Consortium for Energy & Data Science Seminar Series

Interdisciplinary Research and Swiss Innovation for the Global Wind Energy Market

This talk will discuss how the Wind Energy Innovation Division at the Eastern Switzerland University of Applied Sciences applies interdisciplinary research to develop inspiring innovative solutions that can be adopted effectively and sustainably by people to contribute positively to the wind energy sector. After a brief introduction of wind energy basics and its global outlook, the speaker will present two practical examples of how her research group applies interdisciplinary research to overcome the challenges of digitalisation in wind energy. In the first example, a use-case-driven approach for prioritising digitalisation efforts was developed in collaboration with IEA Wind Task 43. In the second example, the WeDoWind framework has been developed in order to improve data sharing and collaboration in the sector. The main innovation of this framework is the way it creates tangible incentives to motivate different types of people to actually share data and knowledge in practice.

Sarah Barber, Ph.D.

Wind Energy Innovation Division
Eastern Switzerland University of
Applied Sciences

Date: May 30, 2023
Time: 11 am – 12 noon US Central Time
Location: Frederick E. Giesecke Engineering
Research Building Conference Room 315
Faculty host: Yu Ding, ISEN

Biography

Dr. Sarah Barber is Head of the Wind Energy Innovation Division at the Eastern Switzerland University of Applied Sciences and is founder and president of the Swiss Wind Energy R&D Network. She is a lecturer in wind energy at the universities of St. Gallen and Graubünden. She is part of the Organizing Committee of IEA Wind Task 43 and Chair of the Diversity Committee at the European Academy of Wind Energy. Dr. Barber has a joint M.Eng. in Aerospace Engineering from the University of Cambridge (UK) and MIT (USA) and a Ph.D. in Aerodynamics from the University of Sheffield (UK). She has been active in the R&D of wind energy since 2007, as a Postdoc and Lecturer at ETH Zurich, Wind Energy Expert at BKW Energie AG, Chief Technology Officer at Agile Wind Power AG (Switzerland) and Group Manager at Fraunhofer IWES (Germany).

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