Special Issue

Computational and Experimental Evaluation of Architectural Acoustics in Enclosures

Message from the Guest Editor

This Special Issue has been prepared to present recent advances and developments in building and room acoustics, including simulation methods, experimental methods, human perception, and new applications. This SI will invite experts from academia and relevant industry to share their research and practical experience. Authors are invited to contribute to this Special Issue with content in the areas of:

- Advances in computational acoustics, auralization, auditory virtual reality, virtual acoustics, uncertainty quantification, experimental simulation, sound field control in rooms;
- Experimental characterization of sound fields, new acoustic elements, such as absorbers, diffusers, and innovative acoustic devices, and their acoustic characterization methods either in situ or in laboratories;
- Human perception of sound in built environments, psychoacoustics, multisensory perceptual evaluation, including sound;
- Best practice case studies in acoustic design, renovation, intervention in buildings.

Guest Editor

Assoc. Prof. Dr. Cheol-Ho Jeong Technical University of Denmark, Lyngby, Denmark

Deadline for manuscript submissions

closed (28 February 2022)



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About the Journal

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.

Editor-in-Chief

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