

Newsletter's Summary

Agenda
Get a reminder on upcoming events and deadlines. Feel free to contribute if you become aware of any change!

News
This month we highlight 'The Rest is Just Noise' podcast and advances in noise-cancelling headphone technology.

Job announcements
Find your dream job in this fresh list of opportunities! If you wish to announce a position, please email the [YAN team](#).

Publications
This month, find a publication by Amneh Hamida, "Guidance to investigate university students' bodily responses and perceptual assessments in sound exposure experiments".

Upcoming Events

January 2025

- 14th **Proposals to update BS 8233 - a deeper dive**
[Manchester, UK](#)
- 22th - 24th **AFPAC'25 Anglo-French Physical Acoustics Conference**
[Loire Valley, France](#)
- 27th - 28th **3rd Underwater Acoustics Data Challenge Workshop 2025**
[Bath, UK](#)

March 2025

- 17th - 20th **DAS|DAGA 2025 51th Annual Meeting on Acoustics**
[Copenhagen, Denmark](#)
- 27th **The Art of Being a Consultant**
[Manchester, UK](#)
- 28th **The Art of Being an Acoustician**
[Manchester, UK](#)

Upcoming Deadlines

January 2025

- 10th - **AFPAC'25**
Anglo-French Physical Acoustics Conference. Loire Valley, France. [Abstract submission](#)
- 19th - **Forum Acusticum Euronoise 2025**
Forum Acusticum Euronoise 2025. Málaga, Spain. [Abstract submission](#)

February 2025

- 01st - **AAAA 2025**
The 11th Congress of the Alps Adria Acoustics Association. Varaždin, Croatia. [Abstract submission](#)

March 2025

- 23rd - **Forum Acusticum Euronoise 2025**
Forum Acusticum Euronoise 2025. Málaga, Spain. [Abstract submission](#)
- 31st - **ICTCA 2025**
16th International Conference on Theoretical and Computational Acoustics. Busan, South Korea. [Abstract submission](#)
- 31st - **DAS|DAGA 2025**
51st Annual Meeting on Acoustics. Copenhagen, Denmark. [Paper submission](#)

News

The Rest is Just Noise Podcast

Did you hear about "The Rest is Just Noise"? Not the book by Alex Ross, but the brilliant podcast that discusses mainly soundscapes around the world with expert guests from acoustics, architecture, and environmental psychology. They also have a series of talks that promote women in acoustics, bringing forward some exciting research. Enjoy learning about the importance of sound in our cities! Check the link: <https://www.justnoisepod.com/1438372/episodes>

Mentoring program

The goal of the Mentoring action is to establish long term links between young acousticians and experienced seniors in order to consolidate the coherence of the EAA and establish bridges between the generation: Seniors-Juniors bridges. More information here: <https://euracoustics.org/products/mentoring/>
Mentor applications for the Mentoring Program are still open. Please use the link below to submit your application:
<https://forms.office.com/Pages/ResponsePage.aspx?id=RRJKOPpR2U2KInGcBcEhEgDj5nFYOAAdJSEXAKKPhMihUQTBOmDhWQ0xDSIZMOVFZUUtRSONSVTUyOS4u>

A look back at the ASSA 2024

The 3rd edition of our Autumn School Series in Acoustics (ASSA) took place from 4th to 8th of November 2024 at Eindhoven University of Technology, hosted by TU/e Building Acoustics. This year's edition was co-organized and sponsored by EAA European Acoustics Association, bringing another week of intensive, nine-to-five, on-site learning to participants from worldwide. Topics of this 2024's edition were: a) Computational Acoustics and Building, b) Room Acoustics.

ASSA 2024 was designed to elevate expertise, offering a deep dive at PhD level into these topics through lectures in the morning and tutorials in the afternoon. This year, 55 participants from 16 countries and 19 lecturers were welcomed. The social program covered coffee breaks, lunches, an opening and closing gathering, and ASSA dinner, creating an excellent environment for connecting early-stage researchers and lecturers. The event was sponsored by EAA European Acoustics Association, Merford, Nieman Groep, NTI Audio, and EAA Young Acousticians Network (YAN), who supported this focused training of emerging acoustics professionals.

Reproduced Sound Debriefing

This year, Reproduced Sound has celebrated 40 years of bringing together researchers from academia and industry in the most welcoming atmosphere! The conference showcased a mix of research, from the expected loudspeaker design to environmental acoustics, computational models, immersive audio and guitar measurement methods. A panel of four experts, Ian Wiggins, Philip Newell, Rob Shepard and Simon Lewis, have conducted an open session where hearing health for audio and acoustic professionals was discussed and brought awareness to the participants. Based on last year's requests, a special presentation and discussion on diversity and neurodiversity was carried out by Mark Bailey (Harman) and James Hipperson (Funktion One Research). And these are just a few of the many inspiring moments that you can find at Reproduced Sound every year!

