

## Program

**10:00–11:30: Rundvandring på Chalmers tekniska högskola parallellt med posterpresentationer**

**11:30–12:30: Lunch på Kårhusrestaurangen**

**12:30–12:50: Välkomna och inledning**

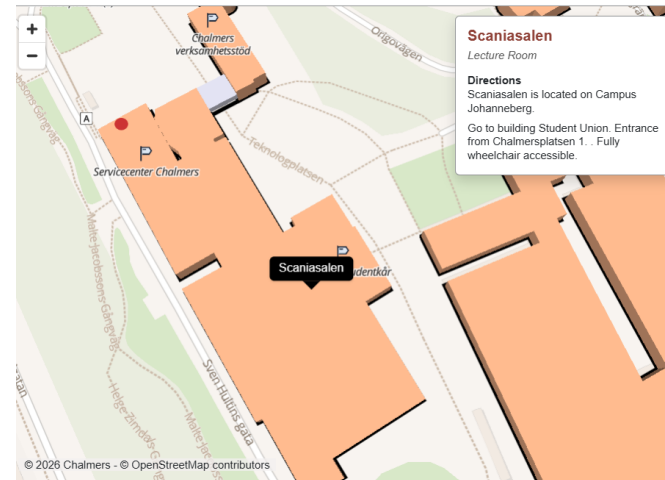
Leif Pettersson, Svenska kraftnät (ordförande i svenska nationalkommittén)

**12:50–13:10: DSO:ns syn på internationellt kunskapsutbyte och nya roller i kraftsystemet**

Lars Edström, vd Göteborg energi elnät

**13:10–13:20: Information om konferensen**

Thomas Hammarström, Chalmers tekniska högskola



## **13:30–15:00 Session 1 A (80p) – Sal Scania**

**Moderator: Danijela Palmgren, NKT**

### **A1 - ROTATING ELECTRICAL MACHINES**

**Lessons learnt from actively balancing two units magnetically with rotor segmentation and dedicated power supplies which results in resolving vibration issues**

Urban Lundin, Ångström laboratoriet

**Parameter-driven strategies to analyze fault ride through capability of synchronous generator**

Pollen Barau, Chalmers tekniska högskola

### **A3 - TRANSMISSION & DISTRIBUTION EQUIPMENT**

**Application of controlled switching to (re-)energization of transmission lines in dynamically changing grid conditions**

Urmil Parikh, Hitachi energy

**Breakthrough for Rogowski coils (LPCT's) in medium voltage switchgear: benefits, standardization, and challenges in protection and testing applications**

Andrea Bonetti och Frej Suomi, Megger

### **B1 - INSULATED CABLES**

**First results from curvature sensor installed in dynamic cable on floating platform**

Vilhelm Rydén, NKT

**Cables in air-filled ducts – comparison between IEC 60287 and FEM**

Ola Thyrvin, NKT

### **B2 - OVERHEAD LINES**

**Corrective maintenance of OHL equipped by composite insulators**

Peter Sidenvall, I2G

## **13:30–15:00 Session 1 B (200p) – Sal Runan**

**Moderator: Emil Hillberg, Rise**

### **B4 - DC SYSTEMS & POWER ELECTRONICS**

**Grid forming STATCOM dynamic performance: A technical study**

Yousef Khayat, Hitachi energy

**Virtual control and protection system in real time software in the Loop**

Joan Hernandez, Hitachi energy

### **B5 - PROTECTION & AUTOMATION**

**Expertise development in innovative technologies for next-generation substations**

Erik Wejander, Svenska kraftnät

### **C1 - POWER SYSTEM DEVELOPMENT & ECONOMICS**

**Hydrogen sector impact on the power sector: power system development, grid planning and operation**

Yelena Vardanyan, Rise

### **C2 - POWER SYSTEM OPERATION & CONTROL**

**SIPS – The unknown superheroes of the power system**

Susanne Aceby, Rise

**Design considerations for fast frequency control in the nordic synchronous area**

Henrik Ekestam, Svenska kraftnät

### **C3 - POWER SYSTEM ENVIRONMENTAL PERFORMANCE**

**Sustainability in HVDC tenders and projects - A pathway to long-term value creation**

Madeleine Stolpe, Hitachi energy

## 15:00–15:30 Fikapaus

### 15:30–17:00 Session 2 A (80p) – Sal Scania Moderator: Tommie Lindquist, Rise

#### B2 - OVERHEAD LINES

**Service experience with composite insulators in Danish OHL**  
Peter Sidenvall, I2G

#### B3 - SUBSTATIONS & ELECTRICAL INSTALLATIONS

**Assessing risk factors for pd-activity in 24 kV secondary substations using machine learning**  
Tommie Lindquist, Rise

**Prefabricated modular substations: Findings from ongoing pilot project**  
Tor Johansson, Vattenfall

#### D1 - MATERIALS AND EMERGING TEST TECHNIQUES

**The effect of hotspot conditions on DGA key gas generation on novel insulating liquids**  
Pär Wedin, Nynas

**Biodegradability testing of transformer insulating liquids: decoding the oecd 301 for the electrical industry**  
Thomas Norrby, Nynas

#### D2 - INFORMATION SYSTEMS, TELECOMMUNICATIONS & CYBERSECURITY

**Pilot project: Line differential protection over Ethernet**  
Per Kriewitz, Vattenfall

**5G-enabled smart grid IoT: Architecture, use cases, challenges & solutions**  
Rahul Gore, Hitachi Energy

## 15:00–15:30 Fikapaus

### 15:30–17:00 Session 2 B (200p) – Sal Runan Moderator: David Lundback, Vattenfall

#### C4 - POWER SYSTEM TECHNICAL PERFORMANCE

**Application of grid-enhancing technologies for stability improvement in low-inertia power systems: a case study from egypt**  
Mustafa Ibrahim, Afry

**State-space models of virtual control and protection systems for stability analysis**  
Joan Hernandez Hitachi Energy

**Co-simulation for nuclear power plant and power electronic interfaced devices interaction studies**  
Julia Jonasson, Vattenfall

#### C5 - ELECTRICITY MARKETS & REGULATIONS

**Proposed tariff component for compensating voltage - regulating reactive power in the swedish transmission system**  
Hannes Hagmar, Svenska kraftnät

**Impact of Economic Incentives in the Power System on Small Companies**  
Haya Rajeh, Högskolan väst

#### C6 - ACTIVE DISTRIBUTION SYSTEMS AND DISTRIBUTED ENERGY RESOURCES

**Black-start Capabilities of the Arholma Microgrid**  
Alexandra Garðarsdóttir, Vattenfall

**From consumers to prosumers: A techno-economic analysis of residential pv-bess deployment in sweden**  
Patrik Ollas, Rise

## **17:05–17:20 Avslutning – Sal Runan**

**Avslutning inklusive info om kommande konferenser och aktiviteter**

Leif Pettersson, Svenska kraftnät