Guide for Geoscientists and Technicians), and had a great deal of input into AusIMM Monograph 9 (Field Geologists Manual) and its updates.

Des White, in recognition of his ongoing involvement with The AusIMM spanning his 60-year period of membership. Des first joined The AusIMM in 1953 as a student member and in 1955 and 1956 served as student representative on the AusIMM Adelaide Branch committee. As his career developed, he served with several AusIMM branches, including Mount Isa, Townsville, Canberra and then Sydney. Des is a Fellow and Chartered Professional of The AusIMM. He was a member of the committee of MICA – The Consultants Society of The AusIMM in 2010-2012. He has been a member of organising committees for conferences and symposiums and contributed to technical volumes as a reviewer.

- Louis Rozman FAusIMM(CP), for commitment and outstanding contributions to the AusIMM. The award serves to acknowledge Louis' previous roles and ongoing work for the Institute, including his roles on the JORC Committee and the Board of Chartered Professionals, his reinvigoration of the Sydney Branch and his current role as Chair of the VALMIN committee.
- 2015 Alice Clark FAUSIMM(CP), in recognition of both the commitment and outstanding contributions she has made to the AusIMM. Alice was elected President of the Institute for 2011 and again for 2012, having been first elected to the Board in 2008. As President, Alice implemented strong governance standards in the interests of members and communicated the changing industry circumstances that were to affect many members in 2012 and since. Alice worked with management and Institute committees to consolidate and deliver a defined program of professional development services and activities. Alice has been heavily involved in the activities of the JORC Committee since 1996, except 2005-2006, and made a leading contribution to the revision of the JORC Code in her position as Deputy Chair from 2007-2013. Alice has been a long-term contributor to the VALMIN Committee and during her time on the AusIMM Board has made a vigorous and valued contribution to the deliberations of the Awards, Ethics, Audit and Risk Management, Remuneration, Investment and Nominating committees. Alice is now in her 25th year of membership, and after seven years of leading and participating in the Institute's governance, she is a most appropriate recipient of the Beryl Jacka Award.

- Ray Tolhurst MAusIMM, Ray has had a very long relationship with the AusIMM in the Illawarra. His association with the AusIMM first began in 1966 when he joined as a student member. Ray has been actively involved on the Illawarra AusIMM Branch Committee since 2001, holding the position of Branch Chair on several occasions. During this time Ray has encouraged many new people to join the committee, including younger material engineers and geologists. His foresight and mentorship has equipped these newer members of the committee with skills and passion to contribute to the local Branch. Ray has also sat on the AusIMM EEF scholarship committee for a number of years.
- 2017 Ron Morland FAusIMM(CP), Ron has demonstrated extraordinary and sustained service to the AusIMM over his 32 years of membership. A long-term active contributor and past Committee member and Chair of the West Coast Tasmania, Broken Hill and Melbourne Branches, he helped set up the Melbourne Mining Club. Ron also served on the Awards Committee for seven years and has Chaired the Membership Applications Committee for the past three years.

He has been Vice-Chair of the Project Evaluation Conference, has served on the International Mine Management Conference Committee, and has been Chair of the AusIMM IMARC Committee.

Ron is a regular and active contributor to Congress and other AusIMM meetings, a great supporter of students and new professionals, a scrutineer for Board elections and generously provides counsel and advice to senior AusIMM members.

Neil Phillips FAusIMM(CP), Neil is an accomplished geologist, leader and mentor to students and practising professionals alike. He is a renowned expert on various types of gold mineralisation around the world.

Teaching and training is a major part of Neil's life, and he mentors many young, mid-career and senior geologists.

Neil has authored numerous geological papers for scientific journals and AusIMM conference publications.

Neil was the editor of Australian Ore Deposits (Monograph 32), launched in September 2017, which is a comprehensive data source of the great mineral resources and exploration successes of our mining industry. This was a significant undertaking and would not have been possible without the sustained efforts and commitment of Neil and the AusIMM staff led by Kristy Burt.

Dale Sims FAusIMM(CP), Dale has been an AusIMM Director since 2013 and completed his second term at the end of 2018. A geologist with over 30 years' experience, he has been involved with AusIMM since becoming a member in 1989 while working at Mount Isa. Always active at Branch level, most recently in the Hunter Region Branch, he has also served as a Young Professional Observer on AusIMM's Council in the 1990s and helped to organise and deliver numerous technical conferences, workshops, field trips and training courses for AusIMM.

Dale has been active with the AusIMM Geoscience Society (and its precursors) since 2000, including as Chair in 2010 and 2014. Dale was also Chair of the Publications Committee from 2015–18 and a member of the Asia Taskforce from 2013–2018 (chairing it from 2016–18). Dale's outstanding commitment, contributions and dedication to AusIMM make him a worthy recipient of the Beryl Jacka Award.

Peter Hills FAusIMM(CP), Peter Hills has been an AusIMM member since 1982 and has been active in taking on many leadership roles in the previous West Coast and Northern Tasmania Branches. Peter worked at the Beaconsfield mine for many years and played a role in the rescue of the trapped miners during the 2006 mine disaster. He is experienced in managing and monitoring mine seismicity and has written and presented many conference papers for the benefit of mine operators on this and related topics.

Peter has provided invaluable leadership in the Tasmania Branch from 2008, first as Secretary and then Chair from 2013-2019. As a conference chair or committee member, Peter has contributed substantially to many successful AusIMM conferences across a range of disciplines, allowing the sharing of technical knowledge throughout the industry. Peter has also been a long-serving member of the AusIMM Chartered Professionals Board/Program Committee, which he chaired from 2016-2018. During 2016-2017 he also sat on the Professional Accreditation Advisory Taskforce which revised the Chartered Professional Program. He joined the Consultants Society Committee in 2015 and is its 2019-20 Chair.

Peter has constantly fostered student participation in AusIMM activities, encouraging the future leaders of the industry. Peter previously received an AusIMM Branch Service Award in 2010.

2020 **Bob Kininmonth MAusIMM,** Bob Kininmonth has been a long-standing AusIMM member with significant involvement in the Illawarra Branch, where he has held a number of committee positions over a career spanning more than 40 years.

Throughout his career Bob has focused on safety, being appointed the NSW Senior Inspector of Coal Mines until 1987, when he joined Coalmines Insurance and finally retired in 1994. He has a strong desire to encourage mining professionals to learn from past incidents so that today's mines can be as safe as possible.

Bob has also been the author or co-author of several AusIMM publications (including Monograph 12 – *Australasian Coal Mining Practice* and Monograph 21 – *History of Coal Mining in Australia*), as well as a convenor of industry conferences and seminars. He is a participant in most Illawarra Branch functions and still maintains an active role in the Illawarra Heritage Subcommittee (which he helped create), and the Southern Coalfields Outburst Committee. Bob has been a long-standing member of the editorial board and latterly coeditor of the annual Coal Operators Conference.

The AusIMM Illawarra Branch has benefitted considerably from Bob's endeavours to promote learning, professionalism and safety within the coal mining industry. Bob was awarded an AusIMM Branch Service Award in 2000 and an AusIMM Service Award in 2008.

Dr Jared Osborne FAusIMM, Jared Osborne embodies the credibility, values, integrity, professionalism and high standards that AusIMM stands for. In particular, he has shown leadership through Chairing AusIMM's Education Endowment Fund (EEF) and being a member of the EEF Investment Fund. The EEF has thrived over the period of Jared's stewardship, providing mentoring and scholarships to future leaders in the mining industry. Jared has been involved in awarding 95 scholarships to deserving students, valued at over \$1 million dollars. His role as EEF Chair shows Jared's genuine passion for investing in future leaders and in advancing initiatives (such as the 'Tomorrow's Professional' program) to leave a positive legacy for the industry as a whole. Jared has also made a positive contribution to establishing leading governance ensure the EEF thrives as a sustainable initiative over the long term. Jared's work with the EEF is entirely voluntary. He has shown tireless commitment to the role while displaying humility and authenticity, while also maintaining a senior leadership position at Rio Tinto.

Jared recently received his 30-year membership certificate, and through his ongoing support of the next generation of resources professionals, he is deserving of recognition as a valuable contributor to AusIMM over a long period of time.

Miriam Way MAusIMM, Miriam is the modern-day Beryl Jacka, displaying extraordinary and sustained dedication to AusIMM, its members and the sector for decades. She became a fully-fledged AusIMM Member in 2015 – one of the first staff members to do so. Supporting members has always been Miriam's major priority, and during her time with AusIMM she has provided guidance and assistance to members, students and young professionals right through to Board Directors and Presidents. She has shown extraordinary leadership for the AusIMM Management Team, including stepping in on multiple occasions as acting CEO during very challenging periods and times of significant change. In recent times she has played a pivotal role in assisting with the development and implementation of AusIMM's

transformational Future Directions strategy and associated digital transformation. Miriam goes about this in her customary modest manner, expecting no accolades. It has been done in addition to her 'ordinary job' which is already broad and multi-faceted. Her dedication and contribution is well above any expectation of an employee, and she is a highly deserving candidate of such a prestigious AusIMM Award.

2023 Paul Harper FAusIMM, Paul Harper has provided highly-valued service to the AusIMM, with contributions over an extended period of time in multiple leading roles. He has demonstrated his leadership as an AusIMM Director (2010-2014) and as Chair of the Melbourne Branch (2006-2008), Mining Society (2009-2010) and Publications Committee (2011-2014). He has also been an invaluable contributor to a diverse suite of committees including AusIMM's Awards Committee, ESG-Social Responsibility Committee, and Consultants Society. Paul has also served and provided guidance to many AusIMM conference committees and has been involved in the delivery of a number of AusIMM short courses, which promotes professional development for a global audience. Alongside his committee work, Paul has also guided many people with energy and enthusiasm and has also encouraged others to be more actively involved in AusIMM activities. In addition, he has formed succession plans for many of these committees to help the ongoing success of the Institute. Paul has the ability to think 'big picture' and strategically for the benefit of the AusIMM and our industry communities. He has been a long-term contributor to AusIMM and to the resources sector at large and is highly deserving of the prestigious Beryl Jacka Award.

Mineral Industry Operating Technique Award (MIOTA)

- 1987 **Dr R J Holmes**, in recognition of his development of an on-line analyser of the iron content of moving iron ore streams and bringing it on steam.
- 1988 *Dr Plackottu J Mathew,* for his work in ash analysis.
- 1989 No Award for 1989.
- Jim Howarth, for his work on the COALSCAN range of on-line coal quality analysis systems manufactured under license to the CSIRO and the University of Queensland.
- 1991 **W T Seib,** for his work on the development and introduction of highwall mining production methods in thick coal seams under large deposits of overburden for increasing resource recovery.
- The team responsible for the development of The Isa Process for electro-refining of copper: J Perry, J Hartland, J O'Kane, S McLean, J C Jenkins, in recognition of The Isa Process for Electro-refining of Copper which marks the development in Australia of a most significant new metallurgical process which has now achieved world recognition and is a commercial marketing success.
- The JKSimMet Team comprising: D Wiseman, Dr W J Whiten, Dr R D Morrison, C W G Bailey and S S Morrell, in recognition of the development of the JKSimMet metallurgical simulation system at the Julius Kruttschnitt Mineral Research Centre in the University of Queensland which has achieved world-wide acclaim and commercial acceptance.
- The Queensland Magnesia Project (QMAC) Team, in recognition of the contribution made to the development of the Queensland Magnesia Project (QMAG), a new metallurgical industry for Australia based on advanced processing technologies specifically designed to maximise the benefits obtainable from the unique Kunwarara magnesite deposit. The Project delivers consistent products to demanding specifications into a highly competitive international market. The team comprised the following: Barrie Hill, General Manager Operations, Bob Auld, Manager, Production, Grant Ackers, Manager, Process, Geoff Shields, Manager, Mine Production, Steve Wilcock, Senior Mine Geologist, Terry Forsyth, Manager, Quality Assurance.

- 1995 **Dr Keith Norrish AO**, in recognition of the development of modern quantitative X-ray spectrometry as a routine accurate and reliable operating technique for chemical analyses in the mineral industry.
- 1996 **Dr lan Devereux**, in recognition of more than 25 years of innovative design, development and production of sampling and sample preparation equipment and systems which have achieved worldwide commercial acceptance.
- Alan William Dickerson, for his outstanding contribution to the invention, design and development of an Innovative Large Mining Truck (ILMT). It is estimated that for a given truck tyre size, the payload of the ILMT will be some 15-25% greater than for a conventional truck. The axle configuration, tyre wear, steering, stability and gradeability are much improved; thus, significantly improving safety and productivity, and reducing costs.
- A *H* (*Sandy*) *Gray*, in recognition of his achievements in conceiving, developing and commercialising the InLine Pressure Jig for the continuous and efficient recovery of gravity concentrates, especially where water balance and large concentrate mass flows are important.
- The Girilambone Copper Company Process Department, in recognition of the introduction of forced heap aeration combined with revised heap management for the leaching of secondary sulphide ores, which has been an outstanding technical and economic success for the Girilambone Copper Company. The process team has developed this technique, which is considered by peers to be a world best practice benchmark. The success of the operating technique has elevated the technical knowledge and economic benefits from the metallurgical processing of secondary sulphide ores.
- 2000 **Dr Edward G Thomas,** in recognition for the pioneering work and for his contributions to the practical applications of fill technology in underground metalliferous mines around the world.
- The Project Team for AMIRA Project P483/483A Mine to Mill (1994-2001) Professor D J McKee, Dr S Morrell, Mr A Scott, Dr W Valery & Dr S S Kancibotla, for the successful implementation of the "Mine to Mill" integration technique to significantly increase the productivity and cost effectiveness of open-pit mining and comminution operations. The JKMRC team have displayed leadership promoting and facilitating the adoption of the operating technique, technical excellence in the enabling technologies and professionalism in the development and technology transfer to operations who now benefit from the technique.
- John Farrow and Neil Jagger (awarded jointly with the same citation for independent activities), for services to the minerals industry, through revolutionising the development and implementation of new thickener technology for mineral processing.
- CRC (CMTE) Universal Dig and Dump (Jeff Rowlands), in recognition of the development of The Universal Dig and Dump (UDD) dragline rigging and control system, which will change the nature of open cut coal mining around the world. The enhanced flexibility afforded by UDD, together with an intuitive operator interface, is allowing operators to excavate areas faster and with greatly improved control. UDD won high praise from operators of Dragline 23 at BMA's Peak Downs mine with demonstrated productivity improvement in excess of 25 per cent with significantly improved equipment protection.
- 2004 **Twin Chamber Pulp Lifter JKMRC,** in recognition of the development of The TCPL, which is a very significant development arising from a team effort on the P9 Mineral Processing project by Sanjeeva Latchireddi, Steve Morrell, Lionel Pullum and Alcoa staff. However,

principal recognition should go to Sanjeeva Latchireddi for an outstanding contribution to the industry arising from his PhD project.

- Edwin van Leeuwen and Phillip Harman, in recognition of the Falcon Team of BHP Billiton's Research Group lead by Edwin van Leeuwen and Gravity Diamonds Limited Managing Director, Phillip Harman. The Falcon™ geophysical technology is a ground-breaking technology. It is the first airborne gravity gradiometer designed specifically for application to minerals exploration and complements other airborne geophysical technologies that have been available since the 1950's. It is capable of mapping in detail the density distribution of rock formations within the top kilometre of the earth's crust and in some cases of locating specific gravity anomalies that are associated with mineral deposits. The Falcon system has the potential to open up new terrains under cover to exploration and discovery, thereby sustaining the future of our industry.
- Jeffrey Whittle, for his eminent services to the mining industry through his great contribution to changing the way the industry both views and practices optimisation in mine design and strategic mine planning.
- 2007 **Wayne Romer**, for creation and global commercialisation of mining software: Mine2-4D Scheduling and Planning System.
- Norman William (Bill) Johnson and Peter Charles Woodall, in recognition of the development of the IsaMill, leading the design changes to upscale and modify the technology for the mining industry. Their work resulted in the creation of a new technology which has moved from fine grinding to mainstream minerals grinding. The successful development of the IsaMill enabled the development of the McArthur River Deposit, which until then had been untreatable. IsaMills later proved to be the enabling technology for the George Fisher deposit and Black Star Open cut deposits at Mt Isa.
- 2009 **Neil Schofield**, in recognition of his specialised work in the application of geostatistics to resource estimation and grade control simulation. As a result of this work, he produced simulation-based software, MP©, specifically designed to optimise ore selection in mining operations. Neil was responsible for the first recognised application of conditional simulation to grade control optimisation in Australia. This was at the Marvel Loch and Yilgarn Star gold mines in Western Australia in the early 1990s. These mines significantly increased ore production with no loss of grade within several months of the introduction of what developed into the MP© grade control system. Importantly, the operations moved guickly from being mine-limited to mill-limited. With the acceptance of dedicated RC grade control drilling and the application of MP©, short to medium term mine planning was considerably improved, as was the definition of stockpile grades. MP© has been applied in numerous mines for a range of commodities and has resulted in a positive and measurable impact on profitability. It generates ore block shapes that are easily interfaced with popular mining software packages and assumes no advanced geostatistical knowledge. Neil also produced the resource modelling software, GS3, which is based around the method of multiple indicator kriging. This has assisted numerous clients with recoverable resource estimation as well as automated variographic modelling.
- Dr Cathy Foley and her CSIRO tea,: for the invention of the method to make a highly sensitive magnetic field sensor using a high temperature superconductor. The sensor is the basis of the mineral exploration tool, LANDTEM™. LANDTEM™ is a portable exploration tool which uses highly sensitive magnetic sensors known as SQUIDs (Superconducting Quantum Interference Devices) to differentiate the ore from other conductive material. Cathy led the initial development and commercialisation of LANDTEM™ in collaboration with BHP Billiton and the then Canadian mining company, Falconbridge. LANDTEM has since been licensed to an Australian start-up company, Outer-Rim Development, and has ultimately helped to unearth around \$6 billion of new mines worldwide.

Gary Zamel of Mine Site Technologies, for the development of the PED communication system, the first successful tool for communicating safely and simultaneously with personnel underground from the surface of mines without the use of a conduit or leaky transmission cable. From its launch in the mid-1980s, PED has become a highly successful world-renowned communications device which is now installed in more than 150 mines on five continents. It has continued to be developed as a stand-alone device or as the backbone of more complex systems whilst also providing the stimulus for more sophisticated systems. Its contribution to underground mine safety cannot be underestimated. Gary demonstrated tremendous commitment and perseverance to bring a vision to practical use, overseeing the technical development and roll-out of this device, requiring the involvement and coordination of scientific and technical expertise from around the world.

2011 Nil

Renamed Mineral Industry Technique Award (MITA)

2012-2013 Neil Cusworth, for his extensive and global work on assignments as a project manager and director and in particular his development of best practice systems and standardised procedures for project management for multinational corporations. Antofagasta Minerals, Barrick Gold, BHP Minerals and Billiton Plc, Codelco, Falconbridge and Stanwell Corporation have confidently incorporated these systems into their corporate processes. A mechanical engineer by training with multi-discipline skills and an orientation towards commercial and project control aspects of the mining, resource and industrial sectors, Neil is a Fellow of The AusIMM and a Member of the Institution of Engineers. Neil made a major contribution to the early chapters and overall committee work for the forthcoming Cost Estimation Handbook, freely allowing his proprietary procedures to be adapted to the Handbook for the benefit of the industry.

Christopher Kelsey FAusIMM, in recognition of the work and success of Chris Kelsey, who took the concept of jigging with high G-forces from invention and practical R&D to commercialisation, resulting in today's "Kelsey Centrifugal Jig" (KCJ). The KCJ was developed in the early 1980s and is now in use in eight countries on a range of minerals. It remains the only commercially available, high G-force, continuous jig. The first truly commercial installation was achieved, with practical operating and maintenance input by staff, at Renison Tin in Tasmania in 1992. By 1995 there were 36 machines operating at 28 mine sites. By 2006 the jig was processing about a quarter of the world's tin. By 2010 there were 42 Kelsey Centrifugal Jigs operating in eight countries operating on tin, mineral sands, gold, nickel, tantalum and wolframite. Chris has remained closely associated with the development of the jig since its invention in the early 1980s. In that time the machine has had numerous refinements not just in terms of separation efficiency but also in relation to operational and mechanical robustness. The Kelsey Centrifugal Jig remains the only high gravity (up to 100 G) continuous operation jig which is commercially available.

2014 Prof Kevin Galvin, in recognition of his work in the initial concept, design, optimisation and commercial implementation of the reflux classifier. He applied basic scientific principles to take an already useful piece of equipment through a step-change for significantly enhanced efficiency and widened applicability. The reflux classifier is a novel autogenous water-based device for separating fine mineral particles based on their size and density. In its initial form the device demonstrated some advantages in certain applications, however, in recent years an ingenious technical breakthrough has transformed its effectiveness and application. These devices are used primarily for gravity separation and hence the size effect on separation has been a major limit in their effectiveness. Kevin surmised that if the lamellar plates were separated by just the right distance then the separation factor due to particle size would disappear. He then built the modern version of the machine from the mathematical design and the results have been astounding. The device is currently manufactured and

distributed by FL Smidth/Ludowici to major coal producers throughout the world and is finding similar utility in applications for non-coal minerals.

