








Technical sessions








Monday 11th September

Meeting Room

8:30	Opening Remarks: President of EFEE - Igor Kopal . Chairman of Swedish Rock Engineering Association - Robert Sturk . President of ISEE - Jack Eloranta . Chairman of Technical Committee - Roger Holmberg .	Room 1
9:00	 Reporting system and database for blasting related incidents – another value adding EFEE project. Jari Honkanen	Room 1
9:30	 Repackaging of explosives: A task not anticipated in the Danish regulations. Christian Andersen	Room 1
10:00	 Best practices guide for urban blasting operations. Ron Elliot	Room 1
10:30	Coffee - Sponsored by Nomis Seismographs	
11:00	 Effect of sample selection, transport and storage on reactive ground test results. Fiona Beach	Room 1
	 A new approach to blasting services contracts. Ran Tamir	Room 2
11:30	 Evaluation of excavation damaged zone characterization methods in nuclear waste disposal facility in Finland. Pekka Kantia	Room 1
	 Innovation in up-hole deviation measurements in sublevel stoping mines. Javier Orive	Room 2
12:00	 Toxic fumes from detonation of emulsion explosives. Ulf Nyberg	Room 1
	 Cut-off in surface delays due to flyrock. Dane Blair	Room 2
12:30	Lunch - Sponsored by Sigicom	
14:00	 Implementation of UK's explosive substance and articles occupational standards in a medium-sized Portuguese company: Case study of GJR. José Gois	Room 1
	 Influence of stemming length and initiation sequence on rock movement and dilution during a blast. Mathieu Lachamp	Room 2

14:30	 Ammonium nitrate; REACH and EU precursor regulation. Erik Nygaard	Room 1
	 Explosive cutting of pipelines for the determination of materials properties. Kai Holtappels	Room 2
15:00	 More than track and trace – new advantages of track and trace software for civil explosives. Frank Hirthammer	Room 1
	 A case study to determine of blast efficiency in sub-level caving method via mining software. Fatma Rüzgar Unal	Room 2
15:30	Coffee - Sponsored by Strayos	
16:00	 Utilization of aerial drones to optimize blast and stockpile fragmentation. R. Tamir	Room 1
	 Stabilisation of emulsion explosives utilising optimised co-surfactant systems - increased efficiency. Ellina Kharatyan	Room 2
16:30	 A new era of blast initiation systems reducing safety risks, costs and enabling automation. Byron Wicks	Room 2
17:00	Adjourn	
19:30	GALA DINNER - Sponsored by EPC Groupe Winterviken	















Key









-  **Health, Safety & Environment**
Session Chair: [Roger Holmberg](#)
-  **Health, Safety & Environment**
Session Chair: [Joerg Rennert](#)
-  **EU Directives and Harmonisation Work**
Session Chair: [Jack Eloranta](#)
-  **New Applications and Training**
Session Chair: [Johan Finsteen Gjøvad](#)
-  **Technical Development**
Session Chair: [Robert Farnfield](#)
-  **Technical Development**
Session Chair: [Finn Ouchterlony](#)
-  **Technical Development**
Session Chair: [Doru Anghelache](#)

Technical sessions







Tuesday 12th September

Meeting Room

8:30	 Blasting close to a substation with a low threshold value. Test blasts, vibration prediction and execution of rock excavations. Sophie Ahrengart & Mathias Jern	Room 1
	 The development of a new geometrical blast fragmentation model and its application to Grade Engineering. David La Rosa	Room 2
9:00	 Dynamic response of a defective slope under open-pit to underground mining blasting. C.B. Zhou	Room 1
	 Close range blasting in adverse geotechnical conditions. Thomas Lewandowski	Room 2
9:30	 Rectangular and circular explosive charges - detonation study using high-speed video. Miguel Araos	Room 1
	 Testing of a full-scale building under external blast Florea Dinu	Room 2
10:00	 600,000 MT to move, a high risk operation. Jean-Sébastien Lambert	Room 1
	 Controlled blast vibrations on the third set of locks: Panama Canal expansion program. Paulo Couceiro	Room 2
10:30	Coffee	
11:00	 Detonation performance of novel hydrogen peroxide and nitrate based hybrid explosives. Iain Fullelove	Room 1
	 The influence of charge confinement on vibration level in blasting. Mats Olsson	Room 2
11:30	 Controlled explosive demolition of a mineral processing plant at Mantoudi, Greece. Stage 2 of the project: rotary kilns and concrete structures. Elias Balihtsis	Room 1
	 Blast pattern expansion – a numerical approach. V. Miranda	Room 2
12:00	 Water blasting of steel box stanchions. Rainer Melzer	Room 1
	 Response spectrograms in ground vibration analysis. Paulo Couceiro	Room 2
12:30	Lunch - Sponsored by Davey Bickford	

14:00		High fidelity computer modelling of air-deck behaviour during rock blasting. Dale Preece	Room 1
		Misfire detection using wavelet transforms of blast seismograms. Douglas Anderson	Room 2
14:30		Blast design requirements classification system for blast design purposes. Trevor Little	Room 1
		Modern theory = flexible blasting = low vibrations. B. Müller	Room 2
15:00		Cloud scanning and photogrammetry – a comparison of blast face surveying techniques. Geoffrey Adderley	Room 1
		Estimating the effects of blast vibrations on high wall stability. Abhinav Sharma	Room 2
15:30		Blast management plan in Gol-e-Gohar open pit iron ore mine, Iran. Nima Refeeian	Room 1
		Underground blasting optimisation: maximum advance and minimum damage. Paulo Couceiro	Room 2
16:00		Conference Closes	

Key

-  **Blasting Work Experiences**
Session Chair: [José Goise](#)
-  **Blasting Work Experiences**
Session Chair: [Mark Hatt](#)
-  **Blast Design Management**
Session Chair: [Rick Hosley](#)
-  **Blast Vibration and Seismology**
Session Chair: [Jerry Wallace](#)
-  **Blast Vibration and Seismology**
Session Chair: [Donald Jonson](#)
-  **Blast Vibration and Seismology**
Session Chair: [Viive Tuuna](#)