



## Architectural Acoustics: From Theory to Application

Guest Editor:

**Dr. Lamberto Tronchin**

Department of Architecture,  
University of Bologna, 40126  
Bologna, Italy

Deadline for manuscript  
submissions:

**closed (20 June 2025)**

### Message from the Guest Editor

Acoustic quality in buildings is an essential aspect of the constructions' designs. Architectural acoustics include room and building acoustics, which entail the evaluation of sound insulation or acoustic quality, and the measurement or calculus of physical acoustic parameters. Architectural acoustics encompass several topics and applications, ranging from opera houses, theatres, concert halls and auditoriums, to schools, cinemas, restaurants and open spaces. Modelling sound insulation or acoustic quality is an important component of architectural acoustics. Measurements of insertion losses or sound reflections in enclosures by means of multichannel microphone arrays, as well as 3D auralization or psychoacoustic evaluation of the sound quality in a specialized listening room, are still important components of this topic, which includes the human perception of the acoustics of enclosure.

Topic (not limited to):

- 3D auralization;
- Acoustic measurements;
- Sound sources in room acoustics;
- Computational acoustics;
- Listening room design and characteristics;
- Acoustic design of concert halls or auditoriums;
- Virtual acoustic reconstruction of historical venues;





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo**  
Dipartimento di Fisica,  
Politecnico di Milano, Piazza L.  
da Vinci 32, 20133 Milano, Italy

## Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, Embase, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

## Contact Us

---

*Applied Sciences* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/applsci](http://mdpi.com/journal/applsci)  
[applsci@mdpi.com](mailto:applsci@mdpi.com)  
[X@Applsci](https://twitter.com/Applsci)