

Special Issue

Active Buildings: From Theory to Practice

Message from the Guest Editors

Active Buildings represent a novel built environment asset class whereby individual buildings are able to support the wider energy network. The concept is founded on the intelligent integration of energy generation, conversion and storage technologies at the building level, community level and beyond to meet heat, power and transport needs. While many of the required contributing low-carbon technologies are already available, substantial technological, social and economic barriers must be overcome in order for the potential of Active Buildings to be fully realised. This Special Issue will present a collection of studies drawn from the portfolio of work being undertaken by the UK's Active Building Centre Research Programme (ABC-RP). Topics to be covered include:

- 3D Stock Modelling;
- Energy Network Modelling;
- Retrofit Optimisation;
- Model- and Data-Driven Predictive Control;
- Multi-vector Energy Optimisation;
- Building Energy Data Monitoring;
- Orthohermography;
- Thermochemical Storage;
- Phase Change Material Storage;
- User Perceptions of Low-Carbon Technology;
- Decision Making Under Uncertainty.

Guest Editors

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Dr. Ahsan Khan

Dr. Josh Sykes

Deadline for manuscript submissions

closed (30 June 2023)



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About the Journal

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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