



24-25  
October  
2022

# Wind power research in focus 2022

 Energiforsk

**STandUP**  
*for*  
**WIND**

 **SWPTC**  
SWEDISH WIND POWER TECHNOLOGY CENTRE

**RI**  
**SE**



# Program

## Monday 24th of October.

11:00 REGISTRATION

11:30-13:00 LUNCH

### 13:00-13:30 Opening session in Pascal

#### Welcome to Wind power research in focus

*Sara Fogelström, Swedish Wind Power Technology Centre*  
*Stefan Ivanell, STandUP for Wind*

### Parallel sessions

#### Pascal

#### Tesla

### 13:30-15:00 Siting

*Chairperson: Erik Sahlee, Uppsala University*

#### **Towards Large-eddy Simulation of Wind Farm Flows for Industrial Applications**

*Henrik Asmuth, Uppsala university*

#### **Coupled wind and wave simulations for offshore wind energy**

*Salur Basbug, RISE*

#### **Coastal effects on the Baltic Sea wind profile**

*Christoffer Hallgren, Uppsala university*

#### **Numerical modelling of neutral atmospheric boundary layer flow over complex terrain covered by the heterogeneous forest**

*Hamidreza Abedi, Chalmers University of Technology*

### System integration

*Chairperson: Lennart Söder, KTH Royal Institute of Technology*

#### **System balancing at nearly 100% renewable electricity generation**

*Henrik Nordström, KTH Royal Institute of Technology*

#### **Wind power and frequency regulation in Sweden – Technical performance and economic evaluation**

*Ola Carlson, Chalmers University of Technology & Mattias Persson, RISE*

#### **Use of Physics-informed neural networks for ageing prediction and lifetime extension of wind farm components**

*Federica Bragone, KTH Royal Institute of Technology*



**Frequency regulation and system services for FFR from existing wind power**  
*Mats Goldberg, RISE*

**15:00-15:30 COFFEE**

**15:30-17:00 Operation & Maintenance**

*Chairperson: Håkan Johansson, Chalmers University of Technology*

**Methods for supervision of bolt pretension: Improvements of Bolted Flange Joints in Wind Turbine Towers by Use of Slender Bolts and Sleeves**  
*Anders Wickström, RISE*

**Transient torque reversals in wind turbine drivetrains: occurrence, consequences and mitigation**  
*Saptarshi Sarkar, Chalmers university of Technology*

**Future sustainable recycling processes for wind turbine blades**  
*Cecilia Mattson, RISE*

**Rekovind2: Mapping and digitization of the flow of wind turbine blades**  
*Sergio Costa, RISE*

**Planning**

*Chairperson: Johanna Liljenfeldt, Uppsala University*

**Land-use synergy**  
*Johan Svensson, SLU*

**Regional wind power planning**  
*Ulla Mörtberg, KTH Royal Institute of Technology*

**Planning offshore**  
*Karin Olsson, Marine Monitoring*

**17:00-18:00 MINGLE**

**18:00- DINNER**



## Tuesday the 25<sup>th</sup> of October

### Parallel sessions

Pascal

Tesla

09:00-10:30

**Future energy landscape**

**Turbine technology**

*Chairperson: Åsa Elmqvist,  
Energiforsk*

*Chairperson: Stefan Ivarsson,  
RISE*

**The role of wind power in  
the future Swedish power  
system**

*Lennart Söder, KTH Royal  
Institute of Technology*

**Wind Sector Management  
using Parabolic Equations for  
Sound Propagation**

*Karl Bolin, KTH Royal Institute  
of Technology*

**Infrastructure in the  
landscape**

*Karin Hammarlund,  
Samskapet*

**Design and production  
methods for sustainable and  
cost-effective wind turbine  
foundations**

*Alexandre Mathern, NCC  
Sverige*

**Disinformation regarding  
wind power online**

*Elisa Tattersall Wallin,  
Swedish school of library and  
information science*

**Modeling of ice accretion on  
wind turbine blades**

*Robert Zoltan Szasz, Lund  
University*

**Methods and material for  
sustainable wind turbine  
towers: Swedish towers made  
from spruce. Including impact  
from fire, on-site gluing and  
moisture**

*Anders Wickström, RISE*

10:30-11:00

COFFEE

One session in Pascal

11:00-12:00

Keynote

**Future possibilities and challenges from an industry  
perspective**

*Henrik Sjöström, OX2  
Anders Rylin, SR Energy*



**12:00-13:00**    **LUNCH**

**13:00-13:30**    **Summary and discussion**

*The session chairs will give a short overview of the latest within the field during a panel discussion together with keynote speakers.*

**13:30-14:00**    **Launch of Swedish Wind Centre**

*Stefan Ivanell and Sara Fogelström will present the new initiative, Swedish Wind Centre, gathering a large part of Swedish academy and industry within the wind energy field.*