



**UNIVERSIDAD CATOLICA
DE LA SANTISIMA CONCEPCION
FACULTAD DE INGENIERIA
LABORATORIO DE GEOMATERIALES, MAGÍSTER INGENIERÍA GEOTÉCNICA E
INGENIERÍA GEOLÓGICA**

**JUEVES 5 DE DICIEMBRE 2013
SALA 06-06 FACULTAD DE MEDICINA UCSC
5.30pm – 6.30pm**

Prof. Fidelis T. Suorineni

*Full Professor and Chair of Mine Geotechnical Engineering
School of Mining Engineering
University of New South Wales, Sydney, Australia*

Reflections on empirical methods in hard rock geomechanics in contemporary practice

Hard rock geomechanics rely greatly on empirical methods in geomechanics for excavation design. These empirical methods include the rock mass classifications systems, open store and pillar design, failure criteria and block cave mining design rules. These empirical methods worked within the limits of the databases from which they were developed and for the intended purposes for which they were established. This presentation will demonstrate that these empirical methods have reached their limits and their continuous use is risky, in particular, when they are used blindly without understanding the databases from which they were established and the assumptions behind their development.

Professor Fidelis Suorineni obtained his B.Sc. in geological engineering from the University of Science and Technology, Ghana, MSc in Advanced Rock Mechanics and Excavation Engineering from the University of Newcastle upon Tyne, UK, and PhD from the University of Waterloo, Canada. Prior to joining UNSW, Professor Suorineni was a senior research engineer in the Geomechanics Research Centre and Adjunct Professor in the Bharti School of Engineering in Laurentian University, Canada. He has over 30 years of experience, in teaching, research and consulting in Ghana and Canada. In 2012, Professor Suorineni was awarded the Douglas Hay Medal by the Institute of Materials, Minerals and Mining (IOM3) for best paper published in Mining Technology.