

# Special Issue

## Solar Thermal Power Generation Technology

### Message from the Guest Editors

This Special Issue focuses on cutting-edge research in solar thermal power generation and heat batteries, covering:

- **Concentrating Solar Power** – Novel designs, materials, and tracking systems.
- **Heat Collection & Storage** – Advanced technologies and materials for efficient thermal storage.
- **Solar Heat Pump Cycles** – Integration with sensible, latent, and thermochemical storage.
- **Heat-to-Power Conversion** – Supercritical CO<sub>2</sub>, ORC, Stirling, Rankine, Kalina, and Cascade cycles.
- **Multi-Generation Systems** – Combined heat/power, cooling, and tri-generation.
- **System Integration** – Solar-desalination, industrial heat, grid forecasting, and control.
- **Cost & Economic Analysis** – LCOE and life cycle assessments.
- **Emerging Technologies** – Space-based solar power and thermophotovoltaics.

We welcome original research, simulations, experiments, and review articles.

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### Guest Editors

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### Deadline for manuscript submissions

30 June 2026



## Technologies

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## About the Journal

### Message from the Editor-in-Chief

*Technologies*, provides a single focus for reporting on developments of all technologies, regardless of their application. It is our intention that *Technologies* becomes the journal of choice for both researchers wanting to publish their work and technologists wishing to exploit the high quality research across a wide range of potential applications. Through its open access policy, its quick publication cycle, *Technologies* will facilitate the rapid uptake and development of the research presented, ultimately providing benefit to the wider society.

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### Editor-in-Chief

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#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is  
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