

## Special Issue

# Renewable and Sustainable Energy: Modeling, Control, Modern Optimization and Multi Criteria Decision Making

### Message from the Guest Editors

The consensus among scientists is that sustainable renewable energy sources with no or very low environmental impact are the best solution. Modeling and optimization are effectively used to solve complicated processes in a short time with minimum effort. Modeling based on AI and modern optimization methods is playing a key part in the industrial revolution, being extensively used by practicing engineers to solve complicated problems. Moreover, Model predictive control (MPC) methods can achieve fast, precise, and multiobjective control tasks for renewable energy systems. By contrast, multicriteria decision making (MCDM) models provide a useful way to model several real-world problems, and they are extensively used in many engineering applications, such as energy efficiency, sustainable development, and so forth. The Special Issue provides a platform for researchers and practitioners who are experts in the area of modern optimizations, control systems, artificial intelligence, and decision making applied to renewable and sustainable energy. Topics in both science and engineering, such as: soft computing, neural networks, fuzzy logic, multicriteria decision making, are welcome.

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### Guest Editors

Dr. Hegazy Rezk

Dr. Mokhtar Aly

Prof. Dr. Mohammad Ali Abdelkareem

Dr. Ahmed Fathy

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### Deadline for manuscript submissions

closed (30 June 2022)



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### Editor-in-Chief

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