



Winterwind

INTERNATIONAL WIND ENERGY CONFERENCE

Preliminary program

Monday March 27

Pre-conference

Field trip (to be announced)

Tuesday March 28

08:00-09:00 Exhibition and registration

09:00-10:00 Technology

Increasing O&M benefits from icing sensors by means of smart data augmentation,
Michael Moser, eologix sensor technology, AT (33)

Power Curve Tests in Cold Climates on Complex Terrain,
Katie Gracie-Orr, Wood Renewables, UK (6)

The Next Generation Ice Detection System – Control System Integrated Software Solution for Substantial Cost Optimization,
Carsten Ebert, Wölfel Wind Systems, DE (9)

09:00-10:00 Development

AEP losses - less than half of the truth of the economic icing losses,
Lasse Hietikko, Wicetec, FI (15)

Case study on vertical variability in icing conditions in Finland,
Timo Karlsson, VTT Technical Research Centre of Finland Ltd, FI (22)

Experiences with IPS icing losses,
Simo Rissanen, Kjeller Vindteknikk Oy, FI (17)

10:00-11:00 Break

11:30-12:30 Opening session Moderators: Cecilia Dalman Eek & Göran Ronsten

Sea ice conditions in the Baltic sea and impact for offshore wind farm foundations,
Florian van der Stap, Wood Thilsted, DK (14)

On the performance of ice detection methods used in wind energy: a long-term field study,
Charles Godreau, Nergica, CA (7)

Panel discussion with wind turbine owners

12:30-14:00 Lunch

13:30-13:55 Poster session

Chemical coating solutions for turbine blade icing, *Don Browning, Phazebreak, US (1)*

Innovative technology to increase efficiency and extend the lifetime of gears and bearings,
Stefan Bill, REWITEC GmbH, DE (5)

REQUIM: Improving erosion testing of rotor blades' leading edges,
Hristo Shkalov, Wind Power LAB, DK (8)



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14:00-15:00 Icing

Mythbusters: wind energy in cold climate edition,
Patrice Roberge, Université Laval, CA (2)

Modelling ice accretion on a cylinder, simple? Right?,
André Bégin-Drolet, Université Laval, CA (3)

Icing detection with LiDAR,
Sara Koller, Meteotest, CH (19)

14:00-15:00 O&M

Addressing lightning risk in cold climates
- a swedish case study,
Andreas Christian Espersen, Wind Power LAB, DK (24)

Lightning Monitoring in Cold Climates?
Is there any need?,
Nils Lesmann, Phoenix Contact, DE (29)

Experiences analyzing operational
wind farms in cold climate,
*Utku Turkyilmaz, Kjeller Vindteknikk
part of Norconsult, SE (18)*

15:00-15:45 Break, Poster session

NICE - Reduction of ice formation by nanostructuring of surfaces with an
ultrashort pulse laser, *Claas Rittinghaus, Energiewerkstatt, AT (11)*

Anti-icing coating from the customer's perspective to technical development,
Urandelger Tuvshindorj, Mikron.X B.V, NL (28)

Multi-fidelity modelling of wakes and blockage for realistic atmospheric
conditions in cold climate, *Narges Tabatabaei, DNV,SE (31)*

15:45-17:00 Going Big

ENERCON E-175 technologies,
Timo Müller/Moritz Rodenhausen, ENERCON GmbH, DE (30)

Turbine performance during icing events, *Ines Runge, Nordex Energy SE Co. KG, DE (34)*

Gearing up for cold climate validation testing of 15MW+ wind turbine drivetrains,
Pieter Jan Jordaens, Sirris, BE (27)

19:00- Conference Dinner



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Wednesday March 29

08:30-09:30 Performance

An active/passive coating stack for surface icing mitigation tested under various climatic conditions., *Patrick Cosemans, Sirris, BE [26]*

Challenges for a smart algorithm controlling wind turbines under icing conditions, *Simon Kloiber, VERBUND Green Power, AT [20]*

Can we make better use of ice protection systems?, *Franziska Gerber, Meteotest, AG [10]*

09:30-10:15 Break

10:15-11:15 Policy and market

ESS – Energy Storage Systems in cold climates, *Christoffer Carlsson, INKOM, Industrikomponenter AB, SE [4]*

Potential and costs for wind power of providing system services to the electricity grid, *Salur Basbug, RISE, SE [25]*

10:15-11:15 O&M:

Proof of concept of using an existing foundation structural health monitoring system to detect icing, *Wout Weijtjens, Vrije Universiteit Brussel, BE [12]*

The importance of early-stage ice detection, *Matthew Stead, Ping Services, AU [16]*

Internal Blade Inspection, *Andreas Espersen, Wind Power LAB, DK [21]*

11.15-12:30 Lunch

12:00-12:25 Poster session

6-month seasonal forecasting of monthly wind speed anomalies, *Albert Bosch, VORTEX, ES [23]*

How to handle the sea ice, *Erik Almkvist, Viking Supply Ships, SE [35]*

12:30-14:00 Closing session

Winterwind Workshop - "Performance Envelopes of Ice Protection Systems"
- A Subtask of IEA Wind TCP Task 54 "Cold Climate Wind Power",
Claas Rittinghaus, Energiewerkstatt, AT [13]

Climate change impacts on Nordic icing climate, *Emilie Iversen, Norconsult, NO [32]*

Summary

End of Winterwind 2023