



Building Simulation: An International Journal* solicits papers for a special issue on **Data-driven Smart Buildings*

Dear Colleagues,

Researchers and practitioners are looking to accelerate energy efficiency adoption and demand flexibility solutions through digitalization with aims to investigate the potential of Software-as-a-Service innovation and intelligent data-driven building automation to reduce energy use in buildings and enable buildings to participate as distributed energy resources in support of increased use of variable renewable electricity sources. Activities in International Energy Agency Energy in Buildings and Communities Programme (IEA-EBC) Annex 81 foresee a world where building-services IT infrastructure makes data accessible and discoverable, supporting advanced analytics, control automation, and AI-driven energy optimization.

This Special Issue aims at the emerging topics of data-driven smart buildings. It will focus on interdisciplinary research in this field and will provide a venue for research findings from a variety of disciplinary perspectives. Example topics include, but not limited to:

- 1) Data platform, data model, and taxonomy for smart building applications;
- 2) Model predictive control for smart building applications;
- 3) Occupant centric control for smart building applications;
- 4) FDD for smart building applications;
- 5) Data-driven solutions for building-grid integration and load flexibility;
- 6) Data-driven building performance evaluation; and
- 7) Data-driven solutions for building cluster and campus systems.

Papers submitted for this special issue are subject to a rigorous peer review procedure before being rapidly and widely disseminated. Upon its acceptance, the paper will go into production immediately. It will be published in the latest regular issue, while be presented on the specific **Topical Collection** webpage simultaneously. In regular issues, **Topical Collection** articles will be clearly marked.

We sincerely invite you to submit your original work to this special issue and are looking forward to sharing your outstanding research outcomes with peers around the world.

Paper submissions: When preparing your manuscript, please follow the Instructions for Authors of *Building Simulation*, which can be downloaded from the journal website (www.springer.com/journal/12273).

Submit your paper online at www.editorialmanager.com/buil and mark “**Special issue on Data-driven Smart Buildings**” in your manuscript.

Submission deadline: **December 31, 2023**

Co-guest Editors:

Zheng O’Neill, Texas A&M University, USA

E-mail: ZONeill@tamu.edu

Jin Wen, Drexel University, USA

E-mail: jinwen@drexel.edu

Linda Xiao, Hong Kong Polytechnic University, Hong Kong, China

E-mail: linda.xiao@polyu.edu.hk

Editorial Office

www.springer.com/journal/12273

E-mail: bsjournal@tsinghua.edu.cn