

Special Issue

Data-Driven Analyses for Field Failures and Faults in Water and Energy Systems

Message from the Guest Editor

The advent of data-driven assessments has led to new approaches in how we develop, operate, and manage our water and energy-critical infrastructure systems. For this Special Issue, we welcome researchers to submit details of advancements made in the characterization, analysis, and responses to faults and failures, observed in the field, for water and energy systems. In recognition of the diverse mechanisms through which operational diagnoses can be made, we welcome the evaluation of multimedia datasets, including sensor-based information, imagery, sound, human assessments, and others. The methods utilized for analyzing the data can range from physics-driven simulations to theory-informed machine learning. Although experimental work is also underway to support field assessments, we would like to prioritize the studies that are done in uncontrolled environments to capture the complexity of myriad factors influencing accurate field diagnostics. The analysis of infrastructure can range from that of specific components (e.g., pipelines, transformers, substations, PV modules, and wind turbines) to system-wide analysis.

Guest Editor

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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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