Dr John Russell MAusIMM, in recognition of his major contribution to the safety and efficiency of grinding mill relines. John was a young mechanical engineer from Mount Isa Mines when he moved to Toowoomba in 1985 to form Russell Mineral Equipment to further his ambition to invent and manufacture world-class mining and mineral processing equipment. At Mount Isa Mines he had shown a talent for solving process problems by designing and building special purpose machines. John turned his attention to the relining of grinding mills, traditionally a slow, dangerous and costly business. Russell Mineral Equipment's first mill relining machine was purchased by Mount Isa Mines in 1990. Russell Mineral Equipment later developed the 'RUSSELL 7' (seven axis), 'RUSSELL 8' (eight axis) mill relining machines and the TWIN 8 mill relining machines (a pair of independent relining machines) that have further enhanced the relining performance in the world's largest mills. Today Russell Mineral Equipment is recognised as the world's leading designer, manufacturer and supplier of mineral grinding mill relining machines and associated equipment.

2015	No award for 2015
2016	No award for 2016
2017	No award for 2017
2018	No award for 2018
2019	No award for 2019
2020	No award for 2020

OH&S Award (Introduced in 2001)

- 2001 **Ernest Henry Mine** awarded to the Ernest Henry management team who created an excellent safety and health management culture by engaging and involving the whole workforce and empowering them to manage safety and health hazards as they work. The resulted positive impact on their behaviour is evident and notable.
- 2002 **Peter B Johnston,** for his role as the driving force and Chairman of the Steering Committee for "Elimination of Fatalities Taskforce" (EOFT) at WMC that resulted in a step-change in the approach to Safety and Health management not only within WMC but also across the Australian minerals industry.
- 2003 **Professor Jim Joy,** for his leadership and influence on mine safety in Australia both as a respected consultant and for his outstanding contribution to mine safety as Professor of Mining Safety and Director of the Minerals Industry Safety and Health Centre at The University of Queensland.
- Jim Torlach, for his leadership, direction and drive associated with mine safety in Western Australia, Australia and internationally, as a state government servant and as a respected member of the mining industry for outstanding contribution to mine safety, duty of care and statutory development in the mining industry.
- Graham Terrey, for his devotion over 30 years to the inspectorate and the Safety and Health Department of NSW Mines. For raising the awareness of a safety culture, for striving for a higher education in and seeking more knowledge on subjects that can make a difference to the safety of miners.

Renamed Jim Torlach Health and Safety Award in 2006

Named in honour of James (Jim) Torlach, the AusIMM Health and Safety Award recognises notable achievements in health and safety for the minerals sector.

- 2006 **Peter Minahan,** for his significant contribution to the restructuring of the Queensland Mines Inspectorate following the Moura Mine disaster and findings of the Enquiry.
- Phil MacIntyre and leadership team Kingsgate Consolidated Limited's, Akara Mining Limited, Chatree Gold Mine, awarded to the leadership team of Kingsgate, in particular General Manager Phil MacIntyre, for commitment to creating, maintaining and enhancing a very successful safety culture in a particularly challenging operating environment in Thailand, through three construction phases and six years of production. In particular for leadership in the development and implementation of best practice policies, codes, procedures and ongoing training resulting in their goal of zero harm being achieved. This leadership and initiatives resulted in a safety record that is amongst the best in the world, reflecting great credit on both the diligence and application of the national workforce and the quality of the local management team.
- Steve deKruijff, for his passionate commitment to improving the safety and health of his people. Steve has been at the forefront of safety and health innovation through programs developed and implemented by teams under his management. He has ensured sustainable improvements in performance and provided strong leadership to the hard-rock mining industry of Queensland.
- Dr Basil Beamish, in recognition of his inspirational leadership and commitment throughout his professional career including service to the Queensland coal industry as a Mines Rescue Team vice-captain and captain, during which time he led teams which won national mines rescue competitions and a Healy Cup (1983) in the Queensland competition. Basil's work also resulted in increased awareness of the health and safety risks associated with spontaneous combustion and coal seam gas through regular presentations at AusIMM conferences and industry workshops in Australia and New Zealand. From his significant

contribution to combating the outburst hazard problem in underground operations as a key member of a mining research team at Collinsville Coal Mine in the 1980s to his current role as Senior Lecturer in Mining Engineering at the University of Queensland, Basil has been a leader in advancing fire and explosion prevention and mining education.

- 2010 Ian Suckling, in recognition of his commitment to Health and Safety issues through his activities as Senior Director Underground Mine Engineering at Newmont Mining Corporation and through his voluntary work as Chairman of the Australian Centre for Geomechanics Board of Management. Ian is also a member of MERIWA's Minerals Research Advisory Committee and chairman of its Engineering Sub-Committee. In all of these activities, his commitment to Health and Safety issues is pre-eminent.
- Simon Ridge from Department of Mines & Petroleum, Resources Safety (WA), in recognition of his work as Director Mines Safety Branch and State Mining Engineer with the Resources Safety Division of the Department of Mines and Petroleum (WA), Simon has been a central figure in a determined drive for change in the performance of the regulator and the safety performance of the mining industry. Simon has introduced a new approach to safety regulation which presents a balance between promoting safety outcomes, monitoring compliance and initiating enforcement activities. He has taken personal responsibility for recruitment of suitably qualified and experienced staff, designed and overseen new inspector induction programs and introduced a new team concept tailored to suit the State's diverse and geographically dispersed mining sector. Simon has made a significant number of presentations to industry to raise awareness of the need to reform within the industry itself and has built both the capacity and competency of the regulator in a very short timeframe.

2012-2013 No award in 2012-2013.

2014 Flight Safety Foundation, in recognition for their work in developing the Basic Aviation Risk (BAR) Standard over the past decade. The standard creates a minimum operating framework and requirements that mining companies can use to assess and manage the aviation contractors who service their operations and exploration areas. Prior to the BAR Standard each resource company had its own aviation safety standard. This subjected aircraft operators to a diverse and often ambiguous set of requirements within already diverse global regulatory requirements. The variety of standards and audits meant that aircraft operators underwent multiple annual audits for various resource company clients. diverting their focus and resources away from flight operations and maintenance oversight. The ability of an individual resource company to influence change within an aircraft operator's practices in response to audit findings was often limited. The BAR Standard not only allows for efficiency and consistency in managing safety and quality but also raises the bar for the minimum acceptable standards for aircraft and airport operations. The BAR Standard has made a huge contribution to safety in the mining industry. The BAR Standard is supported by the International Council on Mining and Metals and has been implemented by a range of major and minor minerals companies around the world. Many tens of thousands of minerals workers are now far safer when travelling by air. The program creates a minimum standard for aviation in the industry, providing benefits to both mining companies and aviation companies. The BAR Standard and all the associated audit tools, awareness packages and training tools has made a huge difference to a critical safety risk for the industry. The award was accepted by Greg Marshall on behalf of the Flight Safety Foundation.

- Prof Philipp Kirsch AAuslMM and Team, in recognition of the development of the ACARP sponsored RISKGATE generic risk assessment material, an online tool developed by and for the coal industry to assist with the risk assessment process. RISKGATE contains checklists to help assess and control 17 potential hazards in coal mining, such as fires, collisions, and explosions. Described as a 'decision support tool', the checklists have been formulated by careful analysis and research. They are designed to be used by industry professionals to assist with risk assessment, auditing, accident investigation, and training. The RISKGATE team is also developing information pertaining to 'Fitness for Work' for coal industry employees, covering such topics as fatigue, drugs, alcohol, and physical and psychological wellbeing. The work by Philipp and his team is a major breakthrough in risk management, and a project is being scoped to add similar information for other industries, such as hard rock mining.
- Stewart Bell PSM Stewart Bell has had a distinguished career with more than 35 years' experience in mine safety in Queensland and internationally. Prior to being appointed Queensland Mine Safety and Health Commissioner, he was Director of the Queensland Government's Safety in Mines Testing and Research Station, and during this period had management roles in the Australian Government's India Mine Safety Training Program (1997-2002) and was instrumental in initiating and managing the Australia—China Xuandong Mine Coal Safety Project (2010-2011). Both projects had a significant and sustainable impact on mine safety in each country. In 2010 Stewart was appointed as one of three Royal Commissioners to inquire into the 2010 Pike River Mine disaster in New Zealand with the final report being produced in October 2012. Stewart was awarded the Public Service Medal (PSM) in 2013 for services to Mine Safety.
- Steve Durkin MAusIMM, Steve is the key driver, developer, designer and manufacturer of the Safescape Laddertube a safe, practical, adaptable and cost-effective escape system for underground mining operations. A modular light weight escape system, it is designed for installation in raise excavations inclined from 50° to vertical.
 Minimal resources and personnel are required for installation and re-use, and the design also facilitates a straight-line stretcher pull, making the extraction of injured personnel quicker and easier than conventional steel or timber ladders. There is currently more than 19 000 m of Safescape Laddertube installed across 73 mines worldwide to date.
- 2018 No award for 2018
- 2019 No award for 2019
- Josh Bryant MAuslMM, Josh Bryant is a professionally qualified geologist with many years of operational experience and senior health and safety roles with Xstrata, BHP and most recently Mitchell Services (MSV), where he holds the position of General Manager People and Risk.

Initially engaged by MSV as a consultant towards the end of 2015 to recommend steps to improve safety performance, Josh joined their leadership team at the beginning of 2016. Lead by him, MSV have significantly improved employee engagement using a 'Safety Differently/Safety II' approach, and there has been a corresponding dramatic reduction in injury frequency and severity, improved working conditions for employees, and a greater understanding and control of critical risks. During a period of significant company growth, safety performance has continued to improve strongly, and as a result MSV has been recognised with a number of industry awards.

A key component of this has been Josh's personal enthusiasm and engaging leadership style that has connected with employees at all levels of the business to achieve the necessary cultural shift. The initiatives that have been put in place by Josh have resonated with all team members and provide the foundation for continual improvement.

Professor David Cliff MAusIMM. Professor David Cliff has a long and distinguished career dedicated to health and safety in the mining industry. He is a world-renowned expert in mine fires and explosions who is often called upon for his expertise in times of crisis. David is currently Professor of OHS in Mining in the Minerals Industry Safety and Health Centre (MISHC) inside the Sustainable Minerals Institute at the University of Queensland (SMI UQ). David has expertise in emergency preparedness, gas analysis, spontaneous combustion, fires and explosions, including providing expert testimony to the Moura mining disaster inquiry, the Hazelwood mine fire inquiry and the Pike River Royal Commission. David has published widely in occupational health and safety in mining, including physical hazards as well as the processes for the effective management of these issues. David has also been active in providing education, training and advice on OHS issues to universities and governments around the world, especially regions that are struggling to cope with rapidly expanding minerals extraction industries.

For more than 30 years David has been providing education, conducting applied research and consulting in the industry to help the sector better understand and improve OHS outcomes.

- 2022 No Jim Torlach Award in 2022
- 2023 Jolyon (Jol) Jardine MAusIMM, Jol Jardine has a 30-year mining engineering career filled with many examples of developing and embracing creative, practical solutions that help address health and safety challenges in underground environments. Examples include trialling the MC51 Hardrock miner at Kanmantoo Copper Mine, deep support for intersections using resin filled self-drilling anchors (SDAs), and face support using flexible thin spray in liner. The application of a TSL as part of the ground support cycle ensures safety at the development face. Several papers co-written by Jol and Ben Roache have been accepted for the AusIMM Underground Operators Conference 2023. Jol has had a hand in pioneering or adopting a significant number of safety innovations and making them work in operating mines in Australia and Aotearoa (New Zealand) - not just in theory. The projects are at the cutting edge of leading practice, and Jol's energy and commitment have seen him achieve success. These attributes set Jol apart from others in this field. Alongside his innovative approach to safety technology, Jol was one of the founders of SAMERC, who run the annual South Australian Mines Rescue Competition, which helps hone the skills of mines rescue workers to ensure they are prepared should they be called upon. In 2022 the event celebrated its 12th anniversary, and included five South Australian teams plus a team from Newcrest's Cadia mine in NSW.

Professional Excellence Awards

The 2015 review of the awards program combined a number of categories such as the MITA Award and the Jim Torlach Health and Safety Award into a new category. This category is the Professional Excellence Award and recognises professional excellence demonstrated in all areas within the industry.

Helgi Stedman MAusIMM, Helgi Stedman has pioneered the use of blast hole data to maximise coal recovery in Thiess' Central Queensland operations. Helgi led development and implementation of the technique within Thiess, which has increased geological model precision, and closed the gap between actual and forecast recoveries compared with traditional exploration models. The technique involves integrating exploration holes with tightly-spaced pre-split holes and additional mid strip blast holes, using geophysics to model the interface between coal and overburden.

David Wiseman MAusIMM, David Wiseman is being recognised for the invention, development and commercialisation of an innovative software application for flowsheet development and drawing, mass balancing and process simulation called LIMN 'The Flowsheet Processor'. LIMN was developed in the mid-1990s and has applications in 19 countries and in 10 different industries. Over 600 licenses have been sold. It has been the industry standard simulation package for more than two decades and is a very widely used

tool for use in coal preparation plant modelling and simulation, especially in Australia, as well as being widely applied in base metals minerals processing and hydrometallurgy.

Stewart Bell, Stewart Bell has had a distinguished career with over 35 years' experience in mine safety in Queensland and internationally. Prior to being appointed Queensland Mine Safety and Health Commissioner, he was Director of the Queensland Government's Safety in Mines Testing and Research Station, and during this period had management roles in the Australian government's India Mine Safety Training Program (1997-2002) and was instrumental in initiating and managing the Australia—China Xuandong Mine Coal Safety Project (2010-2011). Both projects had a significant and sustainable impact on mine safety in each country.

Sandy Gray MAusIMM, Nick Moony, Nick Katsikaros This team was responsible for the design, manufacture and commercialisation of Gekko Systems' InLine Leach Reactor (ILR). The ILR was subsequently designed to optimise the recovery of gold from any high-grade gravity and flotation concentrate streams, and it has the highest unit recoveries of any concentrate treatment available, allowing mine operators to efficiently produce gold doré on site from gravity and flotation concentrates.

Traditional tabling methods could not process the volumes of high-grade concentrates produced from Gekko's InLine Pressure Jig and other gravity concentrates effectively. Today, the ILR is installed in more than 40 countries and further work has advanced the technology and seen it introduced into silver mines.

Kathy Ehrig MAusIMM, Kathy is recognised as a leader of technical excellence, establishing the Olympic Dam geometallurgy program more than a decade ago and was at the forefront of automated mineralogy techniques. She has made significant contributions to the development and application of professional knowledge and practice in the fields of mineralogy, geochemistry, core logging, orebody modelling and geometallurgy. Kathy provides a leadership role in research projects supported by the Australian Research Council, South Australian Mining and Petroleum Services Centre of Excellence, and BHP Billiton Olympic Dam at the University of Adelaide and University of Tasmania. She is always willing to contribute and share knowledge via publishing research results in scientific journals and presenting technical papers at conferences. She engages effectively with both academic and industry professionals, and generously supports and mentors many PhD students and geoscientists.

Ross McAree, Ross has been instrumental in driving and developing the Shovel Load Assist Program (SLAP), which developed operator assist and automation technologies to provide multiple benefits to the performance of electric mining shovels. This eight-year project was completed in June 2016 and has effectively demonstrated the feasibility of a suite of operator assist and automation technologies that enhance the capabilities and safety of electric rope shovel operations.

Most of the work in the industry has been on vehicle collisions, with the intervention generally in the form of emergency brake application. However, the SLAP project was directed towards autonomous operation and the avoidance responses are more appropriate, complex and sophisticated.

2018 **Geoffrey Dunlop MAusIMM**, Geoff has been a recognised leader in the field of metallurgy over many decades. Geoff undertook early geometallurgy work developing geological and metallurgical characterisations of the major Mount Isa orebodies, which resulted in significant improvements in metallurgical performance.

In 1998 Geoff co-edited Mineral Processing and Hydrometallurgy Plant Design, the precursor to the AusIMM MetPlant conference series. From 2002-2013 he co-convened this series.

From 2015-2017 Geoff helped compile papers from over 40 AusIMM conferences, which became the spectrum publication We are Metallurgists, Not Magicians – Landmark Papers by Practising Metallurgists.

Geoff has served on the AusIMM Mt Isa and Adelaide Branch committees and reached 61 years of membership with the AusIMM in 2017. He has embodied the characteristics of technical excellence throughout his eminent career in the minerals industry.

- 2018 Corinne Unger MAusIMM(CP), Corinne is a thought leader on environmental and social matters specifically relating to mining legacies from incomplete mine rehabilitation, closure or abandonment. She has conducted extensive research through her Churchill Fellowship in 2009 and then at the University of Queensland (UQ). She has actively advocated for improvement in rehabilitation and closure, as demonstrated during her tenure as the inaugural Chair of the AusIMM Community and Environment Society. Recognising the opportunity for mining industry professionals to take the lead on good practice for abandoned mine management in Australia, in 2011 Corinne led the development of an AusIMM discussion paper and subsequent member survey on the subject. Corinne hosted the inaugural Managing Mining Legacies forum in 2012, at the Centre for Mined Land Rehabilitation at UQ. Prior to this, she led mine rehabilitation and closure planning for Ranger Mine in the NT. After this, she was Project Manager for the Mount Morgan legacy mine rehabilitation project, which generated a plan for management of Acid and Metalliferous Drainage (AMD), heritage conservation and secondary mining. From her work, a statewide abandoned mine program was initiated. Corinne is also on the committee for the AusIMM spectrum series publication From Start to Finish – A Life-of-Mine Perspective and has just concluded a two-year term on the Chartered Professional Board.
- Aidan Giblett FAusIMM, Aidan has been awarded for his outstanding professional excellence and expertise in the field of metallurgy, particularly comminution, gravity concentration and metallurgical accounting. Currently Senior Technical Advisor Mineral Processing at Newmont, he provides metallurgical support to Newmont's global operations and projects.

 His efforts focus on troubleshooting and operational support, including supporting the 'Full Protection's restriction of the first focus on troubleshooting and operational support, including supporting the 'Full Protection's restriction of the first focus on troubleshooting and operational support, including supporting the 'Full Protection's restriction of the first focus on troubleshooting and operational support, including supporting the 'Full Protection's restriction of the first focus on troubleshooting and operational support, including supporting the 'Full Protection's restriction of the first focus on troubleshooting and operational support in the first focus on troubleshooting and operational support, including supporting the 'Full Protection's restriction of the first focus on troubleshooting and operational support, including supporting the 'Full Protection's restriction of the first focus on troubleshooting and operational support focus of the first focus of the fi

His efforts focus on troubleshooting and operational support, including supporting the 'Full Potential' continuous improvement program. Aidan takes time to mentor and encourage junior engineers and always has time to explain technical information.

Aidan is also heavily involved in AusIMM as former Metallurgical Society Committee Chair, and serving on the organising committee for the Mill Operators' Conference series. He is also involved with other industry bodies including the Global Mining Guidelines Group executive committee and as leader of the comminution efficiency working group. He regularly presents and chairs conference technical sessions and publishes frequently, contributing to the industry body of knowledge. He is a great asset to the mining industry.

Tania Laurencont MAusIMM, Tania was the Project Manager for the Rum Jungle (a former copper and uranium mine in the Northern Territory) Rehabilitation Project over a six-year period until early in 2018. Concurrent with the technical aspects of the project was the effort and considered application Tania made to respectfully building relationships with the Kungarakan and Warai traditional owners.

Over the six years, Tania worked tirelessly to deliver successive National Partnership Agreements between the Northern Territory and the Australian government. Through trust building and knowledge sharing, the project objectives and completion criteria incorporated Indigenous knowledge and cultural expectations. Tania was highly influential in the way she melded the scientific, technical and cultural aspects of the project, providing a leading practice model of how this is best achieved.

Dr Bill (WJ) Whiten FAusIMM, Bill played a fundamental role in the developments of mineral processing simulation and mass balancing software through the Julius Kruttschnitt Mineral Research Centre, under the early leadership of Professor Alban Lynch HonFAusIMM.

These methodologies are now widely used around the world and have become an industry standard. A mathematician by training, Bill's novel approaches to mass balance modelling of comminution processes and modelling techniques allowed these complicated systems to be successfully modelled.

Bill's influence on modern mineral processing is profound, through his mathematical developments, his software, and the numerous graduate students whom he has either supervised directly or advised in the course of their graduate work. His partnership with Alban Lynch, staff and students at JKMRC was one of the most important in the Australian mineral processing sector in the latter half of the 20th century.

Steve Morrell FAusIMM, Steve Morrell has made a major contribution to the field of comminution through several decades of research, development, publication and consulting. His methodologies are widely used throughout the world for comminution testing and process design, in particular for predicting comminution energy consumption and measuring circuit energy efficiency.

While working as a researcher at the JKMRC, Steve's studies developed advanced computational methods for semi-autogenous grinding mill and tumbling mill power draw modelling, which continue to be used worldwide today.

Steve was also a leading figure in the famous AMIRA P9 mineral processing research project, which made numerous advances in the understanding of comminution circuit performance. Remarkably, Steve ran the project while completing his own PhD within the allowed time of three years.

