

PROGRAM OUTLINE

Venue: Hilton Stockholm Slussen

Monday 11 Sept	08:30 – 15:30	Grouting short course (at Trafikverket, Lovö).
	16:00 – 19:00	Excursion at Stockholm Bypass (at Trafikverket, Lovö). Limited numer of participants, pre booked.
	20:00	Social pre-grouting at Eken Bar, Hilton (optional)
Tuesday 12 Sept	08:30 – 09:00	Registration and coffee
	09:00 - 09:15	Opening Ceremony
	09:15 - 09:45	Keynote speaker Stille, Håkan: Transformation of grouting from black magic to art of engineering
	10:10 - 11:20	Technical session: <i>Requirements and verifications</i> * Zhang, Suihan ; Johansson, Fredrik; Funehag, Johan; Zou, Liangchao: On the use of pressure relief holes in remedial grouting of rock foundations under existing dams * Özkoral, Florian ; Maroschek, Philipp; Weber, Florian; Rathenböck, Florian: Data-driven control of compensation grouting measures * Otterberg, Tomas ; Broström, Johan, Funehag, Johan: Connection between drilling and grouting in underground work
	12:30 - 14:00	Technical session: <i>Concepts and design for grouting</i> * Kvartsberg, Sara ; Thörn, Johan; Runslätt, Edward; Almfeldt, Sebastian: Pre-investigation data in grouting design: recommendations regarding fracture transmissivity distributions * Baumann, Hansjürg ; Entfellner, Manuel; Wannenmacher, Helmut; Kratz, Thorsten; Sabew, Sewerin : Technological Insights into Hybrid Grouting * Zou, Liangchao ; Håkansson, Ulf; Cvetkovic, Vladimir: Theoretical analysis of rock grouting with varying injection pressure * Sjöli, Erik ; Funehag, Johan : Optimizing the fan layout with respect to the grouting boreholes and identified geological structures * Åberg, Wilhelm ; Funehag, Johan: Shear modulus as a new parameter to characterise grout * Stille, Björn ; Dalmalm, Thomas: The significance of geology for pre-grouting of tunnels - Experiences from the Stockholm Bypass
	14:30 - 15:00	Keynote speaker Garshol, Knut: Challenges of Grouting for groundwater control in Hard Rock Tunneling
	15:00 - 17:00	<i>Professional Discussion - How do we improve the grouting results?</i>
	17:30 - 18:30	Excursion - Extension of the new metro line (by foot to nearby location). Registrarion during the symposium, limited numer of participants.
	19:00	Mingel (venue)
	20:00	Dinner and Ceremony of passing of the baton (venue)
Wednesday 13 Sept	08:00 – 08:30	Registration
	08:30 - 09:15	Professional Discussions: <i>Wrap-up</i>
	09:30 - 10:30	Technical session: <i>Grouting of soil-rock-concrete interfaces</i> * Andersson, Helen : Sealing under artesian circumstances to stop water causing collapse * Vara Ortiz De La Torre, Fernando : Pre-grouting from a TBM. The Follo Line EPC TBM project (Oslo, Norway) * Andersson, Helen : Sealing the zone between soil and rock to stop water and quick clay
	11:00 - 12:20	Technical session: <i>Case studies</i> * Creütz, Mikael ; Holmberg, Mats: The Anneberg-Skanstull high voltage cable tunnel, Stockholm, Sweden Challenges and possibilities performing pre-excitation grouting in hard crystalline rock from a TBM * Zetterlund, Magnus ; Kvartsberg, Sara; Thörn, Johan; Löseth, Sofia; Le, Nhung; Butron, Christian: Adoption of a grouting design during the production phase: Examples from the west link project * Ouari, Roaa Al ; Alali, Yasmeen ; Ittner, Henrik ; Rahman, Mashuqur : Evaluation of grouting design considering favourable and unfavourable geological conditions * Strömsvik, Helene ; Svendsen, Christian Haugen: Real-time analysis during pre-excitation rock mass grouting -methods and benefits * Thienert, Christian ; Ouschan, Michael ; Wenighofer, Robert ; Könemann, Frank ; Klaproth, Christoph ; Gabriel, Patrik ; Villeneuve, Marlene : Potentials and limitations of using artificial intelligence to predict grouting parameters – Results of a case study in a tunnel project in Scandinavia
	13:45 - 14:50	Technical session: <i>Grouting equipment</i> * Cieszkowski, Krzysztof ; Larsson, Lars-Olof ; Najder, Jan ; Najder, Tomasz ; Penczek, Robert ; Swieca, Marcin : Pressure losses along the delivery lines during rock grouting using polyurethane resins (PUR) * Ulriksen, Peter : Dynamic grouting - Feedback resonance * Ulriksen, Peter : Dynamic grouting - Water hammer * Adams, Joel : Grout-free Expandable Standpipes for Pre-excitation Grouting
	14:50 - 15:00	Closing Ceremony
	15:00 – 16:00	Social post-grouting at Eken Bar, Hilton (optional)