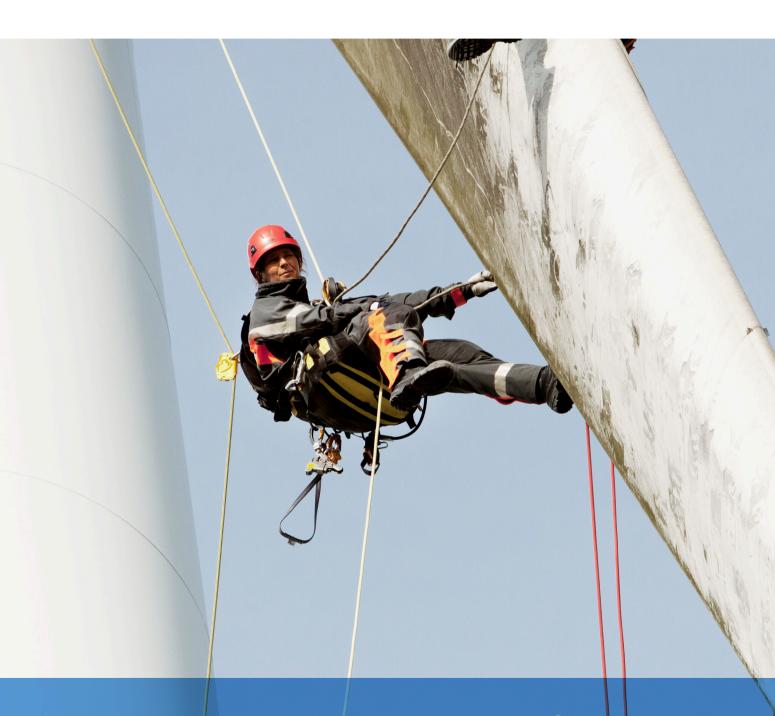
Winterwind 8 INTERNATIONAL WIND ENERGY CONFERENCE



O WINTERWIND INTERNATIONAL WIND ENERGY CONFERENCE 2020 Feb 3-5 2020, Åre, Sweden

Winterwind 2020 Program per 2020-01-29 Swedish Windpower Association and RISE - Workshop on blockage, Martin de Maré, RISE Research Institutes of Sweden (57) By invitation and application only via this link: https://forms.gle/3VPzjCeMhYxYL6q46 09:00 - 12:00 Reality or Myth ?, Jan-Åke Dahlberg, Vattenfall Vindkraft AB, SE (56) 10:00 - 18:00 Field trip Task 19: Performance warranty guidelines for wind turbines in icing climates workshop at Winterwind By invitation and application only 14:00 - 18:00 via this link: https://forms.gle/4iXGREGicngDVzAf7 2020, Helena Wickman, Vattenfall 18:00 - 20:00 Registration and Poster Setup Introduction to Winterwind 2020 19:00 - 20:00 Solskog Registration, Exhibition and Modern 08:00 - 09:00 networking 09:00 - 10:00 Session 1 Opening session Moderators: Jeanette Lindeblad and Fredrik Lindahl Welcome! - Jenette Lindeblad and Fredrik Lindahl, Swedish Windpower Association A short introduction, Göran Ronsten, Program coordinator A European Outlook on the prospect of Onshore Wind - Global importance with regional benefits, Sandra Grauers, Vattenfall (51) Open Innovation Contest, Tanja Tränkle, RISE (50) Innovate to survive, Siemens Gamesa Open Innovation Contest 10:00 - 11:00 Break and Modern networking 10:30 - 10:55 Poster presentations measuring methods, Daniel Schingnitz, Weidmüller Monitoring Systems GmbH, GER (60) Open Innovation Contest

