

David Pratt
Grahame Sands Award
Sydney August 2010

CITATION

This award is based on an endowment made by members of the ASEG and the geoscience profession in memory of the late Grahame Sands, who was tragically killed at the prime of his life and career in an aircraft crash in 1986, whilst developing and testing new equipment for geophysical survey aircraft. Because of Grahame's abilities to turn scientific theory into innovative application, the award is made for innovation in applied geophysics through a significant practical development of benefit to Australian exploration geophysics in the field of instrumentation, data acquisition, interpretation or theory.

The recipient of the Grahame Sands Award in 2010 is David Pratt. Dave graduated with first class honours in geophysics at The University of Sydney in 1968, and completed PhD in remote sensing of ground thermal properties at the University of Newcastle in 1979. At that time, he started consulting under the name of Geospex Associates, developing a range of software applications for mining and petroleum explorers on PDP11, Unix, and VAX platforms.

In 1984, he and Ian Grierson co-founded Encom Technology. Under Dave's direction and with the support of a dedicated team, including Steve Mann, Clive Foss, Blair McKenzie, Tony White, Sam Roberts, Alex Shamin, Peter Gidley and Kerry Parfrey, Encom developed a series of magnetic and gravity processing and modeling applications, which subsequently led to the successful Model Vision software.

This period also saw Encom complete commercialization of several other software routines developed by the CSIRO, university and industry groups, including CSIRO's Siro-Ex TEM software into Encom commercial application EM Vision; beginning of QuickMag development; identified EM tool kit concept in BHP proprietary application GEMEX; by arrangement with Macquarie University developed commercialization path for EMFlow EM processing software.

Over the last 10 years, Encom pursued the rapid development of Profile Analyst into a versatile 'work bench' environment that allowed an interpreter to process and assess large amounts of line and grid data in 2 and 3D; added interfaces to major modeling programs such as University of British Columbia GIF magnetic and gravity codes; through collaborative R&D with CSIRO and major mining companies continued to develop functionality of ModelVision Pro to handle gravity and magnetic gradient data to support new equipment development; i.e. Falcon and SQUIDs.

In 2009, Dave retired from Encom (then part of Pitney Bowes) and formed Tectomet Exploration Pty Ltd. Overall, the major contribution Dave has made through his career was to capture ideas or concepts (not always his own) and provide working technology that the global geophysical community could then use to solve practical exploration problems. Dave provided the vision and leadership over three decades to develop and successfully commercialize software applications which have become an important part of the processing and interpretive environment of exploration geophysicists in Australia and around the world.