



Minerals maketh man

Professor Kip Jeffrey,
First Quantum Minerals Professor of Mining Education

Wednesday, 19 November 2014, 5.15pm
Peter Lanyon Lecture 4, Penryn Campus
Refreshments will be served after the presentation



'If it's not grown it's mined' is a slogan the mining industry has coined to highlight our dependency on minerals to support our way of life. Rising global population, developing world industrialisation and our natural desire for an improved standard of living all require minerals and create a continuous demand to find new deposits of metals, industrial minerals, fuels and other mineral raw materials. Despite aggressive recycling and the all-pervasive sustainability agenda, global demand for minerals continues to rise.

Mining has occurred for at least ten millennia and, while the types and

amount of minerals required have changed, many of the easily discovered and extractable resources have already been exploited. Despite this there are almost no examples of essential minerals that have been depleted. We have, and continue to, develop new ways to find, evaluate and work minerals despite the accelerating demand.

Some minerals are easily located but are difficult to evaluate and work economically, while others require novel exploration approaches to find them. Some high value minerals are worked from increasingly difficult environments requiring unusual technical approaches.

Whatever the technical innovations there is also a need for skilled and experienced people to do this work. Both traditional and developing mining countries have significant shortages of skilled mining staff. Initiatives on mine education provide another important piece of the jigsaw to ensure we can provide the minerals we need in the future.

In this talk we will look at three very different mineral deposit types (sand and gravel, fluorite-barite-lead-zinc, and finally diamonds) highlighting some new methods, using oil industry technology, to find, assess and recover the minerals we all use.