



2026 Fourth International Conference on Sustainable Mobility Applications, Renewables and Technology (SMART)

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Call for Contributions to the Special Session on Sustainable Buildings and Cities: Integrating Technology, Design, and Human Behavior

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Thematic: Sustainable Buildings and Cities: Integrating Technology, Design, and Human Behavior

Nowadays, the global agenda is increasingly oriented toward advancing sustainable buildings and resilient cities, as a response to climate change, resource scarcity, and rapid urbanization. The built environment is one of the largest contributors to energy consumption, carbon emissions, and environmental impact. Accordingly, there is a growing need to adopt integrated, innovative, and multidisciplinary approaches that enhance energy efficiency, environmental performance, and quality of life.

Sustainable buildings and cities encompass a wide range of strategies, including energy-efficient design, renewable energy integration, smart technologies, circular resource management, and human-centered urban planning. These approaches aim to create built environments that are not only environmentally responsible but also socially inclusive, behaviorally responsive, and economically viable.

Key aspects include:

- **Energy-efficient and climate-responsive design** that minimizes energy demand through passive strategies, advanced materials, and building performance optimization.
- **Integration of renewable energy systems** such as solar PV, solar thermal, and district energy systems within buildings and urban infrastructure.
- **Smart and digital technologies** (e.g., IoT, digital twins, and building management systems) that enable real-time monitoring, control, and optimization of building and urban performance.
- **Sustainable urban planning and design** that promotes compact, mixed-use development, green infrastructure, and sustainable mobility solutions.
- **Circular economy approaches** focusing on resource efficiency, waste reduction, and the use of sustainable and low-carbon materials.
- **Human-centered design and environmental quality**, addressing thermal comfort, indoor environmental quality, health, and well-being.
- **Behavioral and social dimensions of sustainability**, including occupant behavior, user interaction with building systems, environmental awareness, and the role of cultural and social practices in shaping energy consumption and sustainability outcomes.
- **Resilience and climate adaptation strategies** to enhance the capacity of cities and buildings to respond to environmental challenges.

Accordingly, this special session aims to promote **innovative tools, methodologies, and real-world applications** that support the transition toward sustainable and resilient built environments. Contributions addressing **cutting-edge research, behavioral insights, case studies, and interdisciplinary approaches** are highly encouraged.

Submission: Prospective authors are invited to submit an extended abstract of two to three A4 pages. There is no specific template. Abstracts should be submitted directly to the special session organizer via email: farah.alatrash@gnu.edu.jo

Deadlines:	June 19, 2026	Abstract submission
	July 09, 2026	Provisional Acceptance
	July 31, 2026	Full paper submission
	August 15, 2026	Final acceptance