11:00-12:30	Sessions 2 - 4	Modelling Chairs: Daniela Roeper, René Cattin	Forecasting Chairs: Sandra Grauers, Sven- Erik Thor	Icing losses and ice throw Chairs: Rebecka Klintström, Anders Wickström
		Large Eddy Simulation of Icing Conditions Impacting Wind Farms in Heterogeneous Land Use, Erik Janzon, Department of Earth Sciences, Uppsala Universitet, Sweden (11)	Improvements to the WRF microphysics, Emilie C. Iversen, Kjeller Vindteknikk (5)	The impact of liquid water content on thermal ice protection systems efficiency , André Bégin-Drolet, Université Laval (18)
		Predicting production loss due to ice accretion, Johan Revstedt, Dept. of Energy Sciences, Lund University, SE (16)	Forecasting of icing for wind energy applications, Øyvind Byrkjedal, Kjeller Vindteknikk, NO (38)	Task19 - Ice Loss Tool, Timo Karlsson, VTT (15)
		Parametric analysis of wind turbine icing in cold regions, Ifrah Mussa, Kingston University, United Kingdom (45)	How might climate change affect repowering?, Charles Godreau, Nergica, CA (8)	windThrow: an open source toolbox for ice throw simulations, Hamid Sarlak, Denmark (23)
		Improved flow modelling at cold climate sites through novel land- surface data from satellite sources , Morten Lybech Thegersen, EMD International A/S, DK (40)	Minimise your business risks with your own biodiversity strategy, Asa Abel, Ecogain AB, SWE (55)	On the communication of the ice throw hazard to the public, Rolv Erlend Bredesen, Kjeller Vindteknikk, NO (44)
		Discussion	Discussion	Discussion

12:30 - 14:00 Lunch and Modern networking

			Uncertainties – development, life cycle, end-of-life	Testing and innovation
14:00 - 15:30	Session 5 - 7		Chairs: Helena Wickman, Hamid Sarlak	Chairs: Ása Abel, Rolv Erlend Bredesen
		Validation of turbine specific modelled ice losses, Stefan Söderberg, DNV GL, SE (31)	Cost of uncertainty in project development, Jenny Longworth, Kjeller Vindteknikk AB (29)	Climatic chamber testing and verification in cold climate, Mattias Viktorsson, RISE (12)
		Validation of, and findings from, the IceLoss 2.0-project, Johannes Lindvall, Kjeller Vindteknikk, SE (36)	Circular streams from GFRP composite waste, Richard Sott, RISE (14)	Pile Foundation Prototype Execution and Applicability for Scandinavia, Miguel Turullols, Nabrawind Technologies SL (Spain) (13)
		A CFD benchmark study of ice accretion on a wind turbine blade and a comparison to the ice accretion of a rotating blade cylinder model, Johannes Lindvall, Kjeller vindteknikk, SE (37)	Improve Wind Project Lifecycle Cost of Energy in Cold Climates, Albert Bosch, VORTEX FdC, SL (6)	Ice and snow management innovations for critical infrastructure , Ville Kaikkonen, University of Oulu (32)
		Offshore wind farm at icy conditions – Tahkoluoto, Jaakko Kleemola, Suomen Hyötytuuli Oy, FI (54)	Wind farm blockage onshore: what drives the loss?, Till Beckford, DNV GL, UK (28)	Storage of electricity in molecules, Finn Daugaard Madsen, Siemens Gamesa Renewable Energy A/S (3)
		Discussion	Discussion	Discussion