Steve also directly oversaw several other notable research projects in related fields. Much of Steve's work greatly influenced the way comminution circuits are studied, designed and operated today, and in this field he is considered one of the world's top consultants. In 2001 and 2004, Steve received an AusIMM Mining Industry Operating Technical Award.

2021 **Professor Donald Barnett FAusIMM,** Professor Donald Barnett has played a leading role in the field of minerals and energy economics education in Australia, and as a respected coal industry economic consultant.

In 1975, Don Barnett was the first academic appointment in Australia in the field of mineral and energy economics, and went on to establish the Centre of Mineral and Energy Economics at Macquarie University in 1991 and Curtin University in 1996. These courses became known as the 'MBA for miners', and the knowledge passed on by Don is now deeply embedded in the Australian resources sector. Graduates from Don's courses can be found today in many executive positions across the resources and finance industry.

In addition to his contribution as an educator, Donald Barnett has left an important legacy in the Australian coal industry. Don launched the International World Coal Outlook series in 1992 as a forum to share market and technical insights, and his dynamic coal supply cost model is now industry standard.

The core skills of understanding and undertaking financial analysis within a mineral economics framework remains an advantage of the Australian resources industry, and Don is a true champion of economic analysis and knowledge in our sector.

Dudley Kingsnorth FAusIMM, Dudley Kingsnorth is recognised as a world authority in the rare earths industry, including rare earth markets and project development. Dudley has not only contributed significantly to the body of technical knowledge surrounding these strategically vital commodities but has also educated others on their role in a more efficient energy equation for the future. His contributions continue to drive further research and learnings. Dudley's long-standing contributions include working as Project Manager of the Mt Weld Rare Earths Project and being an independent consultant to the industry for nearly 20 years. He is the author or editor of many editions of the Roskill report on rare earths and has

given numerous keynote addresses to international rare earths conferences. In addition, Dudley provides advice on rare earths to a number of government departments and corporate organisations around the world.

In 2012, Dudley was appointed a Professor at the Western Australian School of Mines (WASM) at Curtin University in Western Australia with special responsibilities for establishing the Curtin Critical Materials Initiative.

Dudley was also an AusIMM Councillor and served as Vice President from 1997-99. Dudley's broad knowledge and extensive contacts have cemented his highly respected reputation for objectivity and excellence in the rare earths industry.

- 2022 Jonathon Crosbie FAusIMM(CP), Jon Crosbie has been a highly respected leader in the environmental, social and governance (ESG) area of the industry for more than 15 years. He has made significant contributions to the development and application of professional knowledge in mine closure planning, as well as industry wide technical discipline leadership. Jon has worked in the sector in Australia and internationally (including Guinea, the United Kingdom, France, Mozambique, DRC and Peru) across the full life cycle of mining, from exploration and feasibility studies through to closure. He has co-authored leading practice standards and guidance, has continually raised awareness of the criticality of integrated mine and closure planning, and never hesitates to challenge current practices when required. The benefits of Jon's work have been to raise the profile of closure planning practitioners across the industry, and raise the awareness and importance of improving industry practice in this financially significant area of ESG risk. Jon is a very active industry contributor, holding influential roles in a voluntary capacity on several working groups and committees. These include as Co-Chair of the International Council on Mining and Metals (ICMM) Closure Working Group, as a member of the Industry Research Advisory Team of the Co-operative Research Centre for Transitions in Mining Economies (CRC TiME) and on the ESG Working Group of the current JORC Code update. He is passionate about forming collaborative partnerships and actively sharing leading practice in integrated mine closure planning and execution.
- 2022 David Medland FAusIMM, David Medland's contribution to the development of dozer mining is the essence of professional excellence. He has made major contributions that have provided significant value to the industry. David worked for a major NZ Civil engineering contractor for 21 years before joining Thiess in 1982. He became Chief Estimator - Mining in 1999 with responsibilities covering many countries, before founding Medland Mining Services in 2007. He was closely involved with developing dozer mining techniques within Thiess from the time the first D11 dozers arrived in Australia. He helped introduce and develop the D11 carry dozer operations at Yallourn in Victoria, where the operation of three of their four bucket wheel excavators were replaced by four D11s. In March 2020 the dozers passed 273.6 million tonnes of production. David was prompted to write down what he knew, the result being his book The Art and Science of Dozer Mining. David used various software packages to assist in measuring and calculating dozer operating parameters, and in the book he details the art of understanding the input variables. The use of cast-and-doze operations supplementing dragline and truck and shovel operations has become a significant cost reduction method in open cut mines, and significantly contributes to lower mining costs.
- Alan Sherwood FAusIMM, Alan Sherwood is a much respected and highly regarded coal geologist in New Zealand (NZ), who throughout his 45-year career has demonstrated the highest level of professional excellence. Alan's work was an integral part of the NZ coal resources survey through the 1970s and 1980s, particularly heading the Waikato coal region exploration work. This included the discovery of the large Ohinewai subbituminous coalfield, and defining other new coal resources throughout the Waikato. He ended his career as Principal Coal Geologist for the NZ government. Alan has also authored or co-authored numerous coal reports across a range of NZ coal basins. Many of these reports have formed the basis of coal mining proposals and developments. Significantly, Alan authored AusIMM Monograph 33, The Geology and Resources of NZ Coalfields (2019), a landmark publication

for NZ coal resources and mining. The monograph is an essential reference for coal geologists, explorers, coal operators and regulators in NZ. The book is a main reference point for government policy and for future coal exploration and mining permit grants. It has been long accepted by NZ geologists that Alan was the only person who could have developed this monograph, as he had the extensive knowledge and experience relating to NZ coal resources required for such a project as well as the motivation and institutional support.

- 2023 David de Vries FAusIMM, throughout his career, David de Vries has applied his expertise to the design, construction and commissioning of numerous smelting plants around the world. Smelters are notoriously difficult projects to deliver in terms of time, budget and operating capability. As one prominent example of his expertise, David led the design, operational readiness, and start-up of a greenfield copper smelter at Kansanshi, Zambia, and continued as the plant manager. The first concentrate was fed to the smelter in March 2015, and the smelter achieved full-scale commercial production less than four months later. This represents the highest rate achievable when compared with industry benchmarking. In 2018, the smelter treated an annual record of 1.38 million tonnes of concentrate, compared to the name plate capacity of 1.2 mtpa. It is an outstanding achievement for a complex smelting project, and David's technical knowledge and leadership skills were key to its success. David's ability to analyse detailed and complex situations, identify critical issues, communicate effectively, and create an outstanding team culture, to ensure the best possible outcome is a prime example of professional excellence. David is well-known as a key contributor in smelter projects, and is highly regarded by his peers as a leader in his field.
- 2023 Prof David Williams FAusIMM, Professor David Williams is a global subject matter expert in tailings and mine waste management and has a passion and commitment to pass on his professional knowledge and experience. David is Professor and Director of the industry and UQ-funded Geotechnical Engineering Centre at The University of Queensland (UQ), where he has worked for almost 40 years. He also manages the industry-funded Large Open Pit Project. Over the course of his career, he has published over 300 refereed papers, including seven book chapters, over 100 journal articles and over 200 conference papers. He has attracted research funding of well over \$10 million from the Australian Research Council, the Australian Coal Association Research Program and industry, and successfully supervised over 30 Doctoral students and a number of Master's students. David is a member of the Australian National Committee on Large Dams (ANCOLD), where his input to assisting the development and updating of the ANCOLD Guidelines on Tailings Dams has made a significant and lasting contribution to maintaining the safety of tailings containment facilities in Australia. An AusIMM Fellow, David has shared his knowledge for the benefit of others through webinars and keynote lectures at international conferences and chaired the Mine Waste and Tailings Conference in 2018, 2021 and 2023. David initiated in 2020, and largely developed and presents AusIMM's highly successful Professional Certificate in Tailings Management.
- Graeme Miller FAusIMM(CP), Graeme Miller is a chemical engineer with more than 40 years' international experience in the operation and design of processing plants and equipment for a variety of metals and minerals. Over the course of his career, he has made a significant contribution to metallurgical knowledge; in particular, the designs he has developed for the hydrometallurgical industry and their implementation are considered leading edge. His concepts have been included in over fifty solvent extraction operations around the world. Graeme has authored more than eighty technical papers on hydrometallurgy, coal preparation, copper leaching, solvent extraction/electrowinning (SX/EW), and mineral process developments. These papers serve as valuable reference material for professionals around the world and demonstrate his impressive track record of innovation. His published works on these aspects have been reprinted in collections of seminal papers. Graeme's designs for the Girilambone Copper SX/EW plant won an Engineers Australia Engineering Excellence Award in 1994, and his design of the Loaded Organic Coalescer and in-settler coalescing medium won the inaugural Egis Consulting

Innovations prize in 2000. In addition, the development of the loaded organic coalescing system was short-listed for the AusIMM Operating Technique Award in 2000-01, and the development of the in-settler coalescing medium was accepted for the Eureka prize in 1998. In 2018 he was jointly awarded the silver medal by the SAIMM for best paper of the year.

Charles Marshall Award

This is a new award for 2019 and honours AusIMM members who, as consultants, have made outstanding and sustained contributions to the resources sector. The Charles Marshall award particularly recognises Chartered Professionals who are respected in the industry and have embodied and reinforced sound and ethical consulting behaviour.

- Daniel Guibal FAusIMM(CP), Daniel was one of a small, key group of students of George Matheron, the originator of geostatistics as a discipline in the early 1960s at Fontainebleau. These students formed a 'geostatistical diaspora' spreading out to work in mining countries across the globe in the early 1970s. Daniel went to Peru and worked with universities and the state mining company for several years. When Daniel arrived in Australia in the 1980s, he was one of very few post-graduate qualified geostatisticians in the country. Since then he has been involved in a wide range of consulting work, but more importantly he has been at the cutting edge of the innovations in the field of resource estimation and orebody modelling. He was a pioneer in the application of non-linear estimation. Daniel is recognised as being in the top field of mentors in geostatistics in the industry.
- Mark Noppe FAusIMM(CP), Mark Noppe has displayed remarkable professionalism during his 34+ year career for the benefit of his clients, his professional colleagues and the sector as a whole, leading by example and sharing his knowledge generously. He is currently Managing Director and Corporate Consultant with SRK Consulting in Australia and has consistently worked to maintain and improve the professional standards of consultants globally since entering the consulting realm in 1997.

 Mark played an instrumental role in developing and delivering AusIMM's Online Professional Certificate in JORC Code Reporting course as well as adapting the course material for a China-based market. He was a key facilitator and subject matter expert and provided exemplary leadership to ensure the course material was effectively peer-reviewed and delivered in a professional manner to over 300 participants around the world so far. Industry professionals continue to benefit from Mark's professionalism and commitment as he continues to devote his time to upholding professional standards and AusIMM's commitment to be the trusted voice of the sector.
- Susan (Sue) Border FAusIMM CP(Ret), Sue Border has more than 40 years' experience in the minerals industry, specialising in exploration management, mineral resource estimation and valuation. In 1998 she started and led the consultancy company Geos Mining, where she still consults part time. Sue has shown consistent professional and technical excellence and always operates to the highest ethical standards.

Sue was Chair of the AusIMM WIMnet Committee, and was a member of the AusIMM Sydney Branch Committee and the MICA Management Committee. Sue also served on the AusIMM Membership Committee, and in 2020 was selected to join the AusIMM Ethics Committee and quickly made a valuable contribution. Sue has excellent knowledge of the JORC and VALMIN Codes and has always upheld her integrity, demonstrating fairness and compassion in her judgements.

Sue overcame social and cultural barriers by becoming the first woman to undertake the Mining Geology course at the Royal School of Mines at the University of London in the mid-1970s, before moving to Zambia and becoming the first female in the country to be allowed to work in underground mines. In 2013, she was recognised as a gender diversity champion and role model in the first edition of WIM UK's 100 Global Inspirational Women in Mining. Sue received an Institute Service Award in 2007.

G B O'Malley Medal

1987 David Readett 'Modelling the leaching of NaCl from Bowmans lignite: Part 2 Multiple Stage Leaching." 1988 Louisa Lawrence 'Geomechanical dispersion anomalies in transported overburden around the Mount Pleasant gold mine, Western Australia'. 1989 Tony Wiggins 'Maganiferous and zincian exhalites associated with the Broken Hill Orebody.' 1990 June Hill 'The Nature of Shear Zones formed during extension in Eastern Papua New Guinea.' 1991 B Coutts 'Acid mine drainage abatement methods suitable for waste dumps.' 1992 Kylie Blackwell 'Mineral Processes in the Year 2040' (presented at the 1992 Annual Conference). 1993 No Award for 1993. Susan K Brumpton 'The Development of a Heat Stress Monitoring Instrument'. 1994 1995 Bryan Anthony Quinn `Geotechnical Factors Contributing to Stockpile Slope Stability'. 1996 No Award for 1996. 1997 No Award for 1997. 1998 No Award for 1998. 1999 David Schmitz 'Spot Cooler Evaluation at Olympic Dam Operations'. 2000 Cameron M O'Neill 'The JORC Code: Mineral Resource and Ore Reserve Reporting' and its contribution to the recognition and reputation of The AusIMM internationally. 2001 Mr Aleks Nikoloski 'Application of alternative lixiviants for secondary heap leaching of gold' presented at the 7th Mill Operators Conference in October 2000. 2002 Jamie Caratti, for the work undertaken for his final year thesis (submitted in 2001) which forms a substantial part of a paper 'Ore dilution versus Mine to Mill Optimisation at KCGM)' presented at Explo 2001 in the Hunter Valley. 2003 Helen O'Keefe, for the work undertaken for her final year thesis (submitted in November 2002) that is summarised in a paper entitled "Implementation and feasibility of remote controlled blast hole drilling at KCGM's Fimiston open pits" presented at MPES 2003 in Kalgoorlie. 2004 Claire Horsley, for preparation and presentation of thesis research work "Understanding Upland Swamps of the Illawarra" at the 35th Sydney Basin Symposium. Marc Steffens, for his presentation of the paper entitled "Extraction of nickel from acidic 2005 leach solutions using Electrostatic Pseudo Liquid Membrane (ESPLIM)" at an internationally recognised peer reviewed conference, the Conference of Metallurgists - COM 2005, 21st-24th August 2005, Calgary, Alberta, Canada.

- Jeremy Chan, in recognition of his presentation to The AusIMM New Leaders Conference in Kalgoorlie in 2006, which was thoughtful, technically competent and articulate whilst also containing enthusiastic jovialty of a student presentation. His presentation explained the problem, the analysis, the solution and the business benefit of the implementation.
- 2007 *Martin Filar*, for the best preparation and presentation of a technical paper in connection with his research project entitled "Dynamic testing of splitsets at the WASM testing facility".
- 2008 **Hope Adams,** for the preparation and presentation of her paper entitled "Production Drill Optimisation at Telfer Underground: A Move Towards Automation."
- Jenny-Rebecca Stein, for "Stratigraphy and lithology of basal sediments of the eastern Southland lignite basin", which was presented to the 2009 AuslMM New Zealand Branch Annual Conference. Jenny won the prize for the best paper prepared and presented at the Conference. Jenny is a student at the University of Otago, Dunedin, NZ and is a student member of the NZ Branch of The AuslMM. The judges considered her paper provided a clear report on a robust piece of research and her presentation was most professional.
- David Bedward, in recognition of his thesis project, in which he developed a prefeasibility conveyor selection and cost estimation model for a Microsoft Excel VBA platform. The model was created with the goal of enabling the end user to rapidly select a conceptualised conveyor system and perform economic cash-flow analyses. The model incorporates a material database allowing for mass handling prefeasibility estimation in other industries; it has been validated at a local quarry.
- 2011 Phillip Drain, for "Blast Furnace Hearth Refractory & Coke Ash Interactions", which was presented at a combined meeting of the AusIMM Lachlan and Illawarra Branches in late 2010. His paper was judged as being the best prepared and presented of the six papers presented during the event by a panel of judges experienced in geology, mining and metallurgy disciplines.
- 2012-2013 **Ben Sedgwick,** in recognition of his presentation at the New Leaders' Conference 2012 on "Planning Your Career: Setting Goals Early and Moving in the Right Direction". Ben's speech at the New Leaders' Conference impressed those in attendance including members of the AusIMM Board.
- Justine Jasper SAusIMM, in recognition of her thesis project entitled 'Investigation into the viability of Lithium Heterotungstate with tungsten carbide suspension as a substitute for organic liquids in dense medium test work on low grade iron ore', Justine's thesis achieved a High Distinction. Justine also co-authored a paper entitled 'Application of the heavy suspension technique for ore beneficiation plant feed characterisation from the Southern Middleback Ranges' with J Begelhole and L Koroznikova that was presented by Begelhole at the Second AusIMM International Geometallurgy Conference 2013 in Brisbane.
- 2015 No award for 2015
- 2016 **Ryan Lee GAusIMM,** for providing an excellent paper, poster and presentation at the AusIMM NZ Branch conference. His presentation provided a clear outline of the rationale for the research being undertaken, what had already been done and then a conclusion based on the information gained to the stage at which the research had been progressed.
- Anna Eames SAusIMM, Dr Shaun Barker, Dr Patricia Durance MAusIMM
 The 2017 G B O'Malley Medal is awarded to Anna, Shaun and Patricia for the paper 'Pyrite geochemistry and textures in the epithermal Au-Ag mineralisation at Waihi.' This paper was presented at the AusIMM New Zealand Branch Conference in September 2016.
- 2018 Not Awarded in 2018

- 2019 Not Awarded in 2018
- 2020 Not Awarded in 2020
- 2021 Frances Blake AAuslMM

The G B O'Malley Medal for the best student paper prize has been awarded to Frances Blake, University of Otago, for the paper 'Arsenic redistribution in loess above the Hyde-Macraes Shear Zone, Otago, NZ'. This paper was presented at the 2018 New Zealand Branch Conference.

2022 Not Awarded in 2022

Branch Service Award

William (Bill) Henry Conrow, for his active involvement in the LaTrobe Valley Branch over the past 34 years, including service as Honorary Secretary, Treasurer and Chairman of the Branch and his willingness to foster and champion the progress of The Institute. A most worthy recipient of this first LaTrobe Valley Branch Service Award.

Albert E Evans, in recognition of his long association with the mining industry, his loyal and dedicated service to The Australasian Institute of Mining and Metallurgy and his active involvement with the South West WA Branch. A most worthy recipient of this first South West WA Branch Service Award.

Alan James Hargraves, for loyal and distinguished service to the Illawarra Branch, The Australasian Institute of Mining and Metallurgy and to the coal industry. A most worthy recipient of this first Illawarra Branch Service Award.

- Osmar Julius Blau, in recognition of many years' service and support of the Broken Hill and Southern Queensland Branches since 1947, major roles in the organisation of many successful international and national conferences including student conferences. A worthy recipient of the first Southern Queensland Branch Award.
- Alan Bruce Moore, in recognition of his Chairmanship of the North Queensland Branch and active participation with Branch affairs including linking industry, university, secondary schools and government. A worthy recipient of the Inaugural North Queensland Branch Service Award.

Lloyd Samuel Jones, for dedicated service to the New Zealand Branch, primarily since its inception in March 1966 and as a strong advocate for New Zealand and the Branch as an important part of The Australasian Institute of Mining and Metallurgy. A worthy recipient of the inaugural New Zealand Branch Award.

1997 **Dr Richard John Rogerson**, for his outstanding service to The Institute and in particular to the Port Moresby and Papua New Guinea Branches by pursuing the ethics and ideals of The Institute, recruitment of members, fostering student participation and general administration of Branch activities over a period of 13 years. A worthy recipient of the inaugural Port Moresby Branch Service Award.

Owen Kreilis, for service to the Illawarra Branch of The Institute, and to the Mining and Metallurgical Industries in general over a long period, including the growth of longwalling in

the coal mining industry, and particularly the maximisation of output with the re-organisation of maintenance, and for services to teaching and students generally.

1998 **Ian R Pontifex**, in recognition of his contribution to the strength of Adelaide Branch of The Australasian Institute of Mining and Metallurgy through his enduring service as Honorary Treasurer from 1990 to 1998 and his unstinting commitment to the activities of the Branch and the ideal of Institute membership.

Hugh Jones, for his outstanding contribution as a member of Perth Branch, and distinguished service to The AusIMM and the minerals industry over many years. He is particularly recognised for his tireless work in the Perth Branch, especially in the area of large conference organisation, the launch of many initiatives related to the support of Student members and Young Professionals and also for his founding of the Newman Branch in the early 1970s and his active efforts within that Branch.

- John Fisher, in recognition of his efforts both as Honorary Treasurer of the Darwin Branch for more than 10 years as well as Convenor of the Annual Mine Tour for a similar period of time. John's tireless enthusiasm, hard work and over 20 years constant support of The AusIMM Darwin Branch are recognised by this Award. He has devoted more than 30 years service to The AusIMM in general and the Darwin Branch in particular.
- 2000 **Peter M Hancock (Canberra Branch),** since his arrival in Canberra in 1991, Peter Hancock has "made the running" in all areas of Branch activity such as administration, education, public image, fundraising and student mentoring whilst also contributing at a National level in the areas of education, structural reform and public policy issues. His energy, enthusiasm, professionalism and persistence have become legendary throughout The Institute.

