

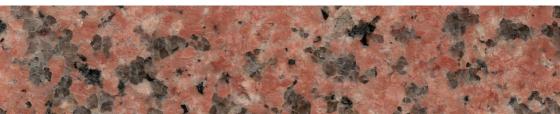
# **RS2016 Symposium**

# 7th International Symposium on In-Situ Rock Stress

May 10-12, 2016 Tampere, Finland



www.rs2016.org



#### Invitation to RS2016 in Tampere

The Finnish National Group of ISRM and the Finnish Association of Civil Engineers RIL invite you to the 7th International Symposium on In-Situ Rock Stress to be held during 10–12 May 2016 in the beautiful city of Tampere, Finland. There have been six previous International Symposia on the rock stress topic, starting in 1976 in Sydney, Australia, and with the most recent one being held in Sendai, Japan, in 2013.

This 7th Symposium will be a natural continuation of the in-situ rock stress topic, which is of great importance to most rock engineering projects. In spite of the numerous research and development projects that have been undertaken in the subject of rock stresses, a great deal remains to be achieved in order to confidently establish the stress field and its variation at a particular site, plus the alteration to the stress field as construction proceeds. We now have much improved stress measurement methods and associated 3-D computer programs-and the development is moving fast.

Accordingly, we hope to welcome all interested rock stress practitioners, modellers, designers and contractors to this 2016 rock stress symposium in Finland. We are sure that the 7th Symposium will contain much new material and will be an excellent forum for presenting your work, keeping up to date with developments, and networking. This symposium encompasses all aspects of rock stresses such as

- Rock stress measurements with different methods
- Interpretation and analysis of results
- Case studies (nuclear waste disposal, mining, civil engineering)
- Regional stress fields
- · Seismicity and rock stress
- New, innovated stress measurement methods
- Rock structures and rock stress
- Stress modeling

Finland is an excellent venue for the Symposium because of the large amount of rock engineering construction and the fact that rock stresses play an important role in the design of Finnish rock engineering projects—even in the shallow underground facilities. Although the high horizontal stresses can be utilized in stabilizing rock caverns, such high stresses can cause rock damage around the rock facilities, so understanding the stress field and designing accordingly is one of the keys to success.



#### **Technical excursions**

#### P-Hämppi central underground parking

Located underneath Hämeenkatu street and offering a total of 972 parking spaces, P-Hämppi serves those living in and frequenting the Tampere city centre.

#### Tampere Rantaväylä Tunnel

Between 2013 and 2017, just over four kilometres of Highway 12 will be rerouted. It is a huge challenge, building a 2.3-kilometre twin road tunnel - the longest in Finland - along with the related interchanges and route arrangements.

#### Post Symposium excursions

There will be two interesting post symposium excursions organized:

 Olkiluoto Nuclear Waste Repository Site

#### Pyhäsalmi Mine

More information about the excursions can be found in the website.

#### Venue

#### City of Tampere

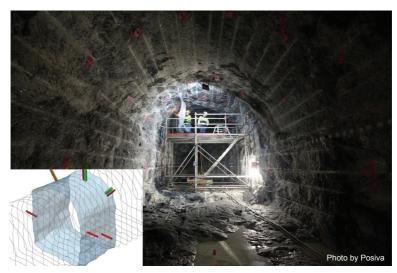
Tampere is the third largest city in Finland and the largest inland centre in the Nordic countries. Tampere's city centre is surrounded by lake and ridge scenery. The Tammerkoski rapids run through the city. Tampere is a significant centre of education and research. There are lots of university students in the city.

# Tampere Hall Congress and Concert Centre

Tampere Hall is Scandinavia's largest Congress and Concert Centre. It is located close to the city centre, only 500 metres from the railway and bus stations. Most of Tampere's hotels are within 5 to 15 minute walk from the venue.

#### Contact

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#### **Keynote speakers**

"Development of hydraulic fracturing method" Francois Cornet, emeritus professor

"Stress fields in deep mines" Stephen D. McKinnon, Queens University

"Stress field in Fennoscandia" Visiting Professor **Ove Stephansson**, GFZ German Research Centre for Geosciences, Potsdam Germany

"An integrated approach for the evaluation of measurements and inferences of in-situ stresses" Ömer Aydan, University of Ryukyus

> "Stress measurements in Finnish nuclear waste site" Kimmo Kemppainen, Posiva Oy

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## **ISRM Specialized Conference 2016**



Suomen Kalliomekaniikkatoimikunta Finnish National Group of ISRM



