Task 52 "Large-Scale Deployment of Wind Lidar"
General Meeting 2023 – Day 2

Julia Gottschall – *Fraunhofer IWES,* Operating Agent [OA] / Task Manager
David Schlipf – *Hochschule Flensburg,* Task Manager

13-14 June 2023 (online)

Technology Collaboration Programme
by iea

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Agenda – Day 2

⊰ 14:00   **Welcome / summary of Day 1**

⊰ 14:10   **Collaboration with other IEA Wind Tasks**

- Stephen Holleran: "Task 43 WRA Data Model – an introduction"

- Konstanze Kölle: "Task 49 and reference sites for floating wind"

- review of joint meetings with Tasks 41 and 54

⊰ 14:55   *Coffee / tea break*

⊰ 15:00   **Working group updates (session #3)**

- Alexander Stoekl: "Complex Terrain"

- David Schlipf: "Lidar-Assisted Control"

- Francisco (Paco) Costa: "Ontology"

⊰ 15:45   **Working group updates – breakout rooms for Q&A**

⊰ 16:00   **Students' session with presentations from ITN LIKE project**

- Isadora Coimbra, Liqin Jin, Priscila Orozco, Mohammad Nafisifard

⊰ 16:55   **Wrap-up**

⊰ 17:00 – 17:30   **Meet the ESRs**

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Summary – Day 1

- 14:00 **Welcome and introduction from Operating Agent**
- 14:10 **What's new in the world of wind lidar**
  - Summary and review of WESC mini-symposia
  - Summary and review of Task 52 Lunch Seminar series
- 14:45 **Working group updates** (session #1)
  - Andy Oldroyd: "Scanning Lidar Offshore"
  - Sara Koller: "Cold Climate"
- 15:15 *Coffee / tea break*
- 15:25 **Working group updates** (session #2)
  - Andy Clifton: "Digitalization"
  - Jakob von Eisenhart Rothe: "Turbulence Intensity"
- 15:55 **Working group updates – breakout rooms for Q&A**
- 16:25 **What's new in the wind lidar industry**
  - Rafael Tavares: "Assessing the performance of eight commercial lidars"
  - Discussion with technology providers
- 16:50 **Wrap-up, outlook to Day 2**

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Strategy → Objectives of IEA Wind Task 52 ('Lidar Task')

Mission
Our members work together on research to **make wind lidar the best and preferred wind measurement tool for wind energy applications**.

Vision
Using wind lidar will be easy. It will bring advantages and opportunities that **enable the (large-scale) deployment of wind energy**.

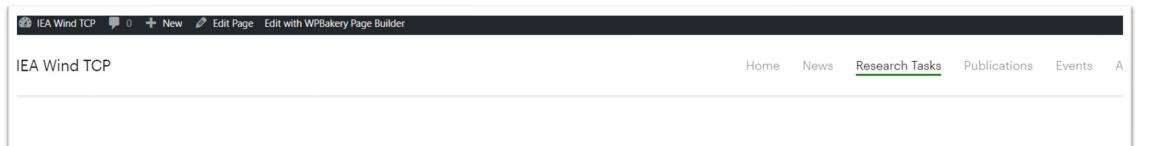| Values |
|---|
| Innovation, inclusion, diversity, cooperation, and openness. |

Presentations od working groups
→ to be continued today

- **Support the large-scale deployment of wind lidar** … by addressing key themes and achieving relevant deliverables

- **Integrating both industry and academia** for most innovative solutions and application-oriented training of young researchers

- **Strong collaboration with other Tasks** to share our knowledge with other applications within the industry
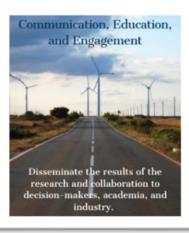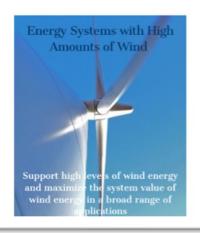
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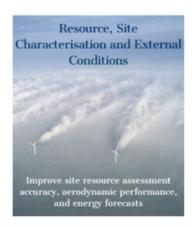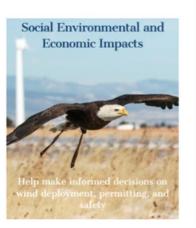# Tasks within IEA Wind TCP

https://iea-wind.org/task-directory/

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- Konstanze Kölle: "Task 49 and reference sites for floating wind"

