

## Special Issue

# Wind Turbine Blade Coatings: New Advances, Application and Challenges

### Message from the Guest Editor

Protection against possible surface damage of coated blade composites is a multifaceted problem since it combines, among others, the consideration of environmental degradation of materials, operational loading rate effects, impact fatigue loading, fluid-structure interaction, interaction of solid particles on deformable materials, erosion and progressive damage modelling, life cycle prediction, coating application methods in the factory and in field repairs, and reliable coating experimentation and validation methods. In particular, the topics of interest include but are not limited to

- Coating aging and environmental degradation factors.
- Coating damage mechanics, modelling and lifetime prediction.
- Coating micro and nano-structure and fundamental properties based innovations.
- Coatings recyclability and bio-based materials.
- Coatings as a multilayer system. Interface/interphase chemical and mechanical interactions and compatibility.
- Coating application process and wind blade manufacturing/repairing issues.
- Coatings characterization and testing reliability.

### Guest Editor

Dr. Fernando Sanchez Lopez

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### Deadline for manuscript submissions

closed (30 November 2023)



## Coatings

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## About the Journal

### Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

Coatings is a well-established, peerreviewed, online journal dedicated to the vibrant field of surface science and engineering. Coatings publishes original research articles that report cutting-edge results and review papers that make the point on the hottest research topics.

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