Patrick J O'Dwyer (Southern Queensland Branch), for long, sustained and extraordinary service as Honorary Secretary to the Southern Queensland Branch of The AusIMM.

Robert J Kininmonth (Illawarra Branch), for his contribution to the safety and coal mining practice in the Illawarra region and Australia.

- Mr Trevor Ireland (Adelaide Branch), for meritorious leadership of the Adelaide Branch during the 1997-99 period. Trevor's Chairmanship led to a renaissance of activities including: establishment of the Mawson Student Chapter, the mentoring scheme, an active monthly newsletter, a website and coordination of many thoughtful responses to the Allen Review.
- Michael Roche (North Queensland Branch), for his outstanding service to the North Queensland Branch, both as Chairman and Committee Member. His enthusiasm, dedication, and active promotion of the AuslMM and the mining industry to all sections of the community has inspired many young people and has enhanced positive perceptions of the industry throughout the region.
- 2002 Peter Waggitt (Darwin Branch), for his long-standing commitment to the programs and administration of the Darwin Branch. During his long membership of the Branch Committee Peter has been a founder member and a principal organiser of the Medal Award Program and the Annual Seminar as well as an organiser and contributor to the regular social and technical programs. Peter's achievements in promoting better environmental practice in the mining industry at home and overseas have added to the professional standing of the Darwin Branch.
- 2003 **Rick West (Sydney)** for his consistent and dedicated contributions to The AuslMM Sydney Branch over 30 years, as well as to Council, JORC, MICA, several sub-committees, conferences and various publications.

2004 **Dr Ernest Baafi (Illawarra Branch),** for his consistent and dedicated contributions to The AusIMM Illawarra Branch over 15 years, as well as initiating and convening coal operators' conference and other Branch conferences and his editorial role in Monograph 12 revision.

Frana McKinstry (North Queensland Branch), for 10 years of dedicated and committed service to the North Queensland Branch Committee and to the promotion of AusIMM to and mentoring of James Cook University students to enable them to be a significant contribution to the local Branch and industry.

Mike Gregson (Melbourne Branch), has been actively involved in the Branch activities of The Institute for many years. He has been on the Melbourne Branch Committee for many years and his erudite contributions are always welcome. He is also one of the group which developed the current Melbourne Mining Club. He is "Mr Reliable" with a passion for the industry.

Michael Buckenham (New Zealand Branch), has shown outstanding leadership and promotion of The AuslMM and particularly the NZ Branch and its representation through all levels of The Institute. Throughout his career he has maintained the highest levels of ethical, personal and professional conduct. He has actively promoted recruitment and the benefits, both applied and professionally, of joining The Institute. Mick is, even in retirement, an influential, respected and renowned man and is recognised within NZ and internationally for his contribution to The AuslMM.

2005 **Ken Nielsen (Central Victoria),** for his sustained commitment and involvement with the Central Victorian Branch of The AusIMM since its inception over 20 years ago. Firstly as a financial donor and member then more recently as Chairperson / Newsletter Editor and Chairperson of national technical conferences.

Rex Berthelsen (Cobar), for his driving force, energy and dedication to the functioning of the Cobar Branch of The AusIMM and its activities.

Associate Professor Norman (Norm) Stockton (Perth), for twenty years' service to the Perth Branch Committee and his wise counsel and as a strong link to the student and younger members as well as his enthusiastic support of all Branch initiatives and student chapters. His support for the ASMV and his understanding of the industry at a local and global level. Also a significant recruiter of mineral industry students into The AusIMM.

- John Collins (Southern Queensland Branch), for being a long serving and enthusiastic member on the committee of the Southern Queensland Branch for over 10 years, and a member of The AusIMM for over 40 years. His roles have included Branch Secretary and an enthusiastic supporter and worker for the annual Student Mining Games and branch technical meetings, the recently introduced Mining Ball, the Julius Kruttschnitt Memorial Lecture and the St Barbara's Day functions.
- Keith Horrocks (Illawarra Branch), for his sustained commitment and involvement with the Illawarra Branch of The AusIMM where he has served as Branch Honorary Secretary, Treasurer and as Branch Chairman; he convened the Coal & Mineral Sizing Symposium served on the organizing committee of the 1994 Maintenance in the Mining and Metallurgical Industries Conference convened by the Branch; involved with the 1993 rewrite of the Australasian Coal Mining Practices Monograph 12 as a chapter editor (Coal Utilization, Beneficiation and Handling) with Con Martin, Alan Hargreaves, Bob Kininmonth as Editors; currently on the Editorial Panel to rewrite Australasian Coal Mining Practices Monograph 12 and as a Chapter Editor of Coal Utilization, Beneficiation and Handling."
- 2008 *Richard Barker (New Zealand Branch)*, for his key role in organising AusIMM conferences in New Zealand. Richard has been actively involved in the Branch Committee for many years

as well as being involved in Branch and industry advocacy to Crown Minerals; he has served on the New Zealand Education Endowment Trust Committee since its inception in 1995.

Graham Gooding (Central Victoria Branch), for services to the Central Victoria Branch as Treasurer and Chairman and for his involvement in Branch Representatives' meetings, Branch technical meetings, mine site visits, The AusIMM Annual Conference 1997 and the Murray Basin Mineral Sands Conference 1999.

Ron Morland (Melbourne Branch), for services to the Melbourne Branch as Chairman over a period of five years and more recently as a very active Committee member. Ron's contribution has been invaluable in many areas of committee activities, including the Branch's work with students; he has also been an active member of the Project Evaluation Conference Organising Committee.

Don Henderson (Southern Queensland), for services to the Southern Queensland Branch. Don has been an outstanding Branch Chairman on two occasions and the current strength of the Branch owes much to his vision, dedication and hard work over many years. Don has been an AusIMM member for more than 40 years since his university days. He was Chairman of the Branch in 1994 and 2007 and each term was preceded by a couple of years as Vice Chairman. He instituted the August Student Seminar concept in 1994; assisted in the introduction of the ASMV in Southern Queensland; encouraged support for students, including those attending QUT; changed the location of technical talks which has seen a big increase in attendance and encouraged a high standard of technical sessions.

Terrence (Terry) Howard (Newman Combined Group), in appreciation of his careful stewardship and involvement over an extensive time with the Newman Combined Group, and for his contribution as a Councillor of The AuslMM. Terry kept the Combined Group functioning during a time when many regional and country groups had become defunct or fallen victim to ever more mobile memberships. He maintained a sustainable business model and adequate reserves that have allowed the Branch to deal with the uncertainty of operating in the high cost environment of Newman, WA.

Robert James (Jim) Morrison (North Queensland), for his long term involvement with the NQ Branch and Charters Towers sub-branch Committee. Jim is always willing to assist whenever and where-ever he can. During his lengthy service with the NQ Branch Committee, Jim has organised social activities such as camping weekends and tours; assisted and arranged technical sessions and the Sir George Fisher Lectures; and was a key organiser of the 2008 NQ mining conference in Charters Towers.

John Lea (Hunter Region Branch), for more than 15 years' involvement in The AuslMM's Hunter Region Branch as secretary and/or treasurer. His dedication to the Institute and its values have been amply demonstrated through his work with the Branch and members, particularly during difficult years when the Branch committee had few active members.

John Fisher (Darwin Branch), for being an active member of The AusIMM for more than 45 years and serving as a Darwin Branch committee member for much of this period. As Branch treasurer for more than 25 years, John has effectively protected the Branch assets through periods of activity and dormancy, and provided exceptional continuity through successive committees. John previously receive a Branch Service Award in 1999.

Peter Hills (Tasmania Branch), for being an active member of the Tasmanian Branch (and its precursors) since the 1980s. He was instrumental in the merging of the largely inactive Hobart and West Coast Branches in the mid-2000s and is currently the secretary of the Tasmanian Branch and co-ordinates all branch activities. He has been instrumental in the reinvigoration of the Branch and student chapters.

Colin Simpson (Canberra Branch), for his work on the Canberra Branch committee of The AusIMM since 2000 and as honorary secretary for most of the period since. He also serves

as Branch newsletter "Anomaly" editor and has maintained Branch communications to members and potential members, mentored students and been the repository of all aspects of branch administration for 10 years (including finances).

Harold Boughen (Melbourne Branch), for his work as a stalwart of the Melbourne Branch for more than a decade and playing an active role in Branch management. He took on the role of treasurer in 2003, overseeing the Branch finances in subsequent years. Harry rationalised the Branch book-keeping procedures to provide a more accurate picture of the Branch financial position and introduced a code of accounts that aligned with AusIMM Services to facilitate financial budgeting and reporting. He was a key member of a subcommittee which reviewed Branch operations with the aim of increasing attendance at functions and technical meetings. Harry was also involved in the organisation of the new format Technical Sessions, Branch Dinners and Students Meet Industry nights.

Dr Chris Harvey (Illawarra Branch), for his work as an active member of the Illawarra Branch of The AusIMM for 12 years and serving as Branch chair from 2004 to 2008. He has been a member of the organising committee for the Coal Operators series of conferences for more than eight years and is a regular contributor of technical papers to these conferences. Chris was a member of the editorial committee for the revision of Monograph 12 *Australasian Coal Mining Practice* (3rd edition). Chris is a member of the Southern Coalfields Outburst Committee, which holds regular half-day seminars promoting effective management of gas outbursts, and convener of a seminar on subsidence, a very topical issue in the southern coalfields. Through his involvement in The AusIMM and the Illawarra Branch, Chris has established and maintains a close liaison with the University of Wollongong's School of Mining Engineering. His involvement includes mentoring students, particularly final year mining students, supporting the Branch's Student Chapter and fulfilling the role of honorary lecturer at the University.

David Stewart (New Zealand Branch), for giving outstanding service to the AusIMM New Zealand Branch, having served as Branch Chair for two years and Secretary for 15 years. He has been a member of The AusIMM for 35 years and was made a Fellow of the Institute in 1983. Dave's extended service to the New Zealand Branch and the wider AusIMM was recognised at the Branch's 2011 annual general meeting when he was presented with the inaugural Lloyd Jones Memorial Award for service to the Branch.

2012-2013 Gerard Bosch (Adelaide Branch), for being a stalwart of the AusIMM Adelaide Branch for almost two decades. He joined the Branch Committee in 1995 and served as secretary of the Branch from 1999 to 2006. Gerard is currently vice-treasurer. Gerard's contribution to the branch committee has extended well beyond the secretary's role. He has been a prime organiser of the annual student night, which is jointly arranged with the Geological Society of Australia Adelaide Branch. Gerard has also been an active member of the Adelaide Branch mentoring scheme, and assisted students with their organisation of events including students meet industry nights. He has been a key person in planning of the annual Essington Lewis Memorial Lecture, the annual Branch Dinner, the successful canvassing of sponsorship funding, and all other aspects of the branch activities. Gerard was a member of the organising committee for the inaugural AusIMM International Uranium Conference initiated by Adelaide Branch in 2005.

Mark Daniell (North Queensland Branch), in recognition of the outstanding contributions made by Mark Daniell to the North Queensland Branch over the past 12 years. Mark joined The AusIMM in 1986 and has also been active in branches in WA, NT and SA. He first joined the North Queensland Branch Committee in 2000 and was secretary from 2002 to 2005, then chair from 2008 to 2010 and treasurer since 2010. Mark's efforts assisted keep the Branch functioning during the lean years of the minerals slump of the mid-2000s. Mark also made major contributions to the engineering profession through liaison with and membership of the committee of the Engineers Australia Townsville Local Group, fostering

joint activities between professional organisations. He has been active through support of the non-profit The Engineering Link Group as a non-operational director, and has mentored students at James Cook University and graduates at his workplace.

Tess Lloyd (Cobar Branch), for being a loyal contributor to the Cobar Branch of The AusIMM since 2002 when her husband Peter Lloyd joined the branch committee. Tess, while not an "official" committee member, has willingly assisted with many branch events ensuring all tasks were completed as required. Of particular note was the effort Tess put into the 2010 Cobar Mining Seminar dinner, attended by more than 100 guests. In addition to her contribution to branch functions, Tess was a dependable volunteer supervisor on behalf of the AusIMM at the Outback Science and Engineering Challenge. The Challenged required supervisors to volunteer from the local community and Tess was there every year since its inception in 2005.

Renamed Branch and Society Service Award

Werrin Allwood MAusIMM(CP) (New Zealand Branch), Kerrin has been a member of The AusIMM for more than 20 years. This award recognises Kerrin's commitment and significant contribution to the New Zealand Branch of The AusIMM. Kerrin has been a New Zealand Branch Committee member for a number of years having served as Treasurer of the Branch for the past four years and Treasurer of the New Zealand Branch Conference organising committee. In these capacities Kerrin has carried out a very large amount of work including working with the New Zealand Inland Revenue Department and managing the finances and services of the Branch's annual conference. With a budget in excess of \$250 000, Kerrin's involvement and contribution to the New Zealand annual conference is significant and a key element in the conference's ongoing success.

Dr Ivor Roberts MAusIMM(CP) (Perth Branch), Ivor has been an AusIMM member for more than 40 years. This award recognises his tireless leadership and many contributions to The AusIMM including his role as the prime organiser for Perth Branch monthly technical sessions and as Chair of the Kalgoorlie Branch (1999 and 2000). Ivor is responsible for the professional development of many Perth Branch members through the technical talks that he facilitates with a fellow committee member. The quality and diversity of these talks reflect Ivor's wide-ranging interests and contacts. Ivor has been strongly involved in supporting and mentoring the three Perth-based student chapters, as well as the West Australian School of Mines Student Chapter when he was in Kalgoorlie. Ivor's industry knowledge and professional insights make him an excellent contributor to Perth Branch's participation in AusIMM scholarship interviews.

John Stanton AAusIMM (Tasmania Branch), John has been a member of The AusIMM for more than 20 years. Initially involved with the former North West Tasmania Branch John is now a member of the Tasmania Branch Committee. John has been an active and enthusiastic member of the Tasmania Branch Committee since the Branch's inception in 2005. He has supported or led the organisation of technical meetings and events and contributed to the organising committee of the 2011 AusIMM Congress in Hobart. John became involved in the wider activities of The AusIMM through his involvement on the committee for the Tenth Underground Operators' (UGOPS) Conference in Launceston in 2008, with the aim of making the event a success for the Tasmania Branch, as well as The AusIMM as a whole. John continued his involvement with the committee for the 11th UGOPS Conference in Canberra in 2011 and the very successful 12th UGOPS Conference in Adelaide earlier this year.

Bob Smith FAusIMM(CP) (Geoscience Society), Bob has been a member of The AusIMM for 50 years and a member of the Geoscience Committee (now the Geoscience Society) since 2005. The role of the Geoscience Society is to further the professional development of

members of The AusIMM who have an interest in geoscience. The Society's priority is to improve links to universities and academics in the geosciences field and the cooperative relationships already established with groups such as the AIG. Bob has been an active advocate for industry exposure for undergraduates and to that end has worked on several projects with the aim of integrating undergraduate studies and industry project work. He is a strong advocate of the need for students to gain industry experience prior to graduating and has actively worked to gain further acceptance from universities for programs to facilitate this.

David Clark FAUSIMM(CP) (Darwin Branch), Dave was responsible for the revitalisation of the Darwin Branch and transformed it during his term in office from 2010-2014. The Branch was inactive upon Dave's relocation to the Northern Territory at the beginning of this period and he was instrumental in forming a committee and successfully Chairing the team during this period of reactivation. A balanced program including regular technical presentations, social activities, university and industry engagement and joint annual technical seminars was developed under Dave's leadership and continues today within the Branch calendar of events.

James Didovich MAusIMM (Kalgoorlie Branch), until 2015, James took care of the administration of the Kalgoorlie Branch as the honorary secretary while the positions of Branch chair and vice-chair remained vacant. During this time, the Branch functioned well under his management. James deserves to be recognised and appreciated for the service he has given to the Branch and the Institute.

Kevin Marston MAusIMM(CP) (Illawarra Branch), in recognition of his extensive involvement in many industry boards and committees. Positions he has held include: Illawarra Branch Treasurer (2007-2010); Honorary treasurer (2011-2014); acting Illawarra Branch Secretary (2013-2014); Member of AusIMM EEF Scholarships Interview Panel in the Illawarra area (2011-2014); Illawarra Branch representative on the Illawarra Student Chapter Executive Committee; Mentor to Illawarra Student Chapter committee members; Illawarra Representative on Moss Vale Committee for Student Thesis Competition (2011-2014); Member of the Organising Committee of Coal Operators' Conference (2012-2014) and 35th APCOM Symposium in 2012. Over the last five years, Kevin has also been an organiser and supervisor of student trips – some up to ten days long – to various states of Australia.

Paul Harper FAusIMM(CP) (Mining Society), in recognition of his contribution to the Mining Society Committee and his conspicuous contribution to the Institute. In late 2007 the Mining Society was re-established and chaired by John Collins. The aim of the Mining Society is to establish and maintain a mechanism for representing the interests of mining professionals within the Institute. Paul was Chairman from 2009 to 2011 and during this time he introduced face to face meetings to develop comprehensive and meaningful strategic plans for the society and its members. The society developed an identity and promoted its relevance to its members and is now a very active contributor to members and the Institute. Some notable achievements include: Mine Manager's Handbook; Guidelines for Technical Economic Evaluation of Minerals Industry Projects; Contributions to the AusIMM/IOM3 Transactions, Monograph publications and Newsletter Program recognition for university courses; Encouraging and facilitating mentoring arrangements for mining engineering students and young professionals; Advising the AusIMM and CP Boards on various matters. Paul has also been a leader, mentor and supporter of several Institute activities and has worked towards increased collaboration among the Institute societies and committees and their members.

Institute Service Award

2006

Pat Stephenson, in addition to his contribution to the Australasian Joint Ore Reserves Committee (JORC) since the early 1980's in the roles as Secretary (5 years) and Chairman (6 years), Pat has played a major role in the advancement and promotion of international

standards for reporting of ore reserves through CRIRSCO. His contributions have included publication of papers, technical articles, conference presentations and liaison with the ASX and industry.

Mark Adams, Mark has served on AusIMM Branch Committees in Queensland and now in Perth for many years. In addition, he has chaired the last three Underground Operator's Conferences and is assisting the committee for 2008. He has represented AusIMM on the JORC Committee for many years.

Tom Farrell (deceased), in recognition of Tom's leadership, over three decades, in transforming the adaptation of diverse science into the science of environmental management. The techniques that Tom helped to pioneer have been adapted and adopted throughout the minerals sector both in Australia and overseas. Also, through his significant contribution to the discipline of environment to The AusIMM and to his support to other professionals.

Stewart Gillies, for his long and valued service to The Australasian Institute of Mining and Metallurgy through his roles in the Southern Queensland Branch Committee, as Chairman of the Fourth and Eighth International Mine Ventilation Conferences, and particularly in his leadership as the second Director of The AusIMM Education Endowment Fund and the Australian Student Minerals Venture scheme. Stewart founded The Institute's system of Student Chapters in 1987 and proposed the concept of the ASMV and has been ASMV Coordinator for twelve years. The ASMV has developed to be a very successful initiative for attracting the brightest and the best students to the minerals industry through provision of vacation schools.

Rod Grant, for his long history of service to The AusIMM, including Melbourne Branch Chair and Committee member; involvement in the activities of the Combined AusIMM/IE Aust. Branch in Port Pirie, and in the organisation of conferences; development of young metallurgists; involvement in various committees, publications and task forces, and particularly his energy and time as Chair of the Metallurgical Society and his support for careers and education initiatives.

Peter Stoker, for his long and valuable service to The Australasian Institute of Mining and Metallurgy through his roles as Councillor, Chair of the Geoscience Task Force, Branch Chairman, Branch Secretary, contributor to conferences and Monograph 23 and particularly as Chairman, Secretary and member of the JORC. Peter has led that body through a period of development of the Code in Australasia and elsewhere and has developed a close relationship with the parent bodies and the ASX. He is also an Australian representative on CRIRSCO, the international committee for resources and reserve reporting.

Sue Border, for many years of service to The AusIMM in committee work and is particularly noted for her contribution to WIMNet, being the chair for five years and achieving progress in diversity policies, mentoring and the raising of womens' issues. Sue has also been on the Membership Applications Committee for 3 years.

Renamed AusIMM Service Award

John Kelly, for long and meritorious service and diligence as Deputy Chairman and Secretary of the VALMIN Committee. John has been heavily involved in the development of all three editions of the VALMIN Code (1995, 1998 and 2005).

R J (Bob) Kininmonth, for long and meritorious service and participation as an active member of the Melbourne, Sydney and Illawarra Branch committees. He was Illawarra Branch Chairman in 1991-93, and is secretary of the Heritage sub-committee of the branch.

The Award also recognises Bob's contribution to mine safety and coal mining practice in the Illawarra region and throughout Australia.

Ken Nielsen, for long and meritorious service to the Central Victoria Branch including leadership roles as Chairman, Secretary and Committee member and for the organisation of two major conferences and technical meetings. Ken is still an active member of the Branch and continues to contribute, particularly through guidance to student members.

