

Newsletter's Summary

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

News [page 4](#)



Find out more about past and upcoming european events, as well as some research projects around Europe!

Job announcements [page 6](#)



Find your dream job in this fresh list of opportunities!
If you wish to announce a position, please contact the YAN.

Publications [page 7](#)



This month discover a publication about the influence of temperature on acoustic metamaterials.

Board's Highlights



NEWS

This month we are highlighting some upcoming events as well as some research projects going around in Europe... Have a look!

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PUBLI

This month read a publication from the Department of Industrial Engineering at the University of Bologna.

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Upcoming Events



July 2022

4th - 6th — WMVC 2022 — 10th International Conference on Wave Mechanics and Vibrations. **Lisbon, Portugal.**



6th - 8th — AAT — The Acoustics of Ancient Theatres. **Verona, Italy.**



12th - 14th — MPSVA 2022 — International Conference on Modern Practice in Stress and Vibration Analysis. **Oxford, England.**



13th - 15th — IMA — Maths in Music Conference. **London, England.**



August 2022

21st - 24th — Inter-Noise 2022 — 51st International Congress and Exposition on Noise Control Engineering. **Glasgow, Scotland.**



September 2022

5th - 8th — IWAENC 2022 — 17th International Workshop on Acoustic Signal Enhancement. **Glasgow, Scotland.**



11th - 14th — Vienna Talk 2020/22 — 4th Vienna Talk on Musical Acoustics. **Vienna, Austria.**



12th - 13th — OUV 2022 — Optics + Ultrasound V. **London, England.**



12th - 14th — ISMA 2022 — International Conference on Noise and Vibration Engineering. **Leuven, Belgium.**



22nd - 23rd — ISon 2022 — Interactive Sonification Workshop 2022. **Delmenhorst, Germany.**



Upcoming Deadlines



July 2022

1st — ICNV 2022 — 27th International Conference, Noise and Vibration. Niš, Romenia.
Paper submission.



15th — OUV 2022 — Optics + Ultrasound V. London, UK. **Abstract submission.**



22nd — IWAENC 2022 — 17th International Workshop on Acoustic Signal Enhancement. Bamberg, Germany. **Paper submission.**



22nd — ICUA 2022 — International Conference on Underwater Acoustics. Southampton, England. **Paper submission.**



August 2022

15th — ICA 2022 — 24th International Congress on Acoustics. Gyeongju, Korea. **Paper submission.**



31st — SAM 2022 — Symposium on Acoustic Metamaterials #3. Nîmes, France. **Abstract submission.**



September 2022

22nd — TECNIACUSTICA 2022 — 53rd Spanish Congress on Acoustics and XII Iberian Congress on Acoustics. Elche-Alicante, Spain. **Paper submission.**



News



Meet the Danish Sound Cluster

Sound technology is one of Denmark's strongest tech areas. The Danish Sound Cluster supports this by bridging the gap and strengthening collaboration between research and industry. They organise regular networking activities, workshops and webinars that are also open to non-Danish acousticians. You can sign up for their newsletter here: <https://danishsoundcluster.dk/en/>

SONICOM

SONICOM is a European research collaboration to revolutionise the way we interact socially within AR/VR environments and applications. Over five years, the international consortium of researchers and tech experts aims to design a new generation of immersive audio technologies that leverage Artificial Intelligence for personalisation and customisation. What's more, their publications are openly available! Their newsletter is available here: <https://www.sonicom.eu/>

Young NAG Event

On the 29th of June the Dutch Acoustical Society organised an event where young acousticians could meet and pitch their work. The youngest presenter was Tim Millenaar, a first year student at the Amsterdam University of Applied Sciences, which proves that you are never too young to show your interest in the field of acoustics! The presentation slides will soon be available on their website: <https://www.nag-acoustics.nl/>

News



Symposium on Acoustic Metamaterials

The 3rd "Symposium on Acoustic Metamaterials" (SAM) will be held from 19th to 21st October 2022 in Nîmes (France), organised by YRAM (Young Researchers in Acoustic Metamaterials). SAM aims at sharing new advances and breakthroughs as well as fostering the community of young researchers in the field of acoustic metamaterials. Abstracts should be submitted simultaneously with the registration before 31st August 2022. For more information, see the SAM website: <https://sam-2022.sciencesconf.org/>

Don't forget to join us on our social media channels below and join our mailing list [here!](#)



Job Announcements



Director of Audiology. MGH Institute of Health Professionals. **Boston, USA.**



Vibroacoustic Engineer. Alstom. **Savigliano, Italy.**



PhD Position - Bio-based Porous Acoustic Materials. Aalto University. **Espoo, Finland.**



PhD Position - Scattered Acoustic Signals from Marine Organisms. University of Bergen. **Bergen, Norway.**



PhD Position - Studies for Live-Electronics. University for Music and Performing Arts. **Vienna, Austria.**



PhD Position - Audio-Visual Deep Learning for Cognitive Hearing Technology. Technical University of Denmark. **Lyngby, Denmark.**



PhD Position - Photoacoustic Imaging through Engineered Acoustic Metamaterials. Delft University of Technology. **Delft, Netherlands.**



Publications



Influence of thermal deformations on sound absorption of three-dimensional printed metamaterials

Acoustic metamaterials (AMMs) are designed with complex geometrical shapes to obtain unconventional sound-absorbing performances.

As additive manufacturing is particularly suited to print complex structures in a more straightforward and controllable way, AMMs often exploit three-dimensional (3-D) printing techniques. However, when exposed to different temperature conditions, such structures can be affected by geometrical deformations, especially when they are polymer-based. This can cause a mismatch between the experimental data and the expected theoretical performance; therefore, it is important to take thermal effects into account.

The present paper investigates the influence of thermal deformations on the sound absorption of three geometries: a coplanar spiral tube, a system with double coiled resonators, and a neck-embedded resonator.

Measurements were performed on each 3-D printed specimen in the impedance tube after the samples had been placed in a climate chamber to modify the temperature settings ($T = 10\text{--}50\text{ }^{\circ}\text{C}$). Numerical models, validated on the measurements, were employed to quantify the geometrical deformation of AMM structures through a multiphysics approach, highlighting the effects of thermal stress on the acoustic behavior.

The main outcomes prove that the frequency shifts of sound absorption peaks depend on temperature configurations and follow exponential regressions, in accordance with previous literature on polymeric materials.

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INFOS

