

## Special Issue

# Novel Research on Wind Turbine Control and Integration

### Message from the Guest Editors

This Special Issue of *Sustainability* aims to address the challenges of designing and using advanced wind turbine control techniques to convert kinetic energy into electrical energy. Original submissions focused on new control techniques and implementation on electronic boards (DsPACE, FPGA, STM, etc.) are welcome. Topics of interest in this Special Issue include, but are not limited to:

- The adaptive control of wind systems;
- The new configuration of wind systems;
- The backward control of wind systems;
- The sliding mode control (high order, super-twist, etc.) of wind systems;
- The direct power or torque control of wind systems;
- The predictive control of wind systems;
- Algorithms to optimize control systems of wind systems;
- Wind System Control Observers;
- The integration of wind systems into the power grid;
- Emerging power electronics for electric drives in renewable energy applications;
- Maximum power point controllers;
- Grid-connected inverter controllers;
- Battery charge controllers;
- The modeling and simulation of smart grids;
- Artificial intelligence control techniques for wind systems;
- Real-Time DsPACE implementation;
- Real-Time FPGA implementation.

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### Guest Editors

Prof. Dr. Bossoufi Badre

Prof. Dr. Youness Mourabit

Dr. Manale Boderbala

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### Deadline for manuscript submissions

closed (31 August 2023)



## Sustainability

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## About the Journal

### Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

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### Editor-in-Chief

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