Trevor Ireland, in recognition of his long and meritorious service to The Institute, including as Chairman of the Adelaide Branch for the periods 1997-1999 and for 2003-2006, and in particular, for his outstanding contribution to the planning and successful stewardship of the 2004 PACRIM Conference.

Miriam Way, in recognition of outstanding service and dedication to, and support of, the aspirations of the Institute. Miriam is a supportive and communicative colleague to her peers and members alike, always focused on the best interests of the Institute. Miriam has not only met, but exceeded the expectations placed upon her in what continues to be a challenging and vital role, and has maintained the strongest relationships with members, colleagues and external partners. For these reasons, Miriam Way is most fittingly, the first employee to be a recipient of The AusIMM Service Award.

2010 Simon Dominy, in his minerals industry career, Simon Dominy has held a variety of posts in industry and academia and has a long record of service to The AusIMM, beginning almost 10 years ago when he was lecturing at James Cook University. Simon has held Publication editorial roles for The AusIMM, namely the Proceedings of the Fifth International Mining Geology Conference (2003), the proceedings of the Sixth International Mining Geology conference (2006), the proceedings of the Narrow Vein Mining Conference 2008 and the proceedings of the Seventh International Mining Geology Conference (2009). As well as the above contributions, Simon has been involved with many conference organising committees in a variety of roles. These include the 2002 AusIMM Underground Operators Conference, the 2003 AusIMM Mill Operators Conference, the 2004 AusIMM Congress, the 2008 AusIMM Sampling Conference, all as an organising committee member, the 2003 Fifth AusIMM International Mining Geology Conference as a co-chairperson, and the 2006 Sixth AusIMM International Mining Geology Conference. He was the driving force behind the 2008 AusIMM Narrow Vein Conference and the 2009 Seventh International Mining Geology Conference, all as chairperson. Simon was also on the organising committee for the 2010 AusIMM Sampling Conference and chaired the 2010 AusIMM Gravity Gold Conference. He is chair of the 2011 AusIMM Narrow Vein Conference. Simon is also an associate editor for AusIMM Transactions Section B (Applied Earth Sciences).

> Ray Tolhurst, in recognition of his significant contribution to The AusIMM, maintaining its inclusive, comprehensive approach and relevance across all stages of production. commodities and personnel, particularly para-professionals and associate members, throughout the minerals industry. Ray was a member of The AusIMM Education and Careers Taskforce that prepared the graduate development programme across geology, mining and metallurgy disciplines, attraction and retention, preparing the AusIMM 2005-2025 Minerals Education policy. He has been active in maintaining a diverse range of minerals industry education and training facilities and opportunities, at a time that some major industry bodies focused on reducing the range of centres. Ray has made representations to AusIMM Annual Congresses, particularly the 2001 explanation on VET Minerals Industry Training Packages and their importance for continuing professional development and gaining statutory qualifications, and the 2009 outlines on marketing The AusIMM across the entire industry and educational recognition for Materials Engineering (Metallurgy) programs. Ray has been a member of the AusIMM's Illawarra Branch Committee since 2001 and Branch chair for three years. He is an active participant and committee member in annual Coal Conferences, New Leaders and Mining Games. Ray also developed and delivered the first post-graduate

qualification in NSW in Sustainable Development for Mining and Metal Production, blending environmental science and technology, business planning and community relations.

Richard Flanagan, in recognition of his strong commitment to AusIMM activities, especially his longstanding and ongoing involvement as a committee member and chair of a multitude of successful AusIMM Conferences. Richard was on the following committees: Hoist & Haul 2005; Iron Ore 2005; UOC 2005; Explo 2007; LOP 2007; UGOP 2008; PE 2009; Heavy Minerals 2011. He was conference chair of: Explo 2004; Project Evaluation 2007; LOP 2010. Richard is managing director of Richard Flanagan Mining Consultancy Pty Ltd (RFMC Ltd) and has more than 40 years' experience in mining services, mining engineering, project development, management and consulting within the mining industry. He is a Fellow of The AusIMM, a Chartered Professional, a member of MICA - The Consultants Society of The AusIMM, and a Fellow of the Australian Institute of Company Directors. His experience includes working in Australia, PNG, New Zealand, Myanmar, Bulgaria and Armenia. In addition he has had involvement with projects in Fiji, Uzbekistan, Botswana, Algeria, Utah and Morocco He has filled the positions of registered manager, project manager, mine manager, mine superintendent, underground manager and consultant throughout his career. Richard has experience and skills in working with and training non-English speaking personnel in the mining industry.

Miriam Lyons-Stanborough, in recognition of being a key committee member and leader of the Women in Mining Network (WIMnet). She has forged a career pathway and built on a solid professional reputation in chemical engineering and management, whilst also taking three rounds of maternity leave. Miriam has been a key element in WIMnet's success and relevance through the last decade. She chaired the group through a period of growth (2004-2005) and has been a very active vice chair for the past three years (2007-2010), leading the group through a changing environment and always injecting positive energy with the most professional perspective. Miriam promotes and represents The AusIMM though organising key development opportunities for women in mining, including negotiation skills seminars in both Perth and Brisbane and leading the Gender Pay Gap survey and reporting for WIMnet. She has been an inspirational keynote speaker at many events in WA, celebrating and encouraging diversity for the industry and WIMnet and also serves as Alcoa's representative on the WA Chamber of Minerals and Energy (CMEWA) Women in Resources reference group.

Donna Frater, in recognition of her work as a member of The AusIMM since 1994 and involvement in the Institute's Women in Mining Network (WIMnet) for more than 11 years. Donna has been instrumental in publicising issues of importance to women in mining, such as the Gender Pay Gap, the need for more flexible work options and the difficulty the industry faces in retaining women once they undertake caring responsibilities. She has been active in representing WIMnet and The AusIMM in submissions to the National Resources Sector Employment Taskforce (NRSET) and the House of Representatives Standing Committee on Employment and Workplace Relations. Donna is also a long-time member of WIMARQ (Women in Mining and Resources Queensland) and represents WIMARQ, WIMnet and The AusIMM on the Mineral Council of Australia's Workforce Committee. It was in this capacity that she was given the honour of making the opening address to the inaugural MCA Women in Mining Workshop in Canberra in 2011.

Donna took on the role of WIMNet Chair of the Committee between 2008 and 2010. As Immediate Past Chair, Donna has remained highly involved in WIMnet, mentoring the current Chair and Deputy Chair and providing invaluable advice to all committee members borne of years of experience on the committee. Donna has a passion for including regionally-based women in networking events, and she has been instrumental in setting up successful networking events for AusIMM members in Mount Isa, Moranbah and Emerald. She also worked on setting up similar events and a formal Women in Mining networking group in New Zealand with the NZ Branch in 2011.

Alison Keogh, for her leadership and contribution to The AusIMM at Board level, to its

Branches and Committees, and to the Women in Mining Network (WIMnet). Alison has provided leadership to and strong representation for the interests of female professionals within the minerals industry, and leadership in sustainable development in mining, by founding the Institute's Sustainability Committee and chairing the committee for three years. Alison has been a member of The AusIMM since 1999 and has served in senior capacities within the Institute, including a three-year term as an elected Director on the AusIMM Board (2009-2011). Alison's first associations with the Institute were as an active member of the Pilbara Branch and was one of the key founding members of Women in Mining Western Australia (WIMWA). In 2005, Alison formed the Women in Mining and Resources Queensland (WIMARQ) group, which she chaired for four years. During this time Alison was regularly asked to speak to the media about the role of women in mining and has played an integral part in representing female professionals and their interests and in ensuring those interests are reflected in AusIMM policies. This included involvement in the introduction of the Queensland Resources Awards for Women. Alison also initiated a partnership between WIMARQ and Women on Boards, introducing their leadership and Directorship training programmes to women in mining in Australia.

Peter Tilyard, for his longstanding support of the Institute at Branch level and for his active participation in the development and ongoing success of the AusIMM Metallurgical Society. Peter has been a member of the AusIMM since 1966 and a Fellow since 1982. He served on branch committees at Panguna and Broken Hill and set up a "hot branch" at Rio Tinto's Technical Services group at Bundoora. He served on Council in 2000.He joined the Metallurgical Society's foundation committee in 2002 and has served as vice-chair since 2008. In particular he has been instrumental in the establishment of the Mineral Processing Toolbox on the Metallurgical Society website, remains largely responsible for its development and has promoted his professional discipline to great effect".

2012-2013 *Robert Burns,* in recognition of his outstanding contribution and work on the *Australasian Mining and Metallurgical Operating Practices* project from 2010, leading to the launch of the publication in 2013. Rob was an instrumental part of the AMMOP project team, taking up the role of project leader to drive the planning, development and implementation of this major publication. He provided extensive input to identifying target sites and plants, developing templates and liaising with company contacts in order to gain paper submissions. The dedication and commitment of Rob to the AMMOP Project over several years has led to the publication being produced in a timely manner, containing high-quality material that will be of great use and interest to The AuslMM membership base and to minerals industry professionals more broadly. Rob has also shown his dedication to The AuslMM as a member of the EEF Board of Trustees since 2001. He instigated the recent review of the EEF and was part of the review steering committee. The recommendations from this review were accepted at the June 2012 EEF Board meeting and will be implemented in 2013-2014.

Emeritus Professor Odwyn Jones AO, in recognition of his broad and extended involvement across a number of AusIMM activities, Societies and Committees.

Odwyn joined The AusIMM as a Fellow in 1977 and was a member of the combined AusIMMM/Institute of Engineers Accreditation Board for a number of years in the mid 1980's. He has served as Chairman of the Eastern Goldfields Branch (1990), member of the Perth Branch committee and member of the AusIMM Council (1991-1994), National Vice-President (1994), and has been a Committee member of the Mining Society since 2008. Odwyn's involvement in the Mining Society has been extensive, from steering the overall aims and direction of the committee to acting as a key point of contact in organising submissions from the Mining Society for more than 15 papers in the discipline-specific Chapter 3 of *Australasian Mining and Metallurgical Operating Practices*.

Odwyn was an integral member of the Mine Managers' Handbook Committee and the AMMOP Project Committee. Odwyn served as a member of the editorial board for the AusIMM/IOM3 Mining Technology journal until his resignation from the Mining Society at the end of 2012, in this capacity he helped to identify suitable material for publication and worked to increase awareness of the journal through the Mining Society.

2014

Dr Ernest Baafi MAusIMM, in recognition of his significant contribution to the AusIMM and for the exceptional work undertaken by Ernest. Professor Ernest Baafi has been an AusIMM member for more than 30 years. Since 1992 Ernest has had extensive involvement with the Application of Computers and Operations Research in the Minerals Industries symposia, attending 11 symposia, representing the Institute on the Organising Council since 2007 and peer reviewing multiple papers for these and other national and international conferences. Ernest chaired the successful 35th Application of Computers and Operations Research in the Minerals Industries Symposium 2011 in Wollongong and was responsible for its ultimate success. Ernest was instrumental in setting up and running the inaugural Australasian Coal Operators' Conference in Wollongong and he chaired the conference for the first four years following its inception. This conference is the premier underground coal mining operators' conference in Australia. Ernest also had a major involvement with the production of The AusIMM's Australasian Coal Mining Practice (Monograph 12), a very successful publication that is used extensively as a reference text. As well as co-editing the volume and acting as a chapter author Ernest also oversaw the desktop publishing of the volume. As Discipline Adviser for Mining Engineering at the University of Wollongong Ernest has coordinated AusIMM student membership applications with AusIMM Services for some 15 years with students joining in record numbers over the past three years. Ernest's interests are diverse. He has been responsible, with the assistance of AusAID, for setting up the geostatistical ore reserve and operations research subjects at the University of Technology in Lae, Papua New Guinea. Ernest continues to spend considerable time with the Institution of Engineers Australia accrediting mining engineering degree programs for other Australian universities.

Lindsay Bottomer FAusIMM(CP), Lindsay Bottomer has been an AusIMM member for more than 40 years and a member of the Membership Applications Committee for ten years. Based in Vancouver, Lindsay is effectively the committee's overseas membership representative. Lindsay has used his extensive industry knowledge and experience in the assessment of applicants for AusIMM membership or grade transfer, especially at Fellow level. He has participated in the regular monthly reviews, focusing on geological applicants and in the subsequent teleconferences where issues of concern over applications are discussed. Lindsay's knowledge of North American and other overseas jurisdictions has provided valuable guidance to Australian-based members of the Committee. In addition to his role as an Applications Committee member Lindsay is an AusIMM International Representative for the Vancouver region, performing a valuable service as a representative and a point of contact for new or aspiring AusIMM members.

Dr Glen Corder MAusIMM(CP), in recognition for his significant contributions to the AusIMM, in particular his outstanding contribution to the AusIMM Southern Queensland Branch. Glen has worked enthusiastically across a range of AusIMM groups and initiatives. He joined the Southern Queensland Branch Committee in 2008, was Branch Chair in 2009 and has also served as secretary and vice chair of the Branch. Glen was a member of the former AusIMM Sustainability Committee, serving as Chair of that Committee's Regional and Environmental Impacts panel during 2011-13. Glen is currently a member of the Community and Environment Society leadership committee. In this role he is helping build The AusIMM's capacity to support and represent minerals professionals working in community and environment related issues. Glen was a member of the technical committee for the inaugural Life-of-Mine conference in 2012. In 2014, building on the success of that conference, The AusIMM will host a second event on this highly topical series on integrative practices for planning, designing and operating mines that deliver long-term beneficial environmental and social legacies. Glen was also on the committee of the AusIMM Sustainable Development Indicators in the Minerals Industry conference in 2009. A member of the Professional

Development Committee and an advocate of bridging the gap between research and industry practice in responsible resource extraction, Glen launched the Webinar – Tech Talk Series in 2013 with the topic 'Can sustainability principles be the driver for innovation in the minerals industry?'.

Dale Sims FAusIMM(CP), in recognition of his significant contributions to the AusIMM community. Dale Sims has been an AusIMM member for more than 20 years. He is a Fellow and Chartered Professional of The AusIMM and has been a dedicated and enthusiastic member of the New South Wales Hunter Region Branch for many years. He served as a Young Professional Observer on Council and has helped to organise numerous technical conferences. Dale was elected as a Director to the Board of The AusIMM in 2013. An active member of the AusIMM Geoscience Committee (now Geoscience Society) since 2005, Dale chaired the Society in 2010 and has been reappointed Chair for 2014. Dale is an integral part of the Geoscience Society committee and is constantly seeking to improve and expand the services the Geoscience Society offers to AusIMM members including establishing and running the Geoscience Society's Geoscience Field Skills course. Dale currently represents The AusIMM on the Australian Geoscience Council and has been a member of the organising committee for several International Mining Geology conferences as well as being the conference chair for the eighth IMGC in Queenstown New Zealand in 2011. Dale is cochair of the AusIMM's Asia Taskforce which was established by the AusIMM Board to develop closer relationships with kindred professional bodies and to expand the services available to AusIMM members in the Asian region. Dale is active in engaging with the broader AusIMM membership and constantly seeks to improve and broaden the links the Institute has with other professional organisations, universities and the wider community.

Christopher Carr FAusIMM(CP), in recognition of his significant contribution to the AusIMM. After long-term involvement in Branch committee activity, including being Chair of the North West Queensland Branch, Chris was elected to the Board of the Institute, a position he held for six years (2007-2012). As a Board member he came to participate in a number of Institute committees and ultimately made an outstanding contribution to Institute affairs and leadership as the Chair of a number of key committees. Chris is Chair of the Chartered Professional Board and the AusIMM Board's Investment Committee, where he has made a particularly strong contribution to the financial stability of the Institute. Chris has contributed to a number of conferences, including the 2009 AusIMM Congress held in Mt Isa and was an active member of the Mining Society Committee from 2008-2014 including a leading role with the Mine Manager's Handbook.

Institute or Minerals Sector Service Award

The Institute or minerals sector service awards build upon the former Branch and Society Service and AusIMM Service Awards. These awards may be presented to any Institute member or to a group of members. These awards recognise consistent and significant contribution to the ongoing success of the Institute and/or the minerals sector.

Mark Chalmers FAusIMM. In 2005 Mark Chalmers initiated and presented the concept of a technical uranium conference to the AusIMM with the vision that it would become a leading international event in a poignant time of industry growth. Mark has provided outstanding leadership as Conference Chair at each and every event with the tenth conference in the series celebrated in Adelaide in 2015.

Christopher Sykes MAusIMM(CP). Chris began his involvement on the Adelaide Branch Committee in 2008 and has given unreservedly of his time and effort in supporting and sustaining a strong Committee. Chris's key role since 2009 has been Branch Treasurer. Chris has also been an active participant in the Branch's technical and social events

program. His tireless efforts in this area have ensured the Branch continues to have one of the Institute's most successful programs for its members.

Terence Fisher FAusIMM CP(Min). Terence Fisher FAusIMM CP(Min) has been an advocate for health and safety (H&S) over many years in both industry-based and inspectorate/regulator-based roles within Australia and overseas. Terry has also performed numerous roles within the AusIMM, including being a founding member of the AusIMM OHS Taskforce in 2000 and a member of the ensuing AusIMM H&S Committee from 2005 until his retirement in early 2015.

Professor Damien Giurco MAusIMM, Professor Damien Giurco of the Institute for Sustainable Futures, University of Technology Sydney has been a central leader in establishing the AusIMM's Community and Environment Society. He first joined the AusIMM's Sustainability Committee in 2010, became Chair in 2011 and then led the development of that Committee into becoming the Community and Environment Society, which was established in 2013 following AusIMM Board endorsement. He has presented multiple conference papers and AusIMM Bulletin articles and led research collaboration with AusIMM on adapting to climate risks.

Dr Kevin Wills FAusIMM, Kevin was the instigator of the annual South Australian Exploration and Mining Conference and remains the Chair 14 years later. Kevin has fostered a unique collaboration between the AusIMM and four other partners and has provided technical information exchange and cooperation between industry, government and students, while advancing the profile of the Institute.

Kevin also serves on industry and education committees, was past Chair of the AusIMM Adelaide Branch, has run short courses, and helps to reinforce the relations between universities and industry.

AusIMM Illawarra Branch Heritage Sub-Committee, The AusIMM Illawarra Branch Heritage Sub-Committee (Chair Andrew Hubsher and Secretary Graham Pryor) has for 30 years been active on practical projects focusing on the mining heritage of the Illawarra region, where coal was first discovered in 1797. Projects were developed in conjunction with the local council and other relevant groups. Their work is a model for similar action by other AusIMM Branches, Societies and Committees.

- David Hunter MAusIMM(CP), David has been an enthusiastic, reliable and productive member of the North Queensland Branch committee. During his time as Chair, David has revitalised branch functions and established monthly technical meetings for members covering a broad range of topics. This work has been successful in raising the standards of professional practice within the branch and demonstrated the commitment of AusIMM members to the highest standards of professional practice.

 In his capacity as a metallurgist in both the QNI Research and Development team and the Metallurgical Accounts team, David has made significant contributions to operational improvements. This work was aided by his commitment to further education including studying post-graduate computer science to better understand and utilise the increase in available data at all steps from mine to market.
- Richard Evans MAusIMM(CP), Richard was nominated because of his excellent work as MAP (Member Assistance Program) Coordinator over the past few years. Managing the cycles of our industry can be isolating and challenging for individuals. As Melbourne Branch MAP Coordinator, Richard has created a supportive network for those that find themselves unemployed or under-employed.

In this role, Richard has piloted direct peer contact, networking gatherings, supported development of the MAP Online Toolkit, initiated a series of masterclasses and investigated low-cost office space for members. He has also presented at Congress encouraging the development of similar programs across other AusIMM branches.

Adrian Pratt FAusIMM(CP), Adrian Pratt is highly regarded and respected in his professional role, and is currently an independent consultant, having held senior operational and management roles during his career.

He has displayed an exceptional and commendable level of commitment and dedication to the AusIMM over many years, leaving a tangible legacy of professional development opportunities for resources professionals. He is a dedicated and reliable member in all his roles, bringing an enviable enthusiasm to each group, ensuring they reach best possible outcomes.

Adrian has made a significant contribution to the AusIMM as an organising committee member and in leadership roles for branches and conferences and has supported a range of AusIMM conferences and publications as a contributing author.

Renamed Institute or Resources Sector Award

Ron Cairns MAusIMM, Ron has had a long and illustrious career within the Illawarra coal mining industry. Ron started work in the industry as an apprentice electrician in 1944, rose to Chief Electrical Engineer of the AIS Collieries in 1964 and in 1979, became Manager Engineering of BHP Steel Division Collieries.

Ron has been a valued member of the AusIMM Illawarra Branch (including as Chair) and contributed to the work of the Mineral Heritage Sub-committee in the production of the documentary 'Beneath Black Skies' and as author of two books recording the history of coal mining in the Illawarra, the Burragorang Valley and the Southern Highlands. Ron is currently the Project Manager of the Illawarra Heritage Trail website.

Kate Hobbs MAusIMM, Kate Hobbs has held many roles within the industry during her career and has importantly been a strong advocate for women and diversity more broadly, both in resources and several other sectors. Kate has been instrumental in voluntary roles, including mentoring and committee membership with her most visible, positive advocacy activities to date having been through her involvement in AusIMM's Women in Mining network (WIMnet) and personal drive to establish the AusIMM's Council for Diversity and Inclusion.

