A Technology-Enabled Revolution in Mineral Exploration: 'Prospecting Drilling'

The Deep Exploration Technologies Cooperative Research Centre (DET CRC) is a $155M research initiative funded by the Australian Government and the mining industry in order to address declining success in mineral exploration beneath barren cover. This presentation will focus on DET CRC's coiled tubing (CT) drilling and real-time sensing projects and their potential to enable a revolutionary new approach to mineral exploration beneath barren cover, i.e. 'prospecting drilling': extensive, continuous drilling programs that map mineral systems beneath cover, enabling progressive vectoring towards deposits. To enable 'prospecting drilling', CT drilling will need to be complemented by downhole and top-of-hole sensing providing real-time petrophysics, structure/rock fabric, geochemistry and mineralogy. This presentation will provide an update on trials of the CT drilling rig and of the sensors which have already been developed and licenced for conventional drilling and are being adapted for CT drilling.

Richard Hillis Bio

Richard Hillis is CEO of the Deep Exploration Technologies CRC. He graduated BSc (Hons) from Imperial College (London) and PhD from the University of Edinburgh. Richard was previously Mawson Professor of Geology and Head of the Australian School of Petroleum at the University of Adelaide. He has published ~200 research papers and has been involved in establishing and selling/listing several technology and resources companies. Richard is currently a director of AuScope, an NCRIS company, and of the CRC Association. He is also a Fellow of the Australian Academy of Technological Sciences and Engineering (ATSE).