The Institute Medal – Dr Megan Clark

Dr Megan Clark has been Chief Executive of CSIRO since January 2009. CSIRO is Australia’s national science agency and one of the top 10 applied research organisations in the world. CSIRO is a mission-directed, multidisciplinary research and development organisation. Dr Clark is also a Principal of the Global Research Alliance [http://www.theglobalresearchalliance.org/] of which CSIRO is a founding member.

Dr Clark began her career as a mine geologist and subsequently worked in mineral exploration, mine geology, R&D management, venture capital and technical strategy areas with Western Mining Corporation. She held senior roles with BHP Billiton, including Vice President, Health, Safety, Environment, Community and Sustainability and Vice President Technology (2003-2008).

Dr Clark graduated in 1981 with honours in economic geology from the University of Western Australia and received a doctorate in economic geology from Queen’s University (Kingston Ontario, Canada) in 1987. She was awarded an Honorary Doctor of Science Degree by University of WA (2006), and an Honorary Doctor of Applied Science by Royal Melbourne Institute of Technology (RMIT) University (2010).

Dr Clark is a member of the Prime Minister’s Science, Engineering and Innovation Council, the Manufacturing Leaders Group, National Precincts Board, Council on Strategy and Innovation, member of Bank of America Merrill Lynch Advisory Board and Chair of the Mining for Development Advisory Board for AusAid. She is also a Commissioner on the International Commission on Sustainable Agriculture and Climate Change and a member of the World Economic Forum’s Committee for Measuring Sustainability. Dr Clark is a Fellow of the Australian Academy of Technological Sciences and Engineering and a Fellow of the Institute of Company Directors.

President’s Award – Geoff Loudon FAusIMM

This award recognises Geoff Loudon’s 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. He remains active in exploration and mining in New Zealand, Papua New Guinea and South America. He is particularly noted in recent times as one of the founders and chairman of Nautilus Minerals, the first company to plan a deep-water seafloor mining operation for copper and gold black smokers. Geoff is a dedicated member of The AusIMM, having first joined in 1964.

Geoff was born and raised in Sydney and is based in Christchurch New Zealand after a lengthy period working from London, UK. He first served a cadetship with the NSW Geological Survey which sponsored his geological degree at the University of Sydney. He subsequently took a post graduate diploma in Mineral Technology (mining-metallurgy-mineral economics) at the University of NSW and later an MSc at James Cook University. He then spent 10 years with Placer Dome in Canada, Australia and PNG, following a mentor’s advice to become involved in mine development so “when you start exploring, you know what to look for”. This was followed by a stint with stockbroker Hattersley & Maxwell / Kleinwort Benson so that “when you find it you know how to finance it”.

Geoff is probably best known for his association with the discovery and development of the Lihir gold mine in PNG. Today he is heavily involved in the running of three New Zealand companies forming the L&M Group which includes a gold mine, a mineral and coal explorer and an oil and gas explorer. In addition to these commitments, he is focused on Nautilus Minerals and various mineral exploration projects in South America. In 2012, Geoff was awarded the prestigious G J Stokes Award by the Diggers and Dealers convention for his successful work in minerals exploration and development.

Honorary Fellowship – Dr Sandra Close HonFAusIMM(CP)

Dr Sandra Close is awarded Honorary Fellowship of the Institute 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. She is currently in her second term as a Director of The AusIMM.

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.
Following the completion of her doctorate, she wrote “The Great Gold Renaissance - The Untold Story of the Modern Australian Gold Boom 1982-2002.” This book, the first comprehensive work on the Australian gold sector for about a hundred years, is a significant contribution to the knowledge and understanding of the modern gold industry.

Dr Close is a recognised expert on the international gold sector. 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 a number of fields, her achievements in her career and her on-going leadership, for almost half a century, are worthy of special recognition.

**Beryl Jacka Award**

**Rob Ryan FAusIMM(CP)**

This award recognises Rob Ryan’s eminent service in mineral exploration in the Australian minerals industry for 56 years. Rob has been a member of the AusIMM since 1957 and is currently a Fellow and a Chartered Professional. He has worked continuously in the Australian and international mineral exploration and production industry since obtaining his MA (Hons Geology) from Oxford in 1955. His experience includes 9½ years regional mapping and mineral resource work for government, plus a wide range of roles in private industry since 1959.

The main feature of Rob’s career is his 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. At Ranger One, his technical abilities and inspired leadership produced a number of “firsts” for Australia and the world. New techniques pioneered for exploration included a range of radiometric geophysical methods (aerial, ground, downhole), targeted geochemical tools (pisolith geochemistry), drilling techniques (encouragement of initial reverse circulation, air core and auger-core drilling methods), and resource estimation methodology (negating the very bad press generated by the Nabarlek “reserve” debacle at the time).

Since the 1960s, Rob’s leadership has resulted in focused mentoring of junior technical and other staff, ensuring rigorous scientific methodology prior to and during all exploration and resource development programs, thus preparing those people for responsible management positions. His personal ethics and standards have always been of the highest quality.

Rob has served with dedication in many branch positions within the AusIMM, specifically in Tennant Creek (1959/1960), Darwin (early 1970s), where he also served as President of the NT Chamber of Mines, and North Queensland (committee member including secretary/treasurer of FNQ Branch at various times between 1990-2013), and has always been an active member. Rob was also a member of the Perth Branch committee before taking on the role as President of the WA Mining Club for two years,

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 FAusIMM(CP)**

This award recognises Des White’s 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.

**Mineral Industry Technique Award**

**Neil Cusworth FAusIMM**

Neil is a director, former managing director and founder of Enthalpy’s Australian and South American operations. He has a project management engineering career spanning almost four decades in the resource sector with experience in minerals, oil and gas and industrial building sectors.

Neil has worked extensively and globally on assignments as a project manager and director and has undertaken a variety of specialist advisory assignments since 1996. In particular he has developed 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

This award recognises 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 early development was supported by CRA, which tested the first commercial prototype at its Wimmera mineral sands project near Horsham, Victoria in 1991. Funding was then by Geo Logics who ultimately took on the commercial development and marketing of the 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.

In 2001 Geo Logics was bought by Roche Mining which became Downer EDI Mineral Technologies. 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. The development in the early years was as much due to Chris's belief in the concept and persistence as the financial support of the various backers.

Jim Torlach Health & Safety Award

No award in 2012-2013.

AusIMM Service Awards

Robert Burns FAusIMM

This award recognises Rob Burns’s outstanding contribution and work on the Australasian Mining and Metallurgical Operating Practices project from 2010, leading to the launch of the publication in 2013. Previously a General Manager with Rio Tinto, Rob has been an Institute member since 1969, becoming a Fellow of The AusIMM in 1985. 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.

Rob played an integral part in establishing the AMMOP Committee and coordinating committee activities in conjunction with committee chair Peter McCarthy. Rob took a very active role in liaising with AusIMM publishing staff involved in the AMMOP project to ensure the highest-quality publication was produced. He also assisted in the content of AMMOP, through writing material for the publication and reviewing author 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 AusIMM membership base and to minerals industry professionals more broadly. Rob has also shown his dedication to The AusIMM 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 FAusIMM

Professor Odwyn Jones has had broad and extended involvement across a number of AusIMM activities, Societies and Committees. Odwyn joined The AusIMM as a Fellow in 1977, when he was Principal of Western Australian School of Mines and Dean of Mining and Mineral Technology at the then Western Australian Institute of Technology, which later became the Curtin University of Technology. Odwyn was a member of the combined AusIMM/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, when the Committee was first re-instituted after having lapsed in 2001 and served as Deputy Chair from 2008-2010.
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*.

From 2010 to 2012, Odwyn has been an integral member of the Mine Managers’ Handbook Committee and the
AMMOP Project Committee. Odwyn's involvement in these publication projects has been extremely helpful in
scoping content and identifying contributors and sponsors. Odwyn was additionally very helpful in gaining
papers from authors and companies; recommending and contacting paper authors; seeking out and securing
publication sponsorships; and reviewing papers.

Odwyn rarely misses a committee meeting and his contribution and willingness to help is highly valued,
appreciated and respected by fellow committee members and AusIMM staff. 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. Odwyn continues to serve the mining industry as
Chairman, Minerals Research Advisory Committee of the Minerals and Energy Research Institute of Western
Australia.

**Branch Service Awards**

**Gerard Bosch FAusIMM**

Gerard Bosch has been 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. His service has been distinguished by his readiness over many years to fill
the gaps which inevitably arise in voluntary committees. Throughout his service, he has been uncomplaining,
willing and absolutely reliable. Gerard continues to make a substantial contribution to the branch and committee
and his industry contacts and knowledge of the history of the branch assist the rest of the committee.

**Mark Daniell MAusIMM(CP)**

This award recognises the outstanding contributions made by Mark Daniell to the North Queensland Branch
over the past 12 years. Mark's ongoing work for the AusIMM, his professionalism, and his dedication to
promote the well-being of the mining industry and of the community make him a worthy recipient.

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. With the support of a very lean committee, and through a lot of personal effort
and despite heavy work obligations, 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 in fostering interest in mining and engineering with young people 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.

Mark is currently Manager Environment Improvement with BHP Billiton Cannington. During his professional
career he has had civil/environmental engineering and OH&S responsibilities for resource, construction and
consultancy companies, and in State and Local Government organisations.

**Tess Lloyd**

Tess Lloyd has been 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. Her latest contribution was to the 2012 annual dinner. While she didn’t realise it at the time, this
would be her last and possibly finest contribution to the successful running of a Cobar Branch event.
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 Challenge required supervisors to volunteer from the local community and Tess was there every year since its inception in 2005. After a decade of contributions to The AusIMM and the community, Tess and Peter have now left Cobar for pursue other opportunities.

New Professionals Award – Ellen Hiscock MAusIMM

Ellen Hiscock (nee McCracken) was awarded a BSc in Zoology and Ecology in 2002 and an MSc (with distinction) in Environmental Science in 2005 from the University of Otago, New Zealand.

Ellen has worked 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 AusIMM, which she has served very effectively as secretary of the AusIMM 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 AusIMM encourages in New Professionals.

G B O’Malley Medal - Ben Sedgwick GAusIMM

This award recognises Ben Sedgwick’s 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. He is an inspiring speaker and a very worthy recipient of this award.

Ben joined The AusIMM as a student in 2009 and has held various positions within the Southern Queensland Student Chapter. He recently became a committee member of the Metallurgical Society.

Whilst completing his studies, Ben attended numerous conferences and workshops to assist in planning his future career path and as a result he was able to mould a graduate program to suit his needs. This is something that Ben recommends all new professionals should endeavour to do.

Ben graduated from the University of Queensland in 2011 with a Bachelor’s Degree in Chemical and Metallurgical Engineering and began his graduate program with Newcrest in 2012 at Cadia Valley Operations, commissioning the largest operating flotation cells and a HPGR operating prior to a SAG Mill. Prior to this, Ben worked as a plant metallurgist at the Pajingo Gold Mine and also with Ausenco.

Ben is currently working as a Metallurgist at Newcrest Mining’s Bonikro Gold Mine in West Africa.

Best Paper Prize – John Vann FAusIMM and colleagues

The judging panel selected John Vann’s paper entitled “Scenario Thinking – A Powerful Tool for Strategic Planning and Evaluation of Mining Projects and Operations” as the Best Paper published in the proceedings of an AusIMM conference in 2012.

The choice of the three panel members was unanimous as they felt that the paper by J Vann, S Jackson, A Bye, S Coward, S Moayer, G Nicholas and R Wolff carried sufficiently important content for the mining industry, from Board level to professionals working in the industry, to warrant wide publication, specifically within the AusIMM Bulletin.

The panel received three papers each from six of the seven eligible conferences held to the end of September and four papers from the 7th conference, giving a choice of 19 papers in all. As in previous years, the quality of the papers at AusIMM conferences, particularly those offered for best paper consideration was extremely high, making the choice of Best Paper a difficult one.

Sir Willis Connolly Memorial Medal – Keith Orchison AM

The Sir Willis Connolly Memorial Medal is awarded to a person who through his ability to communicate has advanced the professionalism, industry or management of science, engineering or technology. This is a joint award between The AusIMM and the Barbarians – a group established by those associated with brown coal in Victoria who have had close ties to the industry in West Germany.

Keith Orchison AM was presented with his award at the St Barbara’s Day Luncheon in Melbourne in December 2012. Keith is Managing Director of consulting company Coolibah Pty Ltd and has been involved in resources and energy industry policy issues management and communications for more than 30 years.