Kate has been actively involved in WIMnet since 2014, including time as the Chair of both WIMnet SA and the national committee. She has also assisted with developing support for regional areas, such as Whyalla and Roxby Downs, and played a key role in the establishment of the successful WIMnet SA mentoring program. Kate works tirelessly to ensure diversity and inclusion is adequately highlighted at the strategic level within AusIMM. She continues to make significant contributions to both AusIMM and the industry more broadly and is an inspiring leader who is passionate about promoting and improving equality within the resources sector.

Keith Yates FAusIMM, Keith has provided a significant, sustained service to AusIMM and the resources sector for more than 50 years, and remains a prominent advocate for the industry and its professionals to this day. Keith is a geologist with substantial experience across mineral exploration and mine development.

Following his retirement in 2007, Keith has served as a member of the SA Mining and Petroleum Experts Group and is currently the Chair of the Minerals and Energy Advisory Council. Keith is a long-term committee member of the Adelaide Branch and a former chair. He was instrumental in establishing a joint scholarship program between the AusIMM Adelaide Branch and the Playford trust, which has seen 25 worthy students recognised and supported. His outstanding commitment and dedication to supporting the industry is highly valued.

2020 **Bruce Harvey FAusIMM**, Bruce has 40 years' worldwide experience in the mining industry as a geologist and for the past 20 years as a social performance professional. He has been

at the forefront of gaining professional recognition for social scientists within the AusIMM and the resources sector generally.

Early in his career Bruce helped establish some of the first exploration access and native title agreements on Aboriginal lands in Australia. As Global Practice Leader – Communities and Social Performance, he drove the early development of Rio Tinto's social performance system and its global implementation.

He is an Adjunct Professor at the Sustainable Minerals Institute, University of Queensland, and a Visiting Lecturer at the University of Otago (New Zealand) MBA School.

Bruce chaired the organising committee for the inaugural AusIMM Social Licence to Operate Forum in 2019, ensuring the proceedings and recommendations were well captured and communicated. As a committee member for the Social and Environment Society he advocates for greater understanding of the importance and application of social science in mining.

John Nethery FAusIMM(CP), John Nethery has been a geologist for more than 50 years and also has a post-graduate Diploma in Education. He has keenly participated in education within the community and more formally through contributions to the primary, secondary and tertiary sectors throughout his career.

As a resident of Chillagoe, John is a regular media contributor on the importance of the industry, has contributed significant sections on geology and mining to three books, has contributed to permanent geotourism interpretive displays and has presented at seminars in the Far North Queensland (FNQ) region.

John has made a consistent and significant contribution to the ongoing success of the resources sector by building better understanding and respect between professionals and local communities in FNQ.

He has managed and provided consulting geological expertise, technical and logistical support to many explorers globally and in the Chillagoe district and the general region.

2020 **Kate Sommerville FAusIMM(CP),** Since joining AusIMM in 1994, Kate has been an active and committed AusIMM member. Her contributions include serving two terms on the AusIMM Board from 2007-2012 and serving on the JORC Committee.

Kate has also played an active role through mentoring and speaking at Women in Mining Network events, as well as appearing on industry panels for a variety of events.

She has shared her knowledge through delivering and reviewing papers on many technical subjects, as well as writing for the AusIMM Bulletin and serving on the conference organising committee for the 2018 Global Mining Leaders Conference.

In 2013 Kate was nominated for and won the 2013 Professions Australia 'Professional of the Year' award, a testament to her dedication and expertise.

In 2011 she was recognised as a WA Chamber of Minerals and Energy Women in Resources Champion.

Henry Antwi FAusIMM, Henry Antwi established the AusIMM's only Community of Interest in Africa, the AusIMM Tarkwa Student Chapter at the University of Mines and Technology in Ghana. Since joining AusIMM in 2006, Henry has supported and mentored the next generation of mining professionals in Ghana and the wider region.

Henry is passionate about the role AusIMM plays in supporting new professionals, and has sponsored more than 200 students to join AusIMM. Many of the students Henry sponsors become great industry professionals in their fields and Henry has instilled a high level of professionalism in the Chapter members.

He has organised many events for Ghanaian students and the industry, including the Annual Tarkwa Forum AusIMM Conference which attracts over 400 participants. Henry has also been a keynote speaker at the Accra Mining Network Quarterly Seminars, the West African Institute of Mining, Metallurgy and Petroleum, Ghana Institute of Geoscientists, University of Mines and Technology Alumni lectures and various conferences globally.

Henry provides great insights to help better Ghana's resources industry, and provides advisory support to companies and governments around the world.

- Glenister Lamont FAusIMM, Glenister Lamont served pro bono on the AusIMM Investment Committee for 13 years, from its inception in 2007 until 2019. Over this period, Glenister helped steer and maintain a strong investment portfolio for AusIMM, including through some very testing times such as the 2008 global financial crisis.

 Glenister's knowledge and guidance was invaluable to the Investment Committee, and he provided much needed external balance. He afforded a deep understanding of the investment environment, the nature of risk of new and developing products, and assessment of the risk/reward performance of the portfolio and the investment manager. Without his guidance, the Committee would have been ignorant to the risk of some recommendations from the investment manager as well as some opportunities that they had not raised. Glenister's extensive experience with the risks associated with investing and investment portfolio management committees across a number of 'not-for-profit' organisations has helped ensure AusIMM's financial sustainability, and he has been pivotal in maintaining a well-managed portfolio.
- 2021 Tony Osman FAusIMM(CP), Tony Osman has made extensive contributions to the AusIMM Chartered Professional (CP) Program over the last 15 years, including growing the program from a cohort of a few hundred Fellows to the 1400+ CP members AuslMM has today. Tony became a CP in 2000 and was a member of the CP Board from 2005-17. Throughout this period was also heavily involved in assessing CP applications, initially Environment then Geology. Tony has also been instrumental in assessing PD logbooks and in contributing to the continued smooth running of the CP program. This included the transition period across 2016-17, when the CP program was relaunched. At the end of 2017, Tony was elected to the Chartered Professional Program Committee (CPPC) to represent the Geology discipline. Tony has been a dedicated member of both the CP Board and the CPPC, attending monthly Committee meetings and assisting with Committee tasks and responsibilities. His contributions to CP-related workshops at AusIMM Congress have also been noteworthy. Tony has been an AusIMM member since 1966, being involved with Branch and other Council/Board activities throughout this time, and will celebrate a remarkable 56 years of membership in 2021.
- Ross Garling FAusIMM, Ross Garling has been a long-standing AusIMM member for over 50 years and has a lengthy record of service, serving on the three branch committees in Sydney, Southern Queensland and most recently North Queensland, where he has been the Secretary and Treasurer for the past two years. In the late 1990s Ross was Secretary and then Chair of the Sydney Branch. During his time as Chair, he undertook a deep dive study into the branch demography, and determined that lunchtime talks better suited the members. He started the ongoing luncheons and presentation talks that remain to this day. Ross is a dynamo in his current role with the North Queensland Branch, always working to improve services for members. He has been involved with organising the Sir George Fisher Lecture for the past two years and organising with Jim Morrison to build the Charters Towers historical 3D map of the old workings. Always willing to help nurture the next generation, Ross has also been instrumental in re-establishing the student chapter at James Cook University in Townsville.
- Dr Richard Lilly MAusIMM, Dr Richard Lilly is passionate about preparing geologists from university courses for work in the exploration and mining industry. Over the past seven years, Richard has made an incredible contribution to the minerals industry through the highly successful NExUS (National Exploration Undercover School) program. As a co-founder and program leader of NExUS, Richard has constantly evolved this important offering to include students in different years of study and different disciplines. The workload for the program is huge and much of it is voluntary. It requires working very long days and nights as well as weekends, organising guest speakers, field trips, networking activities, professional development workshops and technical sessions. The program is recognised nationally and internationally, with collaborative support coming from mining companies, government, industry bodies and academia. Richard is also on the Adelaide Branch Committee and provides a vital link between the University of Adelaide's Geoscience Department and the

branch. Through his position at the University of Adelaide, the NExUS program and his involvement with the AusIMM, Richard has made an enormous contribution to the development of undergraduate and postgraduate students.

- Maya Secheny MAusIMM, Maya Secheny has served as the AusIMM Lachlan Branch Chair since 2012. Through this time, she was the driving force behind the branch, organising and overseeing a quality program of events. Like many regional branches, Lachlan contains several mining operations with members separated by large distances. Maya has organised the branch's flagship event, 'The Central West Mining Forum', since 2013. This annual event comprises one day of technical papers presented by members from the mining, minerals processing and exploration community. The event has been highly successful over a number of years, bringing together these different communities for professional development, and regularly includes attendance from the standing President of AusIMM and the local federal MP. Maya's ability to take on the difficult task of running a branch and delivering a quality program over an extended period of time in a regional area is a testament to her courage and dedication. Maya's work ethic and commitment is a great example of what the AusIMM needs to be successful as a diverse and contemporary organisation.
- Ivy Chen FAusIMM, Ivy Chen is a long-standing AusIMM member and is a great ambassador for the organisation and the resources sector. She has served in various leadership positions for the AusIMM over many years including as a Director, a long-standing committee member and past chair of the Perth Branch, and as a member of both the VALMIN and Ethics Committees. In particular, Ivy has shown her commitment to advancing professional best practice through her support of and involvement in AusIMM's online JORC Code Reporting and VALMIN Code Reporting courses. Ivy takes the opportunity to promote the highest standards through her work with VALMIN and the AusIMM to a wide range of stakeholders. Ivy is also always willing to stand up and be a role model to other professionals. In 2020 she was named in the Women in Mining UK's biennial 100 Global Inspiration Women in Mining, and was a finalist in the 2020 WA Chamber of Minerals and Energy Outstanding Women in Resources award. Ivy also supports the broader community through leadership roles with Multicultural Futures, a non-for-profit organisation supporting migrants and refugees, and Football West.
- Bruce Fulton FAusIMM, Bruce Fulton has been an AusIMM member for more than thirty years, and during this time has made significant contributions as a member of the Sydney Branch Committee, including being Chair on two separate occasions. In particular, he extends the reach of the Branch and opportunities for members by promoting member interaction with neighbouring and kindred groups, such as UNSW, SMEDG and AMEC. Alongside his role on the Sydney Branch, Bruce contributes to the resources sector through his roles as a long standing member of the Advisory Board of the UNSW School of Mineral and Resource Engineering and the Association of Mining and Exploration Companies (AMEC), where he is currently serving as the NSW Chair and a National Vice President. Bruce has a passion for supporting and mentoring students and young professionals as they embark on their careers and his efforts in this space are highly regarded. He is passionate about AusIMM, promoting it at every opportunity and provides regular counsel and advice to AusIMM members and the Board and Executive of the AusIMM. He is a regular attendee at AusIMM Congress and other AusIMM and WIMnet events and activities.
- Richard Schodde MAusIMM, Richard Schodde is a respected professional who has wide variety of experience within the international resources industry. Richard is a long-standing committee member of the AusIMM Melbourne Branch (2008-present), an enthusiastic member of the Melbourne Mining Club, and served for nearly a decade on AusIMM's Heritage Committee (2011-2020). Richard has been instrumental in helping shape the Melbourne Branch's technical events, and the Branch and members have benefited from Richard's involvement through the high standard of speakers he has been able to help attract to its events. Richard selflessly gives of his time for the betterment and future wellbeing of the resources industry, and he is particularly focused on developing and shaping future generations of mining leadership. He is willing to lend a hand to others, providing advice,

guidance and information on the status of the industry. Richard has published several papers on exploration performance and is internationally recognised by his peers as a leader in mineral economics. He further contributes to professional best practice through his role on the editorial board for the Journal of Resource Policy.

New Professional Award

Robert Johansen, for making a difference. He has degrees in Mining, Law & Commerce. Has made real contributions to Anglo Coal in Australia and South Africa. Managed the Brisbane Office of Barlow Jonker, advising Corporate Clients. Now heads "GRAX", and is selling mining related properties. Is active in The AusIMM (a key force on the Queensland Young Professionals Committee) and is seeking to grow The Institute and its relevance to young professionals.

Roderick Haselden graduated with Honours in Geology from the University of Wollongong in 2001, and went on to do a Graduate Diploma of Education in 2002. In 2003 Roderick joined Illawarra Coal as a contract geologist, shortly after joining AusIMM as a Graduate member. Currently Roderick is the Data Integration Geologist working for Illawarra Coal. He is currently an active Illawarra Branch Committee member. He has been serving the Branch in the capacity of Honorary Secretary for the past year. Through his efforts the Branch has for the first time developed its annual program. He has been working hard to implement the Branch program.

- 2005 (Rohan) Mark Shannon, for being a driving force in the passionate promotion of The AusIMM, the mining industry and the University of Ballarat as an active member of the Central Victorian Branch and Ballarat Student Chapter. Also for his involvement in Chairing the 2004 New Leaders Conference and Mining Games.
- Michael Bartlett, for leadership in student branches, organisation of conferences, mining games and for his leadership in encouraging others into the mining industry and The AusIMM. Now a graduate with AMC, Michael is still active in the mining community and is showing considerable promise and is well on his way to making an even more valuable contribution to the mining industry.
- Spiro Pippos, for being a role model in his studies and vacation work through: leadership of the successful 2007 New Leaders Conference and Mining Games; his contribution to Congress, UQ Student AusIMM President 2007, vice president of MAMA and Southern Queensland AusIMM Branch, On-line Services Taskforce, AusIMM Student chapter meetings, promotion of industry to school and university students."
- Richard Price, for being an active member of the Perth Branch for five years who has worked enthusiastically to establish, encourage, mentor and support student chapters. Richard assisted in sending teams to international and national mining games, gave talks at new leaders conferences, presented guest lectures in mining and facilitated Students Meet Industry nights and vacation work. He also supported the ASMV and The AusIMM Career and Education Taskforce.
- Helen O'Keefe OAM, for her work as a member of the Perth branch and former committee member, representing the committee at an AusIMM Congress. Helen was also a committee member of the AusIMM Kalgoorlie Student Chapter and the WASM Student Guild. She was involved in the WASM Wombats Mining Team, leading several victorious teams as a student, competing as an alumni member and helping host the 24th International Intercollegiate Mining Competition as Event Secretary. She was awarded an Order of Australia Medal for her work in promoting the mining industry in the community. Helen has been involved in large scale mining operations such as the KCGM Super Pit and BHP Billiton's Olympic Dam and

provided technical expertise in many diverse projects across the world whilst working for major mining consultancies such as Snowden and Runge. She now works as an independent consultant, assisting a diverse range of clients from large multi-national mining houses to small junior companies.

- 2010 No award.
- Tim Hausler, for his work in the development of the CellView® system. Tim Hausler joined process automation firm MIPAC in 2003 as a student engineer while undertaking a bachelor of engineering (electrical and computer engineering) with honours at the Queensland University of Technology. Tim was instrumental in the development of MIPAC's cell voltage monitoring system, CellView®, which detects or predicts short circuits and monitors the overall health of a cell, making a refining or electro-winning operation realise its full potential. Over an 18-month period, Tim dedicated himself to all aspects of its development and was responsible for the successful deployment of the first CellView® system for Kazzinc in Kazakhstan. Tim is devoting himself to developing MIPAC's tankhouse product suite, and assuming more of a leadership role within the company, especially as mentor to engineering students and graduate engineers.
- 2012-2013 **Ellen Hiscock**, for her work as an environmental adviser since her graduation with various environmental and mining groups, including Pike River Coal Limited and L & M Mining. This has involved complex environmental monitoring programmes, including field stations with continuous water quality monitoring, field sampling and liaison with local authorities. This award recognises Ellen's involvement with The AuslMM, which she has served very effectively as secretary of the AuslMM New Zealand branch and the New Zealand conference organising committee for the past three years. Both these roles require a commitment of time and energy, which Ellen has willingly given. Ellen exemplifies the qualities The AuslMM encourages in New Professionals.
- Leonard Rowe MAusIMM, for his work in establishing Branch links with new professionals in the Hunter Region, resulting in the Branch having more young professionals attend technical talks and mine visits. He has organised Young Professionals graduate nights and been effective in encouraging new professionals to attend technical meetings, thus allowing the Branch the opportunity to recruit new members. Leonard has been effective in a revision of a Rio Tinto graduate handbook to include The AusIMM as a recommended professional body. In 2012 he organised one of the Branch's more successful mine visits in the Hunter Valley. In 2013 Leonard was the first person to speak to the Hong Kong Student Branch as well as presenting at various New Leaders' conferences in the past. In many ways Leonard is a true quiet achiever.
- Chris Rendall MAuslMM, Chris was a member of the New Zealand Branch Committee from 2011-2014 and held the position of Vice Chair in 2014. He was part of the New Zealand Branch Conference Organising Committee from 2012-2014, and as Conference Chair in 2014 he oversaw a very successful conference in Hamilton. He became involved in the AuslMM through working for a consultant geologist preparing permit applications under the Crown Minerals Act. Chris represented the New Zealand Branch at the 2012 New Leaders Conference and associated mining games and at a previous AuslMM Congress, both of which provided him with insight into the aspirations of new members of the industry and the realities of the environment within which mining exists, including obtaining a social licence to operate. Chris operates across the mining industry, is active within the AuslMM, and at an early stage of his career has an important position with the New Zealand Department of Conservation. He also brings new ideas and a fresh approach to the New Zealand Branch.

Erica D'Silva GAusIMM, since graduating, Erica has been on the AusIMM Illawarra Branch Executive Committee and BlueScope Women's Network Steering Committee, as well as being a regional representative for the New South Wales WIMnet Committee. She hosted 'The Oscar Experience', an event honouring Oscar Gregory for her work at BlueScope. Oscar was formerly General Manager of Mills and Coating and is Director ARC Research

Hub for Australian Steel Manufacturing. Erica organised the first WIMnet event in the Illawarra in 2013 and in 2014 organised another WIMnet event for the Illawarra community. Erica is committed to supporting women in the minerals industry. In January 2015 she volunteered as a mentor at the Women in Engineering Summit, a program aimed at high school students and hosted by the University of Wollongong.

- Jacinta Riedel GAusIMM. Jacinta has displayed notable service to the AusIMM, specifically in the area of developing new professionals. She was the inspiration behind the reinvigoration of the New Professionals Committee and was heavily involved in the organising of the flagship New Professionals Network event in Adelaide. She has also attended the New Leaders conference and encouraged others to get involved. She was the driver for the AusIMM webinar on email etiquette, and it is expected that there will be more notable achievements in the coming year.
- Robyn Teet MAusIMM, Robyn has displayed great leadership qualities as a Graduate Member and new professional. Robyn was the Chair of the New Professionals Network in 2015 and was part of the organising committee for the 2015 New Leaders' Conference. She also serves on the committee of the Eastern Australian Ground Control Group and was recently appointed Secretary.

Robyn was instrumental in developing the relationship between the AusIMM and beyondblue to highlight the importance and raise awareness of mental health in young minerals professionals. She facilitated the flagship NPN networking events with beyondblue in Adelaide and Perth, and this partnership will continue in 2017 with additional awareness and fundraising events.

Michael Genockey GAusIMM, Michael has been an active member of the AusIMM for the past eight years, initially as a student studying a double degree in mining and geology when he received an AusIMM Education Endowment Fund Scholarship.

Michael was a highly engaged member of the Adelaide Student Chapter as Secretary and President.

Among his many duties as Student Chapter President, Michael also helped establish the inaugural Student Honours Presentation Night at Adelaide University.

After accepting a graduate position with Glencore in Mt Isa, Michael immediately joined the North West Queensland Branch committee and has been their Secretary since 2016. He has demonstrated a sustained level of maturity and a capacity to engage, promote and lead his fellow professionals.

Viv Naidu AAusIMM, since joining AusIMM in early 2012, Viv has been an active member, demonstrating a level of maturity beyond his age, and a capacity to engage, promote, assist and lead his fellow professionals.

Viv studied a Bachelor of Engineering at the University of Adelaide between 2010 and 2015, with a semester-long placement in 2013 at the Colorado School of Mines. He was Vice President and Events Coordinator of the Adelaide Student Chapter between 2012 to 2015. Following graduation, Viv excelled as a Drill and Blast Engineer with Hillgrove Resources at the Kanmantoo mine, with a great eye for detail and always looking for process improvements. He continues to strive for technical excellence in his current role with Byrnecut at the Prominent Hill operation.

Viv received the Adelaide Branch AusIMM/Playford Memorial Trust Scholarship in 2015, joined the Adelaide Branch committee in 2017 and has enthusiastically taken on additional duties, including newsletter editor, media coordinator and sponsorship liaison.

2020 Rose Lindner MAusIMM, Rose Lindner became an AusIMM member in her first year at the University of Tasmania (UTAS), and since that time has held leadership roles in a number of AusIMM Communities of Interest. Rose has been Tasmanian Student Chapter Vice President and Secretary, and has continued her AusIMM involvement as the Tasmanian Branch Treasurer in 2018-19, Vice Chair in 2019 and Chair in 2020.

Rose is also the WIMnet Tasmania Secretary (where she helped build and launch their mentoring program), and was a Community and Environment Society Committee member in 2018. Rose's role in each of these committees has enabled her to broaden her professional experience and share her knowledge.

Rose has displayed leadership on issues affecting women and other groups who are underrepresented within the industry. She has also taken on roles of community outreach and education, actively inviting and facilitating mine site visits to share knowledge and build relationships between the local community and operating mines.

Jason Hodge MAusIMM, Jason Hodge joined the AusIMM in 2011 as a student at the University of Adelaide. Since graduating in 2012, Jason has worked at Argyle in Western Australia, Prominent Hill and Challenger in South Australia, the Didipio Mine in the Philippines, and now Oyu Tolgoi in Mongolia.

Jason joined the AusIMM Adelaide Branch committee in 2017 and immediately added value, happily taking on a variety of tasks despite his site-based roles meaning he was often doing this remotely. In 2019, Jason took over as Adelaide Branch Secretary and played a supporting role in media and sponsor coordination, as well as leading the coordination of the Branch's annual dinner. He has led from the front and stepped up in responsibility and commitment, driving positive change in the Branch and committee. Jason has the ability to think beyond himself and shows true leadership qualities.

Jason is quick to volunteer his services for anything needs doing, including voluntary work in Cambodia to help alleviate poverty, and being an emergency response team member for both OZ Minerals and Rio Tinto. Jason remains calm in the face of multiple challenges and displays a maturity beyond his years.

- Dr Lauren Farmer MAuslMM, Jason Hodge joined the AuslMM in 2011 as a student at the University of Adelaide. Since graduating in 2012, Jason has worked at Argyle in Western Australia, Prominent Hill and Challenger in South Australia, the Didipio Mine in the Philippines, and now Oyu Tolgoi in Mongolia.
- Jessica Keast AAusIMM, Jason Hodge joined the AusIMM in 2011 as a student at the University of Adelaide. Since graduating in 2012, Jason has worked at Argyle in Western Australia, Prominent Hill and Challenger in South Australia, the Didipio Mine in the Philippines, and now Oyu Tolgoi in Mongolia.

Distinguished Speaker Exchange Program

1980	Robert H Merrill (USA) President Elect, AIME, Staff Associate Mining & Metallurgical Division
1981	Sir James Foots (Australia) Chairman, MIM Holdings Limited
1982	Dr Harold Paxton (USA) President, AIME, Vice President, Research United States Steel Corporation
1983	Sir Russel Madigan, OBE (Australia) Deputy Chairman, CRA Limited
1984	Nelson Severinghaus (USA) President AIME, President Franklin Limestone Company
1985	Sir Arvi Parbo (Australia)

Chairman, Western Mining Corporation Limited

1986	Arlen L Edgar (USA) President AIME	
1987	Dr J Barry Ritchie (Australia) Executive Director, Australian Coal Association	
1988	Dr Thomas Falkie (USA) President, AIME	
1989	Prof Alban J Lynch (Australia) President, The AusIMM	
1990	Dr Milton E Wadsworth (USA) University of Utah	
1991	Roy Woodall AO (Australia) Western Mining Corporation	
1992	Dr Roshan Bhappu (USA) President, AIME	
1993	J K A McLeod (Australia) The AusIMM 1993 President	
1994	Noel Rietman (USA) President, AIME	
1995	J R May (Australia) former executive officer of the Australian Mineral Industries Research Association (AMIRA)	
1996	Dr Don Gentry (USA) President, AIME	
1997 -	President, Alme	
1998	Professor Geoffrey Blainey (Australia)	
1999	Robert Ray Beebe (USA)	
Sir Willis Connolly Memorial Medal		

Sir Willis Connolly Memorial Medal

1986	Sir Arvi Parbo AC
1987	Sir Frank Espie OBE
1988	Brian Thorley Loton
1989	Alfred Charles Copeman AM
1990	Bruce Phillip Webb
1991	Professor Alban Lynch AO
1992	Dr J Barry Ritchie

1993 E D J Stewart

1994 J O Reynolds OAM

1995 L J Bradley

1996 Professor G Blainey

1997 Des Stroud

1998 John T Ralph AC

1999 James Whitehead

2000 Mr John (Jack) Vines

2001 Mr Richard Carter

2002 Mr. Norman Dalton

2003 Dr. Ian Gould AM

2004 Dr John Floyd AM

2005 Dr Ian Plimer

2006 Mr John Dow

2007 Mr Chris Fraser

2008 Dr Peter Lilly

2009 Laureate Professor John Ralston

2010 Ian Nethercote

2011 Prof Geoffrey Neil Phillips FAusIMM(CP)

2012 Mr Keith Orchison AM

Professional of The AusIMM and a member of the AusIMM Board of Directors. Sandra has been a member of The AusIMM for more than 40 years. Sandra graduated from The University of Sydney with a Bachelor's Degree in Economic Geology and was awarded a PhD by The University of Melbourne. She has worked as an exploration geoscientist, a banker and in executive roles in finance, strategy and general management. Sandra is now Director of the minerals industry specialist consulting business Surbiton Associates. As a communicator Sandra has achieved a great deal. She is author of the book The Great Gold Renaissance: The Untold Story of the Modern Australian Gold Boom 1982-2002 and of The Australian Gold Quarterly Review. Sandra is a regular media commentator on mining issues and particularly on gold industry issues. She is a passionate advocate for the development of the resources industry and for best practice amongst minerals industry professionals. Sandra's Sir Willis Connolly Memorial Lecture 2013 was published in *The AusIMM Bulletin* (February 2014).

Prof Robin Batterham FAusIMM, Professor Batterham has been recognised for his outstanding communication in the fields of science, engineering and technology within the

mining sector. He is Kernot Professor of Engineering at the University of Melbourne. Until recently Dr Batterham was Group Chief Scientist, Rio Tinto Limited, President of the Australian Academy of Technological Sciences and Engineering, and Chairman of the International Energy Agency Expert Group on Science for Energy. He has had a distinguished career in research and technology in the public and private sectors in areas such as mining, mineral processing, mineral agglomeration processes and iron making. He is inventor of more than 20 patent families. Professor Batterham was Chief Scientist to the Australian Federal Government from 1999 to 2005.

- 2015 Dr Tim Napier-Smith FAUsIMM, Dr Napier-Munn is Emeritus Professor at the University of Queensland. He is a mineral engineer with degrees from Imperial College, London and the University of the Witwatersrand, Johannesburg. He has had a 40+ year distinguished career in mineral industry research and development in the public and private sectors in three countries, and has held senior positions with De Beers, and with the JKMRC, and JKTech Pty Ltd at the University of Queensland. His research and consulting interests are in the modelling and simulation of mineral processes, physical processing such as dense medium separation and hydrocyclones, comminution, diamond processing, statistical methods applied to mineral processing, technology transfer and research management. Dr Napier-Munn has delivered his professional development courses on Statistics for Mineral Engineers for over 20 years and has recently published a book on the subject. He has published over 140 papers and articles and was editor of the JKMRC 'Blue Book' on comminution and the 7th Edition of Wills' Mineral Processing Technology. He is a member of the Editorial Board of Minerals Engineering journal, founding board member of CEEC International and a Fellow of the AusIMM. He is a recipient of the AusIMM President's Award and the IOM3 Futer Medal.
- 2016 Dr Tony Marxsen, The Sir Willis Connolly Memorial Medal for 2016 was awarded to Dr Tony Marxsen. With a career spanning close to five decades, Dr Tony Marxsen's experience and knowledge of the energy industry is almost unparalleled. Tony has held the role of Non-Executive Director on the Australian Energy Market Operator's Board since 2011 and Chairman of the Board since November 2015. Tony has led projects of national significance in powerline bushfire interaction and powerline bushfire safety. Tony's work informed the recommendations of the Victorian Bushfires Royal Commission and he played a leading role in shaping the recommendations of Victoria's Powerline Bushfire Safety Taskforce.
- **2017** No award for 2017
- 2018 No award for 2018

Sir Willis Connolly Memorial Medal ceased in 2019.

Sir Frank Espie/Rio Tinto Leadership Award

- James Mitchell SAusIMM, James is currently in his fifth year of study, completing a Bachelor of Engineering (Mining) and a Bachelor of Economics double degree program at the University of Western Australia (UWA). To broaden his understanding of the minerals industry, in 2012 James undertook a semester of study at McMaster University in Canada. In 2013, James also completed vacation work with Independence Group NL, further contributing to his engagement with the industry. James is the current President of the UWA Student Chapter and has been an active and committed member of The AusIMM since 2011. Prior to his election as Student Chapter President; James held the position of Events Coordinator for the UWA Student Chapter and has played a role in organising the Students Meet Industry events in Perth. James has sought opportunities to engage with the community throughout the course of his undergraduate study. James is an active member of the Australian Army Reserve and also volunteers his time to Engineers without Borders Australia and Young Engineers Western Australia.
- Michael Assman SAusIMM, Michael is currently in his fourth year of study, completing a Bachelor of Engineering (Metallurgical Engineering) at Curtin University (Western Australia School of Mines). During his time at Curtin University, Michael finished as the top engineering student from a field of over 800 students at the end of his first year which earned him the Most Outstanding Engineering First Year Award in 2012 and the Engineering Mechanics Prize. He followed this by earning the Kalgoorlie Student Guild Prize at the end of his second year. Michael was the Treasurer of the AusIMM Kalgoorlie Student Chapter in 2014, is a current committee member and has been a member of the AusIMM since 2012. He has been actively involved in fundraising events to provide the Student Chapter with funds to host events for students on campus. Michael was chosen to be part of the John Curtin Leadership Academy which focusses on leadership with community values and entrepreneurial spirit.

Daniel Travers GAusIMM, Daniel is currently in his fourth year of study. He has completed a Bachelor of Science (Mineral Geoscience) at the University of Adelaide and is currently pursuing his honours in Economic Geology. To broaden his understanding of the minerals industry, Daniel has undertaken various vacation work placements and internships with a variety of companies such as IMX Resources, Newcrest Mining, CWT Mongolia and MRI Trading AG. These placements have covered underground mining, surface mining, exploration geology and physical commodities trading. Daniel has studied Mandarin at Tsinghua University in Beijing and also received the DEEWR Endeavour Student Exchange Program Scholarship to study economics and earth science for one semester at the Chinese University of Hong Kong in Sha Tin, Hong Kong. Daniel has also been an active member of the Henley Surf Lifesaving Club over the last ten years As part of this he has represented the club and South Australia in the Australian National Surfboat Rowing Series.

Jaxon Evans SAusIMM, Jaxon is in his fifth year of university, studying a Master of Professional Engineering (Mining) at the University of Western Australia (UWA). Prior to this, he studied a Bachelor of Science (Mining, Finance), also at UWA.

Jaxon has sought to broaden his industry knowledge during his studies and has undertaken five internships across a range of companies. He has completed work experience in engineering roles for BHP Billiton and Buru Energy, as a market analyst for Coffey International, as an offsider for Terra Drilling and as an intern for Dalian Bolong Investment Holdings Group in Dalian, China.

Jaxon has been involved with the AusIMM since 2014 and is currently president of the AusIMM UWA Student Chapter.

Georgia Wulf-Rhodes SAusIMM, Georgia is currently in the third and final year of her Bachelor of Science (Geology, Chemistry) degree at the University of Tasmania. Over the past year, Georgia has built her skills and network within the minerals industry by spending 12 months in Perth to gain experience and undertake cross-institutional study at Curtin University.

Georgia has completed work experience as a chemistry vacation student at Nyrstar Hobart, a metallurgical technician at ALS Metallurgy, a geology student at Perth Core Library and an undergraduate geologist at BHP Billiton's Mount Whaleback operations in the Pilbara. Georgia has been a member of the AusIMM since 2013 and chaired the AusIMM Tasmania Student Chapter from 2014-15. She is currently vice president of the chapter.

Rahel Abebe SAusIMM, Rahel is a final year Bachelor of Engineering (Mining) (Honours) student at Federation University in Ballarat, Victoria. Rahel completed a Bachelor of Science at the University of Melbourne before commencing her studies in mining engineering. Rahel has been involved in various AusIMM student chapters, the Melbourne Mining Club and WIMnet Victoria. She presented at the 2016 AusIMM New Leaders' Conference in Brisbane on her experiences as the 2015 Atlas Copco Scholarship winner. Rahel is the student representative for her university's Engineers Industry Advisory Group and is a member of the Golden Key International Honour Society.

She has had summer placements with Doray Minerals and Mining Plus. After graduation, Rahel hopes to commence study in the business realm of the sector.

Leslie Meintjes SAusIMM, Leslie is currently in his sixth year of university, studying a Bachelor of Engineering (Mining) (Honours) and Bachelor of Commerce (Accounting) at the University of Queensland. Leslie was previously awarded the Newcrest Mining Engineering Scholarship and completed his vacation work placement at the Cadia Valley operations. Leslie enjoys challenging himself to find innovative solutions to complex problems and has won first prize in the Shell Malaysia Think Tank Innovation Competition and the University of Queensland's core drilling strata detection engineering project.

Leslie has been an executive committee member of the AusIMM Southern Queensland Student Chapter since 2015 and is currently serving as President of the chapter. He was also a member of the organising committee of the 2016 AusIMM New Leaders' Conference.

Zachary Barnes SAusIMM, University of NSW. Zach is enrolled in the final year of a combined Mining Engineering and Commerce degree at the University of New South Wales with a motivation to establish himself in the field of mining engineering and mine management post-graduation.

During his undergraduate studies, Zach has secured a number of internships involved with the minerals industry working for companies such as WoodMackenzie, Rio Tinto and BHP. In addition, Zach has also been heavily involved in UNSW's Philip Baxter residential college where he held key leadership positions and hopes he can continue to develop and refine his leadership skills as a mining professional.

Zach aspires to work at a corporate level for a global mining leader to contribute to the development and application of innovative techniques and technologies to ensure the sustainability and stability of mining operations.

The allocation of an EEF Scholarship will enable Zach to access and develop relevant industry networks and learn from professionals with diverse and alternative experiences.

2018 **Keely Simpson-Bull SAusIMM**, Monash University. Keely is in her fourth year of a Bachelor of Engineering (Mining) (Honours) at Monash University in Melbourne. She is on the committee of the AusIMM Melbourne Student Chapter, as well has her university's Resource Engineering Student Society.

Keely has completed work experience both in civil construction, and the mining sector. The latter involved a 3 month internship at BHP's Olympic Dam Mine. At the commencement of

the program, she was tasked with a real life issue pertaining to the mine, and presented her findings to stakeholders upon completion. Keely looks forward to completing her Honours study as a continuation of this industry based project.

As well as having a keen interest in logical problem solving, Keely is also passionate about creative endeavours, and is an illustrator for Monash University's student magazine. She enjoys the balance between competitive sports, university commitments, leadership responsibilities and social activities.

Max Donaldson SAusIMM, University of Adelaide. Max is beginning his fourth year at The University of Adelaide, studying a Bachelor of Engineering (Chemical)(Honours) with a Bachelor of Science (Chemistry). He believes in building a strong student community, and is an executive committee member of the AusIMM Adelaide Student Chapter and The Chemical Engineering Society.

Max works as a trade assistant during shutdowns on a number of mine sites, and has recently been working at OZ Minerals as a student metallurgist. He is passionate about the industry because he has found it to be full of driven, intelligent professionals who are friendly and always willing to help. Hoping to have a meaningful career as an industry leader, Max champions culture, innovative thinking, value creation, and technical excellence. He believes this will involve learning from the experiences, ideas, and wisdom of others - which is why organisations like AusIMM are so important. The EEF Premium Scholarship will allow Max to continue enjoying his studies, hobbies, and extra-curricular activities in balance with each other. He is also very excited about the included field trip and networking opportunities presented by the scholarship, as he believes it will give his career the best possible start. Above all, Max is very grateful for the support shown to him by AusIMM, and for the opportunity to represent the organisation as an EEF Premium Scholarship winner.

Siân Baynham SAusIMM, Siân Baynham is a final year Chemical Engineering student from the University of Newcastle. Siân is passionate about leadership and giving back to the community, demonstrated through her roles on the executive committees of the AusIMM Newcastle Student Chapter and the Chemical Engineering Society and extensive volunteer work throughout her time at university.

Siân works as a Technical Officer at the CSIRO and as a Research Assistant at the Newcastle Institute for Energy and Resources, with a focus on improving efficiencies and reducing the water and energy requirements for the separation of copper and iron ore. She is enthusiastic about the industry and the wealth of opportunity that it offers, both in Australia and internationally. Having spent time in Sweden, France and Timor-Leste as part of her studies, Siân is determined to make a positive difference wherever her career takes her. Siân is honoured to be one of awardees of the Sir Frank Espie/Rio Tinto Leadership Award and is confident that this will provide her with the tools to create a solid foundation for her career. Siân is incredibly grateful for all of these opportunities and is looking forward to giving back to the AusIMM for many years to come.

Michael Phillips SAusIMM, Michael is in his final year at the University of Adelaide studying a Double Degree in Chemical Engineering and Finance. He has developed a strong passion for the resources industry, which began when he attended a plant tour of BHP Olympic Dam. Michael has enjoyed vacation work with Iluka Resources in mineral sands as well as Evolution Mining at Lake Cowal. The on-site experiences and exposure to key unit operations, such as grinding, flotation and leaching, has furthered his understanding of the 'mine to product' process.

Michael is humbled to receive an EEF Premium Scholarship and to be one of two winners of the Sir Frank Espie/Rio Tinto Leadership Award for 2020. The opportunities presented through the scholarship will assist in pursuing his desire to be a future leader in the resources industry. Michael's career aspirations include being a senior metallurgist and processing manager whilst having exposure to both safety and project management roles. Michael is looking forward to transitioning from university into the mining industry and is thankful to the AusIMM for the significant role it has played in helping him get this far.

- Robert Colbourne SAusIMM, Rob considers it fitting to be studying mining engineering having grown up in a mining family with parents working as a metallurgist and mining engineer in Australia and internationally. Experiences in mining towns have informed his view of the mining industry as 'one of the biggest collaborative industries around' and Rob is committed to demonstrating this through his role as President of the AusIMM UWA Student Chapter. 'I have always greatly enjoyed working with others in teams and having the opportunity to lead. I grew up seeing the opportunities that the industry can create through my parents moving all over Australia and the world for work, and the great challenges and rewards that it has to offer.'
- Josephine Liantono SAusIMM, Josephine's interest in commodities was sparked by her grandfather who gave her the daily responsibility to report to him the price of the US dollar, gold and oil prices; and guess the following day's price movement.

 Josephine's journey in the mining industry commenced with vacation work that involved exposure to different facets of the mining industry including environment and approvals, open-pit and underground mining engineering, metallurgy, external auditing and analytics and cognitive consulting. This has developed her strong appreciation of the complex business landscape. She is currently the Chairperson of UWA Young Engineers, Secretary of the WA Mining Club Young Professionals, organising committee for the 2021 AusIMM New Leaders Conference and committee member of the UWA Faculty of Engineering and Mathematical Sciences Inclusion and Diversity Committee.
- Tara Andresson SAusIMM, Tara Andresson is currently a fourth year Mining Engineering student with a Computer Science degree at UNSW. Her passion and technical abilities lie in the development of software that assists with and optimises everyday mining engineering challenges. With experience working for both underground coal and hard-rock operations, Tara has grown her skill set and has the opportunity to apply her university knowledge in a practical setting particularly in production engineering. 'This year I am excited to be volunteering my time as both the AusIMM Sydney Student Chapter President and WIMNet student representative.'
- Guster Laufmann SAusIMM, Guster commenced studies in Engineering and Commerce at Curtin University in 2019 and is currently in his final year of studies at the Western Australian School of Mines (WASM) in Kalgoorlie, where in 2022 he was awarded the AusIMM 3rd Year Mining Student award. Concurrently, Guster was awarded a scholarship from the Western Australian Institute of Sport (WAIS) as part of their elite rowing program, and at the age of 20 became Australian Champion in the Under 23 Coxless Four. He was subsequently invited to be a member of the Australian Rowing Squad, and was chosen to represent Australia in the U23 4-. Guster is currently working with Newcrest Mining at their Telfer operations, gaining underground and open pit engineering experience. He is the president of the Kalgoorlie AusIMM student chapter, Vice-President of the WASM Guild, Coach of the WASM football team, member of the WASM Social Club Committee, and is training as a competitor for the International Mining Games, to be held in Kalgoorlie in March of 2023.

AusIMM EEF Postgraduate Research Scholarship

Hazel Lim MAuslMM, currently in her third year of her PhD at Curtin University's Western Australia School of Mines. Her thesis, titled 'Leaching of Complex Zr-Nb Rare Earth Minerals of Australian Sources' aims to achieve the following objectives: provide material characterisation to explore the cation exchange property of the zircon-silicate mineral to effect selective extraction of zirconium, niobium and rare earths from host rock; define the decomposition pattern, leaching mechanism and recoveries for acid decomposition of the material base on a generic method of sulphation roasting; develop an extraction method that optimises the dissolution and recovery of zirconium, niobium, and rare earths elements from the mineral. The Nation Scholarships Committee is highly impressed with Hazels dedication, professionalism and the relevancy of her research to Australia's mineral future. In addition to her impressive academic record, Hazel has considerable industry experience working for

nine years as a Process Engineer in a copper refinery where she also gained experience leading the company's metallurgical laboratory division.

