

Editorial in English

It is with great pleasure that the Editorial Committee of the **Acoustics & Vibrations Journal** has the honor of presenting its fifty-fourth edition (volume 37). In this issue, we continue on the path of innovation and international expansion, an effort that materializes in the welcoming of bilingual — and, boldly, trilingual — contributions, in Portuguese, Spanish, and English. It is already possible to observe the reflection of this initiative on the pages now offered to you.

In this moment of transition, we still feel the remnants of the pandemic that afflicted us. However, the journal not only survives but also reinvents and strengthens itself, navigating through waters of modernization and restructuring. Despite the challenges that persist in the panorama of scientific production and the development of applied technical works, it is with enthusiasm that we note the vigorous advancement of science in acoustics, vibrations, and audio.

This issue, therefore, is not just a testament to the resilience of our scientific community, but also a celebration of the incessant human desire for knowledge and innovation. We invite our readers to dive into the following pages, where they will find not only novelties but also the confirmation that, even in the face of obstacles, our journey in search of excellence and knowledge never ceases.

The 54th edition of the **Acoustics & Vibrations Journal** presents a collection of eleven unique texts. However, this number reveals even greater richness when we contemplate the works in their multiple languages: considering the translated versions, the collection expands to a total of twenty-six texts.

In this edition, we highlight the investigation by Wittmann, Heissler, and Oliveira on the acoustic performance of roofing systems with metal tiles, focusing on the impact of dampening layers on rain noise. This study is set in a contemporary context of climate changes, with noticeable iterations in rain patterns, which in turn can directly influence acoustic quality in buildings, especially those with large spans. Analyzing 12 different roofing configurations under artificial rain conditions, the authors demonstrate that the integration of glass wool between the metal tiles is the most effective, significantly reducing noise transmission. This article is a great read for architects, engineers, and builders looking for solutions to improve acoustic comfort in indoor environments. The article is available in Portuguese and English.

The article by Ortega-Rodríguez, Solís-Sánchez, Valverde-Méndez, and Venegas-Li (a collaboration between researchers from Costa Rica and the United States) examines how intense emotions, such as anger, can distort acoustic signals and, consequently, affect the accuracy of forensic speaker identification. Using advanced techniques to analyze long-term speech spectra, the researchers found that even moderate levels of anger can significantly alter identification outcomes, moving them toward a completely different speaker. This discovery highlights the need for caution when applying these methods in forensic situations, especially when emotions are involved. The article is available in Spanish, Portuguese, and English.

This edition also presents contents originating from two significant milestones in the field of acoustics in Brazil. We begin with a highlight on the 12th Ibero-American Congress of Acoustics (FIA 2020/22), an enriching collaboration with the XXIX Meeting of the Brazilian Society of Acoustics (Sobrac), held in the picturesque city of Florianópolis, SC, from August 28 to 31, 2022. Advancing in time, we turn our attention to the XXX Meeting of Sobrac, scheduled to occur in the vibrant city of Natal, RN, from November 19 to 22, 2023, promising to be another milestone for the acoustic community.

For those interested in the FIA, this edition brings the three models for article submission for the event, in Portuguese, Spanish, and English. Additionally, a report on the congress, kindly provided by professors Júlio Cordioli and Sérgio Silva, enriches the news section, offering a perspective on the developments and discussions that took place there. Regarding the XXX Meeting of Sobrac, we invite our readers to familiarize themselves with the article model specific for this event, along with a detailed call for papers that sheds light on what to expect from the upcoming meeting.

In the inserts, the book review section brings four works¹, namely: Room Acoustics: Design and Modeling; Virtual Experiments in Mechanical Vibrations: Structural Dynamics and Signal Processing; Array Signal Processing: Concepts and Techniques; and Acoustics in Building Rehabilitation — with the first two commented on by the authors themselves —, this insert is available in Portuguese and English. In this section, it is also possible to check the insert in English (previously published in Portuguese), which explains the principles of the L^AT_EX writing system — in which our journal is also edited —, in addition to teaching how to start a new article project using the A&V template. Lastly, we find the report from INAD Brazil 2022 (in three languages), a campaign to raise awareness that this year brought the motto “**In childhood, fun and protection. No noise!**”, to draw attention to the dangers of noise for those at a *tender age*.

In our news section, we find two texts written by Professor Dinara Paixão, the first of which reports on the Sobrac 2022 electoral process (in Portuguese and English). The second deals with the new FIA Board of Directors, in addition to elaborating details of the entity (available in three languages). Also in this section, Paulo Chagas signs the text (bilingual) that informs about the acoustic event organized by the North Regional of Sobrac.

Finally, in the *calls* section, we have details about the XXX Meeting of Sobrac and an invitation for you to join Sobrac.

As you flip through the pages of this edition, we hope that you, dear reader, will be enveloped by the spirit of discovery and the shared passion for acoustics, motivating you to contribute to the continuous growth of this fascinating field.

We would like to thank Sobrac, the authors, and the technical reviewer group for their contribution to this edition.

Enjoy reading!

Cordially,

A&V Editors n^o 54, December 2022.

¹Original names: Acústica de Salas: Projeto e Modelagem; Virtual Experiments in Mechanical Vibrations: Structural Dynamics and Signal Processing; Array Signal Processing: Concepts and Techniques; and A Acústica na Reabilitação de Edifícios.