

Young Acousticians Network Newsletter #121 March 2023



Newsletter's Summary

Agenda page 2



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

News page 5



We have some great news as another national YAN is created, and some updates on Forum Acusticum, have a look...!

Job announcements page 7



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

Publications page 8



This month discover a publication on microperforated absorbers for use in classrooms.

Board's Highlights



==

FA2023 updates, new N-YANs being established around Europe, Science Awards calls...! Plenty news for our members!

Page 5



This month find a publication by Bilkent University on transparent parallel-arranged MPPs absorbers.

Page 8





Upcoming Events



April 2023

19th - 21st — USS 2023 — Urban Sound Symposium 2023. Barcelona, Spain.



May 2023

No events

June 2023

12th - 14th — CeLyA 2023 — CeLyA Summer School "Hearing in Noise" 2023. Lyon, France.



12th - 16th — Phononics 2023 — 6th International Conference on Phononic. Manchester, England.



18th - 22nd — ICBEN 2023 — 14th ICBEN Congress on Noise as a Public Health Problem. **Belgrade, Serbia.**



21st - 23rd — WTN 2023 — International Conference on Wind Turbine Noise. Dublin, Ireland.



25th - 30th — UACE 2023 — 14th Underwater Acoustics Conference and Exhibition. **Kalamata, Greece.**







Upcoming Deadlines



March 2023

28th — ICU 2023 — International Congress on Ultrasonics. Beijing, China. **Abstract submission**.



31st — I3DA 2023 — International Conference on Immersive and 3D Audio. Bologna, Italy. Abstract submission.



31st — **DAGA 2023** — 49th Annual Conference on Acoustics. Hamburg, Germany. **Paper submission**.



31st — ICSV 2023 — The 29th International Congress on Sound and Vibration. Prague, Czech Republic. Paper submission.



April 2023

14th — ICBEN 2023 — 14th ICBEN Congress on Noise as a Public Health Problem. Belgrade, Serbia. Paper submission.



14th — WTN 2023 — International Conference on Wind Turbine Noise. Dublin, Ireland. Paper submission.



30th — Forum Acusticm 2023 — 10th Convention of the European Accustics Association. Torino, Italy. **Paper submission**.







Upcoming Deadlines



<u>May 2023</u>

10th — UACE 2023 — The Underwater Acoustics Conference and Exhibition. Kalamata, Greece. Paper submission.



19th — INTER NOISE 2023 — 52nd International Congress and Exposition on Noise Control Engineering. Chiba, Japan. **Paper submission**.



31st — **AAAA 2023** — 10th Congress of the Alps Adria Acoustics. Izola, Slovenia. **Abstract submission**.



<u>June 2023</u>

10th — I3DA 2023 — International Conference on Immersive and 3D Audio. Bologna, Italy. Paper submission.



Announce here!

Your company opened a position related to acoustics?

Announce it here and reach young acousticians all over Europe! Contact us through:

eaa.yan@euracoustics.org





News



Danish YAN

The YAN is very happy to announce the establishment of the <u>Danish YAN</u> (or DYAN), with Jibran Khan as Founding Chair, and with support of the Danish Acoustic Society.

The DYAN aims to establish a community for young researchers, students, and professionals from all research (public and private) consultancy-based organisations in Denmark; to connect them; to provide support for relevant issues as needed.

If you are based in Denmark, this is a great chance to connect with other acousticians across the country. You can find more information at their <u>webpage</u>, including how to register for their <u>mailing list</u>.

Science Communication Awards

The Acoustical Society of America has made a call for nominations for the <u>Science</u> <u>Communication Award</u>. This award recognises excellence in the presentation of acoustics to a popular audience. Nominations were due on March 15th, 2023!

Forum Acusticum Abstracts

Now that the abstract submission deadline for <u>Forum Acusticum</u> has passed a the numbers are in, we can share that a total of **1,272 abstracts were submitted**, a record-breaking amount! The YAN board has submitted an abstract too, for the session A22-04: Role of social media in outreaching of acoustics topics.





News



Forum Acusticum Summer School

Registration for the <u>FA2023 Summer School</u> on 8-10 September is now open! There are modules oriented for undergraduate students, PhD students, young researchers and professionals in all sorts of hot topics.







Job Announcements



Acoustic Consultant. Red Twin Ltd. South England, UK.



PhD Position - Structural Acoustics. Institut National des Sciences Appliquées de Lyon. Lyon, France.



Research Engineer - Binaural Audio and Virtual Acoustics. Fraunhofer-Gesellschaft. **Erlangen, Germany.**



Student Internship - Acoustic Metamaterials for Strong Immersion. Institut d'Électronique de Microélectronique et de Nanotechnologie. **Lille, France.**



Environmental Engineer. M+O Immissionsschutz GmbH. Oststeinbek, Germany.



Application Engineer. Comsol Multiphysics GmbH. Goettingen, Germany.



Acoustic Engineer. ATS Bruxelles. Liege, Belgium.



PhD Position - Vibroacoustic Coupling at High Levels. Université de Technologie de Compiègne. **Compiègne, France.**







Publications

Investigating the Potential of Transparent Parallel-Arranged Micro-Perforated Panels (MPPs) as Sound Absorbers in Classrooms

Acoustic deficiencies due to lack of absorption in indoor spaces may sometime render significant buildings unfit for their purpose, especially the ones used as speech auditoria. This study investigates the potential of designing wideband acoustic absorbers composed of parallel-arranged microperforated panels (MPPs), known as efficient absorbers that do not need any other fibrous/ porous material to have a high absorptive performance. It aims to integrate architectural trends such as transparency and the use of raw materials with acoustical constraints to ensure optimal indoor acoustic conditions.

It proposes a structure composed of four parallel-arranged MPPs, which have been theoretically modelled using the electrical Equivalent Circuit Model (ECM) implemented on an acrylic prototype using recent techniques such as CNC machining tools. The resulting samples are experimentally analysed for their absorption efficiency through the ISO-10534-2 method in an impedance tube.

The results show that the prediction model and the experimental data are in good

agreement. Afterward, the investigation focuses on applying the most absorptive MPP structure in a classroom without acoustic treatment through numerical simulations in ODEON 16 Acoustics Software. When the proposed material is installed as a wall panel, the results show an improvement toward optimum values in Reverberation Time (RT30) and Speech Transmission Index (STI)

About the Author

Ela Fasllija is an architect pursuing a Ph.D. in Interior Architecture and Environmental Design at Bilkent University in Ankara, Turkey. Additionally, she is also a teaching and research assistant in the same department. Ela's research primarily focuses on topics such as classroom acoustics, soundscape, acoustic absorbing materials, and micro-perforated panels. Currently, her research is centered on examining the absorption capabilities of large-scale wall/ceiling panels made of transparent inhomogeneous microperforated panels. These panels are designed to offer wideband absorption in the speech frequency range.

Authors: Ela Fasllija and Semiha

Yilmazer

Affiliation: Department of Interior Architecture and Environmental Design, Faculty of Art, