

Robert (Bob) Smith
ASEG Gold Medal
Sydney February 2018

CITATION

The ASEG Gold Medal is awarded from time to time for exceptional and highly distinguished contributions to the science and practice of geophysics by a member, resulting in wide recognition within the geoscientific community. The ASEG President announced at the ASEG Awards ceremony held at the AEGC in Sydney in February that the ASEG Gold Medal has been awarded in 2018 to Bob Smith, a member of the ASEG since its formation in 1970.

This award specifically recognizes Bob's distinguished service to the profession, both in Australia and overseas, through his contributions to industry, research and education over a 50-year period, and his outstanding work and support for the ASEG and other professional bodies.

After graduating from the University of Melbourne in 1960 with a B.Sc. (Hons) majoring in Physics, Bob embarked on a geophysical career in 1961 with the Bureau of Mineral Resources, based in Melbourne and later Canberra. In 1968, he moved to Adelaide to take up the position of Chief Geophysicist with McPhar Geophysics P/L managing McPhar's geophysical contracting services in Australasia. In 1973, he built up and managed a successful consulting practice in mineral exploration.

In 1977, Bob was appointed to the role of Chief Geophysicist for CRA Exploration Pty. Ltd (CRAE), where he was charged with leading and developing the acceptance and application of geophysics and related technology within CRA. The role included representing CRAE on various government committees and industry professional groups. Bob led the introduction and development of modern geophysical methods during a period of unprecedented expansion in CRA. CRAE soon became recognised as an industry leader in geophysical applications in mineral exploration.

Bob was instrumental in recruiting and training geophysical staff to develop an integrated role within what became the world's largest mining company, with the most extensive exploration program seen to date. He provided technical support to all geophysical operations in CRAE's exploration activities, resulting in several discoveries which could be directly attributed to the geophysical input.

During his two decades with CRA (which merged with Rio Tinto in 1995), Bob became an active supporter and initiator of a wide range of research projects, many through AMIRA and others within CRAE. The developments in TEM and IP in Australia at that time were part of a broad-based cooperative program, with CSIRO at the centre and most exploration companies contributing both funds and expert input. Bob's input and leadership were major ingredients in the success of these collaborative programs.

As part of this drive for innovation and problem solving, Bob developed and maintained strong links with the geophysical community worldwide, and visits to Australia by many 'world experts' resulted. Through this co-operation and sharing of expertise, Bob and mineral geophysics in Australia achieved wide international recognition.

During his time at CRAE/ Rio Tinto, Bob built a formidable geophysical team, many starting as young, green graduates and progressing under Bob's guidance to make their mark within and outside that group as innovators, leaders and discoverers in their own right. Bob's legacy remains strong within the Rio Tinto group but also industry wide where geophysicists mentored by him have subsequently made their mark in exploration applications and discoveries worldwide.

Bob's promotion of the integration of geology and geophysics in exploration was no better exemplified than his initiation and implementation, in partnership with the late Prof David Boyd and other industry geophysicists, of the AMF course "Geophysics for Geologists". This long running course was attended by over 600 geologists in Australia and overseas over three decades, and has arguably helped to create a special 'Australian brand' of close cooperation between geophysicists and their geological colleagues.

Bob's contributions to ASEG have been outstanding, having been a member since the Society's inception, and an active supporter and contributor to the present day. He served as Federal President in 1987-88 and was the founding Chairman of the ASEG Research Foundation in 1990. Bob was a member of the ASEG-PESA Conference Organising Committee in Melbourne 2013, and an organiser of Airborne Gravity and Natural Fields EM Workshops held in conjunction with ASEG conferences in 2004, 2010, 2012, and 2016. He has attended and had an active participation in every ASEG conference since the first meeting in Adelaide in 1979. Bob was awarded Honorary Membership of the ASEG in 1997 for his outstanding contribution to the ASEG and the profession to that time.

He has also had an active role in other professional organisations, including the SEG (Associate Editor, conference technical chairman), the AusIMM (Geoscience Society Committee member, and representative on AGC). He was also a member of the Technical Advisory Committee for the Australian Mineral Exploration Technologies CRC from 1995-2000 and a similar role at AGSO during the 1990s.. He has been an invited speaker at several Australian and international conferences and has authored or co-authored many published papers including state-of-the-art papers on geophysical technology development and the role of geophysical methods in mineral exploration.

A flow on effect of Bob's professionalism throughout his career was and is still a firm focus on quality control in contractor-acquired data. The Australian contracting industry has benefited and owes much to Bob's sharp eye for quality data.

Since retiring from Rio Tinto in 1999, Bob has continued practicing as a consultant and has remained very active in the ASEG and the ASEG Research Foundation.. One of his main achievements has been the advancement of the University of WA

Airborne Gravity Gradiometer (AGG) project to the stage where it was ready for funding to completion by a third party. Since 2000, he has served on a management committee overseeing the project and monitoring development of the system. The R.J. Smith Airborne Gravity Gradiometry test range near Kauring (WA) is named in honour of his efforts in the field of AGG.

Wider recognition of his services to the industry have come in the form of the Australian Centenary Medal Award in 2003 “for service to Australian society in geophysics and mineral exploration”, and the AusIMM Branch & Society Service Award in 2014. In later years as he nears retirement, he has become a State Emergency Service (Victoria) volunteer, and a keen golfer.

It is only fitting that his positive influence on the science and on many members of the profession, his distinguished career spanning over 50 years, and his on-going contributions to the ASEG and the professional development of its members should now be recognised with the award of the ASEG Gold Medal.