

ASEG WORKSHOP 8: NEAR SURFACE PASSIVE SEISMIC SURVEYING FOR MINERAL EXPLORATION, ENVIRONMENTAL AND ENGINEERING APPLICATIONS

SUNDAY 21 AUGUST 2016

SPEAKER BIOS

1. Michael Asten

Michael Asten is a Professor (Research), part-time, in the School of Geosciences, Monash University, Melbourne. He has worked in academia and the mineral exploration industry in Australia and overseas to 1997, and joined Monash part time in 1997. He is recipient/co-recipient of five innovation awards from the Australian Society of Exploration Geophysicists, CSIRO and BHP including the Laric Hawkins Award in 2004 for introducing microtremor array methods to Australia. He is currently the Australian Geoscience Council representative on the Australian Academy of Sciences UNCOVER Executive Committee, a group providing guidance for development of next-generation technology in Australia for mineral exploration. His ongoing microtremor research includes collaborations with Geoscience Australia, the US Geological Survey and the METU University, Turkey.

2. Jeremy Magnon

Jeremy is a geophysicist with a Master degree in Geophysics and Natural Hazard from the Grenoble University (France). He has an extended knowledge regarding the subsurface geophysical prospection methods and works at MoHo, a geophysical company which tries to conceive geophysical instruments different from what already exists.

3. Nicholas Smith

Nick is a geophysicist with a B.Sc.(Hons) in Geophysics from the University of Tasmania. A relative newcomer to the mineral exploration industry, he initially worked for OZ Minerals in copper exploration and project evaluation and is now director and geophysicist of PassiveX, a specialist passive seismic contractor.

4. Jayson Meyers

Jayson is a geoscientist with a Bachelors in Geology, Masters in Geochemistry and PhD in Geophysics. He has over 25 years of worldwide resource industry experience, and is currently a Principal Consultant at Resource Potentials based in Perth. He is also an Adjunct Associate Professor in Exploration Geophysics at the WA School of Mines, Curtin University, where he co-supervises post graduate students.

5. Matt Owers

Matt is a geophysicist with 25 years of experience. He spent many years with Fugro Airborne Surveys, where he specialised in magnetic and radiometric data processing. He left Fugro to join Paladin where he turned his attention to uranium exploration. He is now a Consultant at Resource Potentials where he is primarily involved with the passive seismic system.

6. Chris Wijns

Chris Wijns has been the Group Geophysicist since late 2008 for First Quantum Minerals, a global copper and nickel miner. Previously, he held a similar role with gold company Resolute Mining. Chris studied geophysics degrees in Canada, and worked in gold exploration in West Africa for Placer Dome before moving to Australia in 1999, where he completed a PhD in 2004. He has enjoyed working inside sizeable companies for the opportunity to have constant interaction with geologists, geochemists, and assorted engineers. Chris fancies himself as a geophysicist who tries to become a bit more of a geologist and geochemist with every passing year.

7. Alexei Gorbatov

Alexei Gorbatov is a senior scientist of Geoscience Australia who works across several groups primarily focused on Mineral Potential and Australian Tsunami Warning projects. His scientific interests include theory of seismic imaging, inversion methods, seismotectonics, and seismic source generation process. His professional carrier started in 1988 at the Institute of Physics of the Earth, Moscow, USSR, after completion his master degree in space navigation. After completion of his Ph.D. in geophysics at the Instituto de Geofisica, UNAM, Mexico, he worked there as a research fellow developing methods and a geodetic network for monitoring tectonic deformations. In 1998 he accepted a postdoctoral position in the Earthquake Research Institute, Tokyo University, Japan, focusing on the development of theory and methods for seismic imaging. His carrier continued at RSES, ANU, and then in Japan Marine Science and Technology Centre. Finally he joint Geoscience Australia in 2004.

8. Nigel Cantwell

Nigel is currently Chief Geophysicist at Resource Potentials, where he has worked since 2004. Nigel graduated from Curtin University with Honours in 2003. The first few years of work were spent gaining a broad experience across many different exploration projects, and spending time in the field with survey contractors completing EM, IP and SAM surveys, and acquiring gravity and ground magnetic data with equipment rented or owned by Resource Potentials. Nigel has acted as project geologist on a few different exploration projects, which involved logging of drill chips from aircore and RC drilling, and is therefore slowly gaining an appreciation of different types of regolith geology, and how this impacts on various geoscientific data. Within the field of passive seismic, Nigel is a “newbie”, but has a keen interest in trying to understand the theoretical basis for the H/V method and integrating the H/V cover thickness results with other datasets.

9. Ruth Murdie

Since 2013 Ruth has been working at GSWA as a 3D modeller, but is also running passive seismic surveys on a big regional scale with a network across the Capricorn Region. She is taking over from Andreas Scheib by using the GSWA Tromino system for shallow level investigations. Previously Ruth has worked in Kalgoorlie in the gold mining industry, in Austria at the Comprehensive Nuclear-Test-Ban Treaty Organisation – a UN organisation.

10. David Stannard

David graduated from Curtin University in 2009, completing his first class honours dissertation on the application of ground penetrating RADAR for ironsand exploration. David joined Resource Potentials in 2010, and is currently a Managing Geophysicist, providing geophysical consulting services for mineral exploration and engineering clients.

11. Andrew Fitzpatrick

Andrew Fitzpatrick received a BSc (1st Hons) in geophysics from Curtin University and a PhD in geophysics from the University of Tasmania. He is currently the Chief Geophysicist for Cameco Exploration and previously held roles at the CSIRO and Geoscience Australia. He is also an Adjunct Associate Professor in Exploration Geophysics at the WA School of Mines, Curtin University, where he is a sessional lecturer.

12. Kevin Stephens

Kevin Stephens graduated with B.Sc (Geology) and B.Sc (Geophysics) at Curtin University Australia in Perth, 2011. The following year he joined Fortescue Metals Group (FMG) as an Exploration Geologist working on Iron Ore projects in the Pilbara region of Western Australia. In recent years Kevin has continued working for FMG as a Project Geologist and has concurrently been researching the use of applying passive seismic techniques for iron ore delineation. Looking forward Kevin aims to further incorporate geophysical techniques into increasing the efficiency of brownfields and greenfields Iron Ore exploration.

13. Anya Reading

Associate Professor Anya Reading leads the 'Compute Earth' group at the University of Tasmania, with strong connections to CODES and their new Australian Research Council initiative in Transforming the Mining Value Chain. Research interests include 'left-field' uses of seismology at global to local scales including ambient seismic and tomographic imaging. She has a general interest in Big Data methods for geosciences, innovative and integrated approaches addressing challenges in both fundamental and applied Earth Sciences.