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The Sustainable Approaches of Energy Management and Intelligent Load Forecasting of HVAC Systems in Buildings

Guest Editor:

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Deadline for manuscript submissions:
closed (25 February 2026)

Message from the Guest Editor

Dear Colleagues,

This Special Issue aims to cover the most recent advances related to the theory, design, modelling, load forecasting, application, control, and condition monitoring of HVAC system. We encourage authors to submit research papers, reviews, technical papers, case studies, and methodologies.
Topics of interest for publication include, but are not limited to:

- Online and offline condition monitoring techniques
- Optimal design methodologies
- Advanced modelling approaches
- Statistical forecasting models (ARIMA; SARIMA; ARMAX; multi-variate regression; Kalman filter; etc.)
- Artificial neural networks (ANNs)
- Knowledge-based expert systems and fuzzy theory and fuzzy inference systems
- Evolutionary computation models and evolutionary algorithms
- Support vector regression (SVR)
- New models for load forecasting demand
- Important variables in the forecasting
- Forecasting applications to the management of the HVAC system
- Data analytics
- Fault detection & diagnosis

Dr. Ali Razban
Guest Editor

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Message from the Editor-in-Chief

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