15:30 - 16:30 Break and Modern networking

16:30 - 18:00	Session 8 - 10	Structural monitoring Chairs: Tanja Tränkle, Till Beckford	Ice detection Chairs: Frida Godet, Øyvind Byrkjedal	Ice Protection Systems I Chairs: Jenny Longworth, Finn Daugaard Madsen
	Modern networking	Blade defect forecasting, Anders Røpke, Wind Power LAB (4)	lcing intensity evaluation based on ice detector measurements, Jarkko Latonen, Labkotec Oy, FI (43)	Experimental investigation of an infrared de- icing system for wind power application in cold climate, Sofia Sollén, Luleà University of Technology (48)
		Towards tracing a rotor surface's 3D trajectory over time, Michael Moser, eologix sensor technology gmbh (42)	The impact of light ice masses on expected wind power production, Florian Rieger, fos4X GmbH (21)	Performance Maps for Ice Mitigation Operational Strategies, Dimitar Stoyanov, Coventry University (33)
		Effect of heavy rotor blade icing to lifetime consumption of tower and foundation, Carsten Ebert, Woelfel Wind Systems (46)	Blade based ice detection IDD.Blade – efficient operation in cold climate, Bernd Wölfel, Wölfel Wind Systems GmbH (47)	Measuring the Wind in Cold Climates - a real world summary of Lidar performance, Wulstan Nixon, United Kingdom (10)
		Siemens Gamesa effective blade repair solution at cold temperatures, Mert Satir, Siemens Gamesa Renewable Energy, Ireland (30)	Optimizing Windturbine heaters with blade based ice detection Systems, Nils Lesmann, Phoenix Contact, GER (1)	Case study; Controlled environment in up- tower blade repairs, Ville Karkkolainen, Bladefence, FI (53)
		Discussion	Discussion	Discussion

18:00 - 19:30

Mingle, poster presentations in exhibition hall and Modern networking

19:30 - 23:59

Dinner and entertainment

Whater a described 5				
Wednesday Feb 5				
Winterwind 2020		Program per 2020-01-29		
		Arenan	Solskog	Snöljus
09:00 - 10:00	Session 11	O&M Chairs: Anne Mette Nodeland, Martin de Maré		
	Open Innovation Contest awards	Slowly, slowly, we'll reach our goal!, Sébastien Trudel, EDF Renewables, Canada (52)		
		Highlights from CanWEA's operations and maintenance summit 2020, Charles Godreau, Nergica, CA (41)		
10:00 - 11:00	Break and Modern networking			
11:00 - 12:30	Session 12-14	Manufacturers Chairs: Asa Elmqvist, Stefan Söderberg	Ice protection systems II Chairs: Emilie C. Iversen, Jan-Åke Dahlberg	O&M activities and strategies Chairs: Liselotte Aldén, Lars Jacobsson
		Vestas Cold Climate solutions, Karl Gregory, Vestas Wind Systems A/S, DK (27)	Megaterends in blade heating, Petteri Antikainen, Wicetec, Fi (26)	Wind turbine operations in northem Siberia Masafumi Yamazaki, Kanagawa Institute o Technology, Japan (25)
		Evaluation of Vestas De-icing System, Alexander Stökl, Energiewerkstatt e.V. (2)	A new type of anti icing system – development/application/demonstrat ion, Sven-Erik Thor, Lindskog Innovation AB (19)	Control of tower bolt connections and the challenges related to cold climate conditions, Anders Wickström, RISE Research Institutes of Sweden (20)
		Siemens Gamesa ice accretion modelling and its impact on the aerodynamic performance and AEP, Esteban Belmonte, Siemens Gamesa Renewable Energy, SP (35)	Installation of Retrofit Hot Air De- icing Systems, Daniela Roeper, Borealis Wind, Canada (9)	From Open Innovation Contest
		Nordex advanced Anti-Icing System for N149 wind turbines, Konrad Sachse, Nordex Energy GmbH, DE (7)	Ice protection systems and retrofits: Performance and experiences, Charles Godreau, Nergica, CA (39)	Advanced operational analytics with machine learning, Till Beckford, DNV GL, UK (34)
		Discussion	Discussion	Discussion

12:30 - 13:30	Lunch and Modern networking

13:30-15:00	Session 15	What do we need now?
		Moderator: Tomas Kåberger
		Should I heat or should I not? - Smart operation of wind turbines in Cold Climate, René Cattin, Meteotest, CH (24)
		World Energy Outlook 2019 – Wind Offshore long-term perspectives: Opportunities and uncertainties, Yasmine Arsalane, World Energy Outlook Directorate of Sustainability, Technology and Outlooks International Energy Agency (58)
		Dialogue: Yasmine Arsalane (IEA) and Sandra Grauers (Vattenfall)
14:40-14:50		A decade of expansion ahead, Tomas Kåberger, Renewavle Energy Institute, InnoEnergy, Chalmers (59)
14:50-15:00		Final words Fredrik Lindahl