Acoustics in Practice: A Platform for Acoustics Professionals

Acoustics in Practice is an open-access journal dedicated to sharing practical knowledge and experiences in the field of acoustics. It is open to a diverse audience of practitioners, including consultants, manufacturers, policymakers, and regulators. This journal prioritizes the dissemination of practical information, with a focus on real-world applications and solutions. The journal covers a wide range of topics within acoustics, including environmental noise, building acoustics, and industrial noise. Authors are encouraged to submit well-structured papers with clear explanations and practical insights. More in: <https://euracoustics.org/products/acoustics-practice/>

Advancement noise-cancelling headphone technology

Researchers at the University of Washington have developed a device relevant in noise-cancelling technology. Their AI-powered headphones create a "sound bubble" that allows users to focus on specific sounds within a set radius. The researchers developed a novel AI-powered system that leverages a neural network to process audio signals captured by multiple microphones on the headphones. The idea behind is to have the system trained on a dataset of real-world audio recordings to learn to distinguish between sounds originating from within and outside the desired listening area. By analyzing the time differences of arrival and phase differences of sound waves at different microphones, the system can estimate the spatial location of sound sources. More in <https://www.washington.edu/news/2024/11/14/ai-headphones-sound-bubble-noise-cancelling/>.

Don't miss out on the latest topical issue in Acta Acustica.

The journal has recently published the topical issue in Musical Acoustics, discussing the latest analytical and experimental techniques for understanding the physics of musical instruments. Find out more by accessing the full articles in Acta Acustica, in the "Musical Acoustics: Latest Advances in Analytical, Numerical and Experimental Methods Tackling Complex Phenomena in Musical Instruments". More in: <https://acta-acustica.edpsciences.org/component/topic/?task=topic&id=2117>

A farewell to 2024 🎄❄️🎉

The end of the year is approaching quickly, and a retrospective is almost expected. The YAN has been changing and evolving, bringing all of us together to share knowledge and experiences. Whether you joined us online or in person for one of this year's events and programs, we thank you for becoming a part of our network! On behalf of the YAN team, we wish you all a wonderful Christmas break and an extraordinary new year! We hope to see you all at our future events to celebrate your achievements with all the wonderful young acousticians around the world!

A massive thank you! 🙏

I extend my deepest gratitude to Glen, Diogo, Merve, Michiel, and Seb for their unwavering support, dedication, and enthusiasm in bringing YAN closer to our community over the past two years. Your efforts have been truly inspiring and instrumental in our progress. A special thanks to our incredible Newsletter Committee—Arina, Zinah, Ricardo, Alessio, and Alexander—for your creativity and valuable contributions. It has been a privilege and a deeply rewarding experience to collaborate with you in delivering the newsletter to our audience each month. As I prepare to step aside and pass the torch, I am confident that YAN will continue to thrive. Let's keep up the momentum strong and build on the foundation we've created together!

