



AKTUELLT FRÅN RISE

Haukur Ingason

Research Institutes of Sweden

Safety and Transport - Fire Reserach



- KCBU – Kompetens Centrum för Brand i Undermarksanläggningar
 - Stockholm 16 feb 2018
- En dag workshop kring nya beräkningsmetoder vid brand i tunnlar
 - 13 mars på RISE i Borås
- ISTSS 14 – 16 mars i centrala Borås – föreläsningar/demoförsök i lab på RISE
 - www.istss.se
- TUSC – Tunnel Underground Safety Center



KCBU – Kompetenscentrum för brandsäkerhet i undermarksanläggningar

Välkommen på en halvdags föreläsningar om brand och säkerhet i tunnlar och undermarksanläggningar

Datum: 16 februari 2018

Plats: KTH, Brinellvägen 23, Sal: B3 - Stockholm

Program:

9:00 – 9:10	Inledning Mia Kumm och Haukur Ingason RISE Safety
9:10 – 9:40	Vad har vi lärt oss kring utrymning vid riktiga tunnelbränder? - En erfarenhetsberättelse från Norge Dr Gunnar D. Jensen vid SINTEF i Norge
9:40 – 10:10	Utrymningsbelysning i vägtunnlar - Utvärdering av vägledande utrymningsljus Dr Karl Fridolf WSP och Dr Håkan Frantzich LTH
10:10 – 10:30	Fika
10:30 – 11:00	Utformning av utrymningsystem i en tunnelbanestation med utrymningshissar - Försök i Virtual Reality-miljö Axel Mossberg, Brandskyddslaget AB
11:00 – 11:30	Akustiska utrymningslarm och ljudfyrrar i vägtunnlar Dag Glebe, RISE
11:30 – 12:00	SAFEPOS II - Positionering i gruvor - ny teknik och utveckling Daniel Herata Skellefteå Räddningstjänst och Mia Kumm RISE Safety
12:00 – 12:30	Diskussion och sammanfattning Daniel Nilsson LTH



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- REGISTRATION

Welcome to the International Symposium on Tunnel Safety and Security (ISTSS)!

The next symposium will be held in Borås, Sweden 14 - 16 March 2018.

Who should attend?

Tunnels are an increasingly important part of the infrastructure network. They create challenges for traffic and emergency management, fire safety and security against attacks or sabotage. This Symposium will offer an excellent opportunity for experts working with transport, emergency management, risk analysis, infrastructure security, tunnel consultants, system providers, tunnel operation and research to exchange their experiences in an international forum.

Registration

Registration is now [open](#)! Early bird registration discount is closed since February 2nd 2018.

Venue

The conference venue is Textile Fashion Center in Borås, Sweden.

Textile Fashion Center in Borås is a creative meeting place for businesses within textile and fashion but have also rooms for all kinds of conferences.

Welcome to Textile Fashion Center conference in Borås!

Textile Fashion Center
Skaraborgsvägen 3
506 30 Borås
Sweden

Program

You find the preliminary programme for ISTSS 2018 on the right hand side

[To the registration](#)

[Preliminary Programme ISTSS 2018](#)

ISTSS 2018,
Borås, Sweden

035 : 01 : 04 : 28
Day Hrs Min Sec



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Workshop in engineering correlations for tunnel fire safety

Date: March 13, 2018 (One day prior to ISTSS 2018)

Time: 10 – 16

Location: RISE Research Institutes of Sweden in Borås, Sweden

Price: SEK 3000 + taxes (Sign up in conjunction with registration)

As the knowledge in fire dynamics in tunnels increases there is a need to introduce and learn more about new engineering calculations models for consultants and other stakeholders. In order to present the latest knowledge and methods RISE will offer a one day workshop prior to the ISTSS 2018 conference.

The aim is that the participants should be able to use the latest engineering models for calculation of fire development, smoke control and fire dynamics in underground structures. The participants will also obtain good understanding of the principles for production of toxic species in underground structure fires and their effects on persons exposed to the fire gases and the smoke.



Knowledge and Understanding

The main knowledge gain will be on how to:

- describe the relevant course of fire development and fire dynamics in underground structures
- explain principles for fires in vehicles, how the fire progresses and the effects of ventilation on the process
- explain and use engineering relationships for design fires, visibility, flame lengths, critical velocity, backlayering, stratification of smoke, gas temperature, heat flux, fire spread, and production of smoke and toxic species in the fire gases
- use methods to predict the effects of combustion products, heat and radiation on persons; explain the Fractional Effective Dose (FED) and Fractional Effective Concentration (FEC) models used to predict incapacitation and what occurs when human body is exposed to it.
- Training in using some of the most important equations on flame lengths, critical velocity, visibility and toxicity.

Content

The course is aimed for practicing engineers and other stakeholders working with fire safety in underground constructions.

The literature consists of the book Tunnel Fire Dynamics, written by Haukur Ingason, Ying Zhen Li and Anders Lönnemark 2015. The book fully covers the contents of the course and gives necessary background to the problems to solve.

If you have questions about the workshop please contact Prof. Haukur Ingason



Risks associated with alternative fuels in road tunnels and underground garages

Jonatan Gehandler, Peter Karlsson, Lotta Vylund

SP Technical Research Institute of Sweden



SAFETY AND TRANSPORT



Study of fire and explosion hazards of alternative fuel vehicles in tunnels

Ying Zhen Li

RISE rapport 2018:XX

~~Åfors~~ Project 16-649

~~BrandForsk~~ Project 400-161