- J. Gottschall: review of joint meetings with Tasks 41 and 54

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Joint meetings with Tasks 41 and 54 (Oct 2023)

https://iea-wind.org/task41/task-41-meetings/

Joint Tasks 41 (Distributed Wind), 52 (Large-Scale Wind LIDAR), and 54 (Cold Climate Wind Power) Meeting
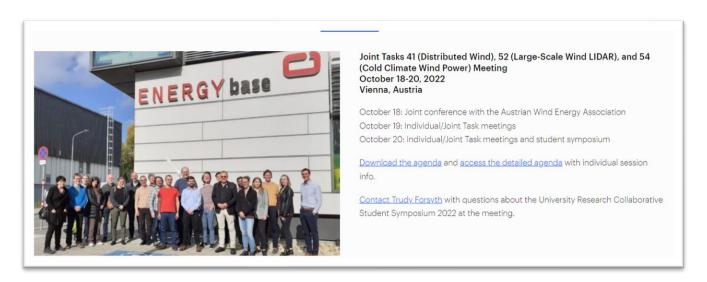October 18-20, 2022
Vienna, Austria

October 18: Joint conference with the Austrian Wind Energy Association
October 19: Individual/Joint Task meetings
October 20: Individual/Joint Task meetings and student symposium

Download the agenda and access the detailed agenda with individual session info.

Contact Trudy Forsyth with questions about the University Research Collaborative Student Symposium 2022 at the meeting.

Joint meetings with Tasks 41 and 54 (Oct 2023)

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⊰ Task 52 (in-person / hybrid) working group meetings .. Cold Climate and Complex Terrain

⊰ Joint sessions with Task 41 (Distributed Wind) and 54 (Cold Climate)

Joint meetings with Tasks 41 and 54 (Oct 2023)

Joint sessions covering the following questions …

⊣ **Session 1: Turbulence measurements and the impact of temperature on turbulence**

⊣ Session 2: Cold climate siting

⊣ **Session 3: Resource assessment for isolated systems with adverse weather conditions**

⊣ Session 4: Understanding icing

⊣ **Session 5: Lidar business models for distributed wind**

⊣ Session 6: Scaling down icing technology solutions

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Introduction of Task 52 work programme

Four themes → (currently) seven working groups .. working on one deliverable each

	Theme	Working groups (active)
# 1	*Universal inflow characterisation*	(#1) Turbulence Intensity (TI) by Lidar (#2) Lidar Assisted Control (LAC)
# 2	*Replacing met masts*	(#3) Lidar in Complex Terrain (#4) Lidar in Cold Climate
# 3	*Connecting wind lidar*	(#5) Digitalization (#7) Lidar Ontology
# 4	*Accelerating offshore wind deployment*	(#6) Scanning Lidar Offshore

Check our website https://iea-wind.org/task52/ to find out how to join the individual working groups.

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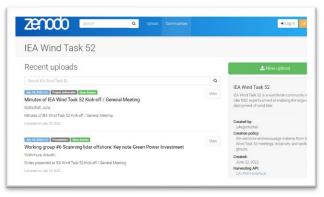
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Join our Task 52 community …
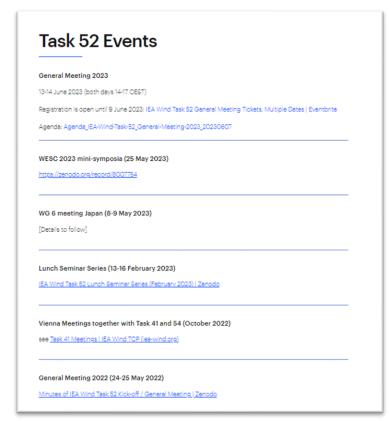

Our website:
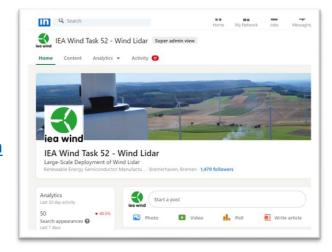https://iea-wind.org/task52/

Zenodo community
(https://zenodo.org/communities/ieawindtask52/)
for published documents

Public events with
typically 100+
participants
+ "private" workshops

1,731 (Stand: June 2023)
followers on LinkedIn
(https://www.linkedin.com/showcase/4037465/)

Mailing list for regular newsletter (every six months) and
event invitations – to be added (and for all further requests)
send e-mail to IEAWind.Task52@iwes.fraunhofer.de