# **Special Issue**

### Advanced Cooling Methods, Thermal Protection for Modern Engines, Turbines and Hydrogen Cooled Turbogenerators

### Message from the Guest Editor

This Special Issue will focus on novel techniques for determining the influence of hydrogen-containing fuels and lubricant-cooling environments on durability during long-term service of structural materials, their preparation, wear, cavitation, and modern engines, turbines, turbogenerators performance. This Special Issue will focus on, but is not limited to, the following themes:

- Modern hydrogen-containing fuel systems for engines and turbines;
- Advanced hydrogen-cooling methods and thermal protection for turbogenerators;
- Advanced cooling strategies and thermal protection for hydrogen turbines blades;
- Hydrogen influences crack resistance and fracture character of materials for hydrogen buffer infrastructures;
- In hydrogen-grid distribution: the compatibility of nonsteel (Cu-Ni, Ni-Co alloys, Pb, Al, group 3 metals chalcogenides and group 6 transition metals dichalcogenides) materials;
- Lubricant cooling (liquid, solid, gaseous) of hydrogencontaining technological environments;
- Analysis of conditions of hydrogen-assisted vibration cavitation.

### Guest Editor

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### Deadline for manuscript submissions

closed (11 September 2023)



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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.

### Editor-in-Chief

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