

# METROLOGY IN MINE SAFETY

David Turner<sup>1,2</sup>

<sup>1</sup> Technical Director, Simtars

<sup>2</sup> Chair of Board NATA, Australia

Correspondence: david.turner@simtars.com.au

The Safety in Mines Testing and Research Station (Simtars) was established in 1983 by the Queensland Government following the tragedies of the Box Flat Colliery and Kiangra No. 1 Colliery underground mine explosions. Simtars has since grown to become a world-leading centre for mining safety and health technical services, delivering complementary scientific, engineering, and training services, both nationally and internationally. Simtars operates within Resources Safety & Health Queensland (RSHQ), and one of its key purposes is to provide research, incident response, and scientific investigation support to the Queensland resources regulator and industry.

The NATA accredited services that support mine safety include gas concentration measurement and analysis, testing for respirable dust exposure determination, testing and certification of equipment used in explosive atmospheres, and the calibration of equipment used in these applications. These services were developed specifically to support the underground coal mining industry, but the capabilities are provided more generally to support related industries and the community. Simtars has carried out various research projects over the last 30 years, many of which have led to significant developments and improvements in the Queensland mining industry's ability to measure and gather information. These include mine gas monitoring and analysis and the use of digital 3D laser scanning for investigation support.

This presentation provides insights into good metrology in mine safety, and how third-party recognition and peer review provided by accreditation gives industry peace-of-mind.

Example from  
previous conference  
only