



Acoustics and Noise Control in Buildings

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Message from the Guest Editors

Dear Colleagues,

This Special Issue of *Buildings* on “Acoustics and Noise Control in Buildings” aims at disseminating the latest research related to these two major fields: 1. PROTECTION AGAINST NOISE IN BUILDINGS. 2. COMFORT AND SOUND PERCEPTION IN RESIDENTIAL AND EDUCATIONAL SPACES.

We invite original contributions describing new research, case studies, projects, reviews and state-of-the-art discussions on the following and related topics, including but not limited to:

- Traditional, alternative and optimized sound insulation and impact noise measurement methods.
- Development of new acoustic performing materials and constructive solutions.
- Sound sources identification in buildings and proposed solutions.
- Structure borne noise, vibrations in buildings and their impact on sound insulation and acoustic comfort.
- Acoustics comfort evaluation, in buildings and in urban spaces.
- Standardisation in building acoustics.
- Noise control devices and systems in buildings.
- Service equipment noise in buildings.
- Sound insulation numerical models and simulations.
- Measurement uncertainty in building acoustics.
- Sound insulation in volume construction



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Message from the Editor-in-Chief

Current urban environments are home to multi-modal transit systems, extensive energy grids, a building stock, and integrated services. Sprawling neighborhoods are composed of buildings that accommodate living and working quarters. However, it is expected that the cities and communities of the future will face complex and enormous challenges, including maintenance, interconnectivity, resilience, energy efficiency, and sustainability issues, to name but a few. A smart city uses advanced technologies and a digital infrastructure to improve the outcomes in every aspect of a city's operations. A smart building optimizes the experience of occupants, staff, and management by using a modern and connected environment. Innovations in technology that can bring dramatic improvements to design, planning, and policy are critical in developing the cities and buildings of the future.

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