

## Special Issue

# Probabilistic Design and Assessment of Wind Turbine Structures

### Message from the Guest Editors

Wind turbines play a crucial role in our sustainable energy future. Ensuring their structural integrity and reliability is paramount. **Explore the Latest Advances** Join us in this special issue as we dive into the world of *Probabilistic Design and Assessment of Wind Turbine Structures*. Discover the potential of probabilistic approaches to enhance design, reduce uncertainties, and extend the life of wind turbines. **Key Topics Include**

- ☒ Probabilistic design of structural components
- ☒ Reliability analysis of wind turbine structural components
- ☒ Assessment for wind turbine life extension
- ☒ Uncertainty quantification
- ☒ Probabilistic assessments based on data
- ☒ Risk- and reliability-based inspection and maintenance planning
- ☒ System reliability assessments for wind turbines and wind farms
- ☒ Risk-based decision-making
- ☒ Value of information analyses
- ☒ Derivation of target reliabilities

**Share Your Expertise** Contribute to the latest advances in wind turbine structural assessment. Your research can help shape the future of renewable energy. Be a part of our Special Issue!

### Guest Editors

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### Deadline for manuscript submissions

closed (30 September 2024)



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### Message from the Editor-in-Chief

*Energies* is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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