Journal of Optimization

Special Issue on
Modeling and Optimization under Uncertainty for Energy and Environmental Systems

CALL FOR PAPERS

Effective planning and management of energy and environmental systems (EES) are now the first priority of many decision-makers and resources managers around the world because of the challenges associated with rising energy demands, shrinking natural resources, degrading environmental quality, increasing health concerns, and intimidating climate change. However, recent energy and environmental systems are becoming more complicated with various uncertainties due to the diversity in technology options, system characteristics, process implementations, parameter configurations, and management practices. Therefore, in response to these uncertainties and complexities, more robust modeling and optimization techniques are desired for effectively managing energy and environmental systems.

The aim of this special issue is to capture recent advances in the modeling and optimization techniques under various uncertain conditions and their applications for EES management. Researchers are invited to submit articles in support of systematic modeling and analysis as well as effective decision-making and management practices in EES. Review articles describing the current state of the art in the modeling and optimization techniques under various uncertainties and their applications in EES are also welcome.

Potential topics include but are not limited to the following:

- ▶ Mathematical methods for dealing with various uncertainties

- ▶ EES modeling and optimization under uncertainty

- ▶ Uncertainty quantification and risk assessment in EES modeling

- ▶ Systematic analysis of multiple uncertainties and their interactions

- ▶ Applications of novel modeling and optimization techniques in EES management practices

Authors can submit their manuscripts through the Manuscript Tracking System at https://mts.hindawi.com/submit/journals/jopti/moue/.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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