

Special Issue on
**Sound Absorption and Insulation Materials and
Components for Building Applications**

CALL FOR PAPERS

Indoor acoustic comfort is a very important challenge that can impact health and wellbeing as well as communication aspects, related to a good intelligibility of the acoustic messages, such as general talking, as music or other messages. In this context, a number of details need to be taken into account: room acoustic design, sound generation and propagation, sound insulation and absorption, and the overall impact of noise. These details can be approached by studying the sound absorption, transmission, and reflection properties of materials and components inside the building space as well as investigating their sound insulation performance.

This special issue aims to provide a collection of papers about sound absorption and insulation materials and components able to contribute to indoor acoustic comfort and health. Both review and application specific research papers advancing the state of the art are welcome. Review papers should present comprehensive reference information and a definitive state of the art coverage about the topics considered. Information on the materials and components available on the market and/or recently developed in the literature would be welcome. Research papers will contribute to knowledge with acoustic characterization of innovative materials and components, also at low frequencies, especially highlighting solutions with low impact both on environment (use of recycled materials) and on human health. We invite the researchers to contribute original research articles and review articles showing the performance of materials and components in different scenarios.

Potential topics include but are not limited to the following:

- ▶ Sound absorption materials and components: experimental and numerical characterization
- ▶ Sound insulation materials and components: experimental and numerical characterization
- ▶ Room acoustics: design (geometry and volume)
- ▶ Room acoustics: simulation and experimental validation
- ▶ Building sound insulation: design
- ▶ Building sound insulation: simulation and experimental validation

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/aav/saim/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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