Marcelo Argotti Gomez

Job Announcements

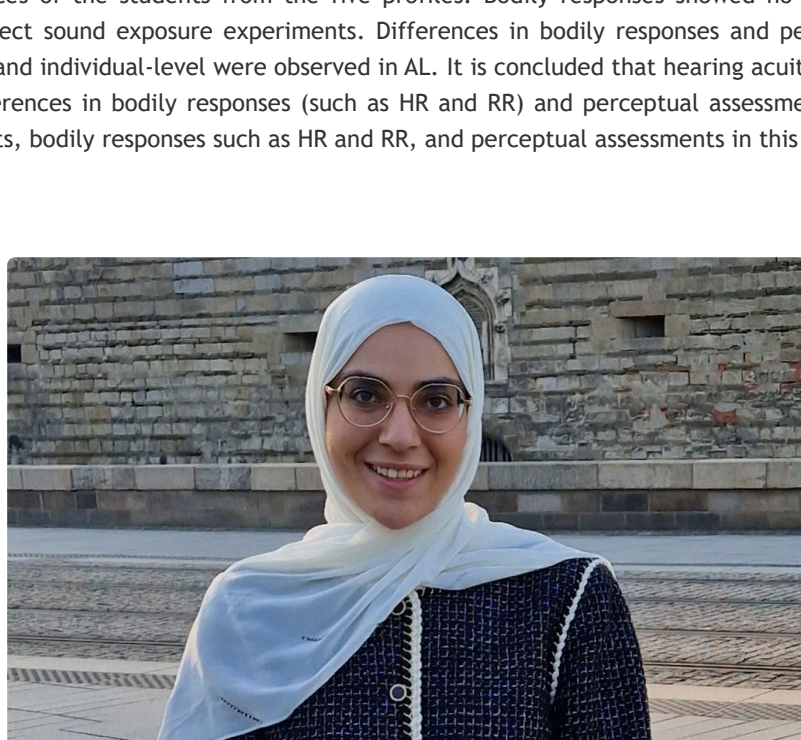
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|---|--|
| <p>Environmental Acoustics Engineer
CSD Engineers
Namur, Belgium.</p> | <p>PhD Studentship: AI-based Modal 3D Environment Model Reconstruction
University of Southampton
Southampton, UK</p> |
| <p>PhD: Physics-informed auralization of urban sound environments
Fraunhofer IBP, Stuttgart, Germany.</p> | <p>Research Associate - Audio and Media Technologies
Fraunhofer IIS, Erlangen, Germany.</p> |
| <p>PostDoc - Machine Learning for Signal Processing
Fraunhofer IIS, Erlangen, Germany.</p> | <p>PostDoc - Development of acoustic imaging algorithms for pulsed noise sources
École de technologie supérieure (ÉTS). Montréal, Canada.</p> |
| <p>Acoustic energy losses in different oscillating flow regimes: Experimental investigations
University of Poitiers, Poitiers, France.</p> | <p>Theoretical evaluation of acoustic parameters of fibrous media by self-coherent homogenization
UMRAE. Strasbourg, France.</p> |
| <p>Mixed speech in aircraft cockpits: Labelling and acoustic measurements
Audio-CVR Laboratory, Paris, France.</p> | <p>Lecturer / Senior Lecturer in Aeroacoustics
University of Bristol, Bristol, UK.</p> |
| <p>PhD position (Univ.Ass.) in Virtual Acoustics / Audio Engineering
IEM, Graz, Österreich.</p> | |

Publications

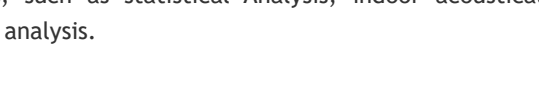
Guidance to investigate university students' bodily responses and perceptual assessments in sound exposure experiments

Previous studies have shown that sound influences students both physiologically and perceptually. However, most of these studies focussed on the effects of sounds at group-level, ignoring individual differences. Therefore, we investigated which indicators can be used to identify differences in bodily responses and perceptual assessments of each individual when exposed to four different sounds. This was done on an audiometric test, the hearing acuity of 15 students (from five different profiles based on their acoustical preferences and needs) was measured. Then, two sound exposure experiments were conducted in the SenseLab: direct sound exposure using earbuds in a laboratory setting, and indirect sound exposure with speakers in a real room setting. During each experiment, the attention level (AL), mental relaxation level (MRL), heart rate (HR), and respiration rate (RR) were measured with wearable devices, and students made perceptual assessments of each condition. The percentage of change normalised the four bodily response measurements among students. Based on correlation analysis and t-tests, bodily responses, and perceptual assessments across experiments were compared, at group-level and individual-level. Six students, who suffered from mild hearing loss in low-frequency sounds, showed bodily responses such as increased HR during exposure to low-frequency sound conditions. Perceptual assessments of different sound types during both lab experiments substantiated the acoustical preferences of the students from the five profiles. Bodily responses showed no strong nor significant correlations with perceptual assessments during the direct sound exposure experiments. Differences in bodily responses and perceptual assessments between the two experiments and between group-level and individual-level were observed in AL. It is concluded that hearing acuity and type of sound (sound frequencies) are key indicators for identifying differences in bodily responses (such as HR and RR) and perceptual assessment. For future research, it is crucial to consider incorporating audiometric tests, bodily responses such as HR and RR, and perceptual assessments in this type of investigations.

About the Author



Amneh Hamida is a PhD candidate at Faculty of Architecture and the Built Environment, Technische Universiteit Delft, the Netherlands. Her research interests focus on occupants' health and comfort concerning indoor environmental quality factors, and specifically acoustical quality. She is engaged with quantitative and qualitative research methods, including questionnaire surveys, field studies, interviews, lab experiments, and data analysis. During her PhD research, she developed several skills, such as statistical Analysis, indoor acoustical measurements, indoor air quality measurements, physiological measurements, and Qualitative data analysis.



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