

After Lunch Seminar

The Use of Centrifuge Testing in Physical Modelling of Tailings

Tailings dams are structures undergoing constant changes during operation of mines while they are supposed to last for many hundreds of years. This raises questions of how the behaviour can be predicted and how various components interact. Systematic studies of these large structures can be done by employing a geotechnical centrifuge. This technique is now introduced in Sweden by work at LTU.

This seminar will introduce the centrifuge technology together with a summary of some of the open questions in tailings design and management. It is followed by presentations of two experts from the United States and Australia, sharing their experiences in applying this modelling techniques to study the behaviour of tailing facilities.

Date: Wednesday, March 21, 2018 **Time: 12.30 – 16.00**

Venue: Luleå University of Technology, room F1031

Program:

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| 12.30 | Annika Bjelkevik TCS/ Sven Knutsson LTU:
Challenges in Tailings Design and Management |
| 12.45 | Jan Laue LTU: Introduction to Centrifuge Modelling |
| 13:15 | Inthuorn Sasanakul University of South Carolina, Columbia, USA
Examples of Physical Modelling of Tailings from North America |
| 14:15 | Coffee and Discussion |
| 14:45 | Andy Fourie University of Western Australia, Perth
Examples of Physical Modelling of Tailings from Australia |
| 15:45 | Discussion |