2015 Not awarded in 2015

2016 Stuart Nicol MAusIMM

Ayesha Ahmed MAusIMM, Ayesha Ahmed just started the second year of a PhD in Earth Sciences at the University of Tasmania. Her project focuses on identifying patterns in propylitic alteration mineral chemistry around porphyry deposits and using those patterns to provide insights into ore-forming processes. Her field site is the Yerington porphyry Cu–Mo–Au district in Nevada, USA.

One of her career highlights was working as a project geologist and being a major part of the discovery and subsequent development of the Invincible gold deposit in Western Australia. Ayesha is currently the University of Tasmania representative for the AusIMM Women in Mining Network. Her role includes being a judge at the 2017 Tasmanian Women in Resources awards and a committee member for the national awards.

Casey Blundell AAusIMM, Casey is in the third year of her PhD in Structural Geology and Geophysics with a multidisciplinary project that focuses on the mineralised Hyde-Macraes Shear Zone (HMSZ) and it's geologic context within the poly deformed and metamorphosed Otago Schist. The HMSZ hosts the large Macraes orogenic gold deposit in the South Island of New Zealand. This project involves detailed structural analysis and the application of principles of structural geology to geophysical interpretation with the aim of identifying how strain from tectonic activity influences the localisation of gold. This is achieving through understanding 3D geometric relationships, kinematics, overprinting relationships and crustal fluid pathways.

Casey is presently in Vienna attending the General Assembly of the European Geosciences Union (EGU). This event draws together thousands of scientists from all disciplines of earth sciences and attendance at the meeting is considered a career highlight by Casey who was successful in her application to attend and present to the meeting. The title of the paper presented is: 'Mesozoic Evolution of the Otago Schist constrained from aeromagnetic and electromagnetic geophysical data and field structural data'. Following the conference, Casey is attending a field trip for which she is co-organiser, to Spain travelling through the Iberian Pyrite belt including visits to the mines of Minas de Almaden, Las Cruces, Rio Tinto, Aguas Tenidas and Tharis.

- Casey Blundell AAusIMM, Casey is in the third year of her PhD in Structural Geology and Geophysics with a multidisciplinary project that focuses on the mineralised Hyde-Macraes Shear Zone (HMSZ) and it's geologic context within the poly deformed and metamorphosed Otago Schist. The HMSZ hosts the large Macraes orogenic gold deposit in the South Island of New Zealand. This project involves detailed structural analysis and the application of principles of structural geology to geophysical interpretation with the aim of identifying how strain from tectonic activity influences the localisation of gold. This is achieving through understanding 3D geometric relationships, kinematics, overprinting relationships and crustal fluid pathways.
- Karin Fogarty MAusIMM, Karin is currently in the first year of a PhD in environmental economics at the University of Western Australia. Her project involves undertaking an economic valuation of different post-mine land uses to assist in the decision making of mine closure options. This will include determining the costs as well as the benefits and values of alternative post-mine land uses using non-market valuation techniques. A coal mine in the Central Tablelands of NSW is being used as the case study.

 Karin has over eight years' experience in the coal mining industry in both central Queensland and NSW. Karin is involved in AusIMM Women in Mining Network in NSW Central West as well as participating in the 2017 NSW AusIMM Women in Mining Network Mentoring

Program as a mentee.

- Ross Chandler AAusIMM, Australian National University. Ross is a first year PhD student in 2019 geology at the Australian National University. He is investigating the formation of rare metal (Zr, Nb and rare earth element) deposits in peralkaline systems using a variety of field and experimental techniques. He is primarily interested in the behaviour of trace elements during the extreme fractionation of alkaline suites and using this to both better understand these unusual systems as well as assist in the search for economic mineralisation within them. Ross is a former undergraduate Education Endowment Fund (EEF) recipient, having completed a Bachelor of Geology (Honours) at James Cook University with first class honours and University Medal in mid-2018. Rare metal prospects he discovered in central Queensland during his undergraduate research are currently being explored for their economic potential, and he begins his PhD studies after an extended period of rare metal exploration across eastern Australia. He completed vacation work with South32 at Cannington in 2018 and is passionate about bridging the gap between academia and industry. He's highly optimistic about the future of the minerals industry in Australia and feels it is well positioned to continue to flourish in a high-tech and environmentally conscious future.
- Nikky LaBranche MAusIMM(CP), Nikky LaBranche is a Research Manager OHS in the Minerals Industry Safety and Health Centre (MISHC) within the Sustainable Minerals Institute (SMI) at the University of Queensland on secondment from Simtars. She is also studying for a PhD. Her doctoral research is characterising the impact of dust on the respiratory health of coal mine workers. In her research position she is undertaking a strategic gap analysis in the understanding and management of particulates in the resources sector as well as continuing her research into improving the management of significant incidents.

 Nikky holds a Bachelors in Mining Engineering from Virginia Tech and an MBA in Finance from the University of Alabama Birmingham. She has 15 years' experience in surface and underground coal through her work in the US, Colombia and Australia. She is also an experienced researcher in incident management having assessed five Level 1 Emergency exercises and performed NIOSH research in self-escape and built-in-place shelters.
- Tom Payten AAusIMM, Tom Payten worked in the mining industry for a decade as a process mineralogist, helping to solve problems for a range of commodities across the entire mining cycle. In this time, he gained expertise in automated mineralogical systems and understanding of the application of mineral identification techniques to the issues facing the industry.

Tom completed a Bachelor of Science/Bachelor of Nanotechnology in 2008, and honours in Physics in 2011. His honours project focused on sub-micron element mapping of minerals at the Australian Synchrotron to understand their processing behaviour.

Tom's current research applies novel fluorescence methods to minerals of economic significance to develop real-time, mineral-specific sensors for ore sorting or processing decision making. This research takes advantage of advances in technology that have occurred over the last 20 years, and exploits fluorescence mechanisms that are yet to be investigated in natural minerals.

Tom hopes to continue solving interesting problems in a variety of situations well into the future.

Nathan Barrett AAuslMM, Nathan completed a Bachelor of Chemical Engineering with first class honours in 2019, and subsequently commenced a PhD with the Centre for Ironmaking Materials Research (CIMR) in 2020. Between graduating and commencing the PhD Nathan worked as a research assistant with the CIMR on a broad range of ironmaking projects. This experience broadened his knowledge in the ironmaking industry, allowing a quick progression in the early stages of his research. Nathan's research with a focus on hydrogen utilisation in the blast furnace is complemented by his personal commitment to sustainable

engineering practices and a belief that his areas of research will be significant in reducing blast furnace emissions while ironmaking transitions to alternative technologies with lower fossil fuel reliance. 'I am honoured to be a recipient of the AusIMM EEF Scholarship and look forward to the opportunities to connect with the broader minerals industry.'

- Ahmad Tabish AAusIMM, Following the completion of undergraduate degree studies in Chemical Engineering, Ahmad Tabish received his MS in Chemical Engineering from The Petroleum Institute Research Center of Abu Dhabi National Oil Company (ADNOC) and subsequently worked on the synthesis of self-healing anti corrosion coatings based on carbon nanomaterials for oil/gas industry. After receiving his MS Ahmad Tabish worked at the Khalifa University's Research Center in UAE from 2017-2019 on projects related to metal recovery from wastes. All of these experiences combined to inspire an interest in further study and research. Consequently Ahmad Tabish has enrolled with the The Global Innovation Center for Advanced Nanomaterials at the University of Newcastle and through his PhD is working on finding novel pathways for synthesis of Mesoporous Silica based nanomaterials for carbon capture and for manufacturing various fine chemicals via catalysis.
- Kade Parascos AAusIMM, Growing up in Queensland on the Sunshine Coast, Kade developed a passion for Australia's environment culminating in a research topic with a focus on the design and optimisation of advanced solid-state electrolyte materials for lithium-ion batteries. With a background in chemical and metallurgical engineering, Kade appreciates Australia's potential as a significant player in the global battery market and is completing his research with the Future Battery Industries Cooperative Research Centre (FBI CRC). 'High-performance rechargeable batteries have emerged as a major market force in recent years, making them on of the most exciting fields in engineering. However considerable research is still required to address the many challenges that still exist regarding performance and safety. This demand, coupled with my long-time passion for science and technology is why I have chosen to focus my research on the advancement of lithium-ion batteries. With the support of the AusIMM and the FBI CRC, I hope to contribute to this movement toward bringing Australia to the forefront of battery innovation and technology.'
- Daniel Goldstein MAusIMM, Working first as a field technician in 2011 and then returning as a geologist in 2014 for the same company before progressing to mining and geotechnical engineering roles has given Daniel a 'ground up' understanding of the Australian mining industry. He has recently achieved a Master of Mining Engineering (Mine Geomechanics) at UNSW (Awarded with Excellence) while working full-time. Daniel's PhD research at Curtin University's WA School of Mines focuses on applying machine learning algorithms to mining data, aligning with his passion for increasing mining sustainability. By developing data-driven, real-time analysis in a decision support framework, the mining industry can lower the cost of mining operations and vastly improve safety through proactive risk management. 'I am honoured to have the support of the AusIMM through the EEF Scholarship. I look forward to contributing to the fascinating Industry 4.0. I believe we can move state of the art forward for the mining industry by brushing off the 'digital dust' on data that is not currently used to its full potential.'
- Kylie Ward MAusIMM, A 'lengthy, roundabout but exciting journey in mining' led Kylie back to research at Curtin University (WASM Kalgoorlie), driven by her desire to question the 'how and why'. Passionate about mineral processing in particular flotation and gravity processing, Kylie is fascinated by the impact mineralogy has on the way we process ores, and is generous in supporting and driving knowledge transfer to enhance operating plant performance. Kylie's PhD project is looking at improving recovery of tellurides from Superpit ores, with the co-extraction of gold and tellurium creating opportunity for a new value stream from existing operations without increasing the environmental footprint. 'I'm excited about this project as I feel it is something that could produce a deliverable outcome.' A strong advocate for STEM in schools, diversity and inclusion in the mining sector and supporting young professionals, Kylie has been a WIMWA mentor for the last 3 years.

- 2023 Hanrong Huang AAusIMM, Hanrong is currently enrolled as a second-year PhD candidate at the University of New South Wales and the focus of his research is the decarbonisation of mining via renewable energy microgrids. The centre of interest is in the intersection of renewable energy, off-grid mining, system design, regional decarbonisation, and economics. The motivations for this research come from the background of continuously decreasing prices of renewable energy (in particular, PV and wind), and the urgent need for decarbonisation to reach the goal of net-zero emissions by 2050. With a particular focus on Australia's mining industry, a significant number of mining sites are adapting renewable energy into a power supply to reduce carbon emissions. The hybrid microgrid seems to be the most feasible and appealing solution and it has been proven that it is feasible in terms of technology readiness and economic results. Previous research work undertaken by Hanrong has involved the construction of a fully renewable microgrid that could be applied to copper ore processing to attain zero carbon emissions. Extended from ore processing, the ultimate goal of his PhD is to construct a fully renewable microgrid model that could cover loads of an entire mining site with a focus on demand-side flexibility and predictive dispatch strategies. Hanrong firmly believes that his research outcomes will accelerate the transition to decarbonised and sustainable mining and will contribute beneficially to the mitigation of climate change.
- Loren Nichols MAusIMM, Loren Nicholls is a PhD Candidate at the University of Queensland's Sustainable Minerals Institute. Her research integrates geometallurgy, environmental geochemistry and ore deposit knowledge into exploring the secondary prospectivity of critical minerals in mine waste and the potential for reprocessing. The project applies circular economy principles to mine waste management through recovery of valuable components (particular focus on cobalt) and reducing the environmental impacts of the residual waste. Loren has 10 years industry experience as an exploration geologist in gold and copper, working across Australia, Fiji and Indonesia. Using her skillset in geochemistry and orebody modelling, Loren is following her passion to research alternative and ethical sources of critical minerals for the green energy transition and future resources demand. The traditionally linear take-make-waste approach to mining can evolve into a more sustainable circular model with development of a clear pathway to resource identification and recovery.

Atlas Copco Scholarship

- Russell Brooks SAusIMM, is currently completing the final year of a Bachelor of Engineering (Mining) at The University of Adelaide. To broaden his understanding of the minerals industry, in 2013, Russell completed his penultimate year of study on academic exchange at the Colorado School of Mines where he received a place on the Dean's List for academic merit. During the exchange program, Russell gained valuable industry experience working at Edgar Experimental Mine, followed by employment wit the Kraemer Obayashi Joint Venture, Merco Inc. and Orica. Russell used his time in Colorado to extend his networks, regularly attending SME events. Upon returning to Australia, Russell has been engaged in the activities of the AusIMM Adelaide Student Chapter.
- 2015 Rahel Abebe SAusIMM, Rahel is currently completing a Bachelor of Mining Engineering (Honours) at Federation University in Ballarat, Victoria.

She is originally from Ethiopia, having arrived as a refugee in 1996. Rahel completed a Bachelor of Science at The University of Melbourne before commencing her studies in mining engineering. She has been involved in Women in Resources Victoria (WIRV), the AusIMM Melbourne Student Chapter and attended the 2015 New Leaders Conference and International Mining Games in Kalgoorlie.

Rahel is involved in the Melbourne City Mission as a volunteer tutor for financially disadvantaged students as well as having worked within the VCAL program aiding students who support with their learning

and/or social skills. Rahel is the Student Representative on Engineers Industry Advisory Group (E.I.A.G).

Rahel received the AusIMM Victoria Women's Auxiliary Award in 2013.

Ashleigh Walsh SAusIMM, Ashleigh is a final-year engineering student at the University of Adelaide. She has been actively involved in the AusIMM Adelaide Student Chapter and the AusIMM Women in Mining Network South Australia, taking on leadership roles in both committees.

Ashleigh has also been involved in the South Australian Youth and Junior Parliament programs as a participant, mentor and member of the organisational body over a period spanning five years. A highlight of the programs for her was mentoring the Migrant Resource Centre team and meeting a fantastic group of young change-makers in the process.

2017 **Emma Guerini SAusIMM**, Emma is a final-year mining engineering and geology student at the University of Western Australia (UWA). She is an active committee member of the AusIMM Student Chapter at UWA and hopes to continue her involvement with the AusIMM as a mentor to younger students.

Emma has an enthusiasm for working in the minerals industry which has grown out of her love of travel, new challenges and a fascination for rocks. Having recently completed her third round of vacation work, Emma has developed a keen interest in the future of mining and is looking forward to gaining further insight into Atlas Copco's innovative technology through the scholarship.

2018 Not awarded in 2018

Epiroc Scholarship (Previously called the Atlas Copco Scholarship)

Marten Hunt SAusIMM, University of Wollongong. Marten is enrolled in his final year of a Bachelor's in Mining Engineering at the University of Wollongong. He has been an active member of AusIMM, holding the position of the Illawarra Student Chapter President for a consecutive two years.

During his undergraduate studies, Marten has taken the opportunity to build upon his university course work by securing internships in both underground and open cut mines at Glencore Coal Assets Australia. Along with internships, he has developed a global appreciation for the mining industry with a summer research program at the China University of Mining and Technology, focusing on the mitigation of coal outburst in underground mines.

- 2020 Josephine Liantono SAusIMM. University of Western Australia. Josephine is currently a Masters of Professional Engineering (Mining Engineering) student at the University of Western Australia, having recently graduated from a Bachelor of Science in Mining Engineering and Economics. Her journey in the mining industry commenced at the end of her first year of university in 2017. Josephine has undertaken vacation work with Mount Gibson Iron Limited, Fortescue Metals Group, PwC Australia, Deloitte Consulting and BHP Nickel West. Through the various roles, she had the opportunity to work in different facets of the mining industry such as environment and approvals, open-pit and underground mining engineering, metallurgy, external auditing and analytics and cognitive consulting which has developed her strong appreciation of the complex business landscape. She is currently the Chairperson of UWA Young Engineers, Treasurer of the AusIMM UWA Student Chapter, Secretary of the WA Mining Club Young Professionals and committee member of the UWA Faculty of Engineering and Mathematical Sciences Inclusion and Diversity Committee. Prior to these roles, she was the Founding President of Women in Engineering and Mathematical Sciences UWA and Vice-President (Careers) of University Engineers Club.
- Lauren Harding SAusIMM, University of Western Australia. Lauren Harding is in her final year of a Bachelor of Science, with a major in engineering, specialising in mechanical and mining disciplines. She will complete vacation work over summer at Barminco's Nova mine, and hopes to acquire a first class mine managers certificate in the future. Lauren has worked for the Gifted and Talented Children's Association, engaging children in STEM principles. She has also worked for Teamworks Development Australia, educating on cohesive and

safe teamwork. She is engaged on campus through mining games competitions and has been elected as the 2022 media coordinator for the AusIMM UWA Student Chapter. Lauren believes that a project's means is as important as its outcome. Innovation that increases efficiency without losing focus on sustainability is critical to match the increasing demands on the resources sector without damaging the integrity of access for future generations.

- 2022 Jacqueline Harding SAusIMM, University of Western Australia. Masters of Professional Engineering, Specializing in Mining. She completed her Bachelor of Science in 2021 majoring in Mechanical Engineering and Economics before switching into Mining after getting involved in the AusIMM UWA Student Chapter and learning more about the resources industry where she could apply both her technical and economics knowledge. She completed a vacation program with Rio Tinto in 2021/22 where she continued to work as an intern with Explosives and Dangerous Goods through the semester and plans to complete a second summer on site following exams. Her current goal is to work toward a Quarry Manager certificate in her early career. Whilst completing her degree, she has worked in a range of jobs including organizing and instructing sailing courses at the Claremont Yacht Club, developing and instructing STEM courses for the Gifted and Talented Children's Association with her sister Lauren Harding, Asset Management for the Town of Cambridge, and worked as a Skipper for 'five short blasts', an indigenous story time experience through the medium of radio communication. She has also been actively involved in various executive committees at university including the AusIMM Student Chapter where she has been Treasurer and Media Coordinator, Science Union, and the University Engineers' Club. Jacqueline is a hard worker and welcomes opportunities to broaden her career horizon in the resources and mining industry. She is especially interested in new automation technologies and the ability to increase personnel safety, production efficiency, and access to operational data.
- Jasmine Gill SAusIMM, University of Western Australia. Jasmine Gill is a third year Industrial and Systems Engineering student studying at Curtin University in Perth, Western Australia. Living in Karratha for several years of her childhood is when Jasmine first developed a fascination for the mining industry. During high school an affinity for math and physics then led her to engineering. After completing the first year of engineering she found she was particularly passionate about the optimisation of systems. Specifically creating efficient manufacturing lines, regarding finances, reducing waste whilst still producing a quality output. This led her to the specialty of Industrial and Systems Engineering. Halfway through her degree she began an engineering support role at Metzke Engineering, a company which designs, manufactures, and supplies drilling equipment for the mining industry. Jasmine is looking forward to learning more about sustainability in the mining industry through her engagements with AusIMM and Epiroc.

Best Paper Prize

The Best Paper Prize may be presented to a resources sector professional who has prepared and published a technical paper through an AusIMM conference during the year.

- 2018 William J Shaw FAusIMM(CP) and Andrew J Scogings MAusIMM
- Dr David Reid, the Award for the Best Paper Prize is to David Reid, for his paper 'Importance of the simple shear loading direction to the stability of tailings storage facilities', presented at the AusIMM Mine Waste and Tailings Stewardship Conference 2018.
- Richard (Ted) Bearman FAuslMM, David Bowman and Robert Dunne MAuslMM, awarded to Richard (Ted) Bearman, David Bowman and Robert Dunne for their paper 'Decision support for ore sorting and preconcentration in gold applications', presented at the World Gold 2019 conference.

- Abraham Whaanga MAusIMM(CP), William Vigor-Brown and Sam Nowland, awarded to Abraham Whaanga, William Vigor-Brown and Sam Nowland for their paper 'The implementation of photogrammetry and automated data analysis functions at the Waihi Underground Gold Mine', presented at Mining Geology 2019.
- Peter Woodall, Daniel Smith and Joe Pease FAusIMM, awarded to Peter Woodall, Daniel Smith and Joe Pease for their paper 'Advances in Flotation Froth Pumping' presented at Mill Operators 2021. This paper investigates the pumping challenges faced at the McArthur River Mine (MRM), which stem from the tenacious froths produced during the flotation of fine mineral concentrates. It defines the development pathways followed to improved pump performance and the alternatives considered, many of which were failures. Finally, it provides an overview of the solution, its success at MRM; and the implications of this work to the broader mineral processing industry.
- No Best Paper prize awarded for 2023

2005 Special Award

Trevor Sykes: The AusIMM has introduced a new Special Award for 2005 called the "Pierpont Award" to thank Trevor Sykes for his huge contribution through 53 years of journalism and 33 years as a columnist under the pseudonym of Pierpont, to the minerals industry. In particular for endeavouring to "keep the bastards honest" throughout his career in his role in forensic financial journalism creating insightful exposure of the shenanigans of some of the industries corporate cowboys".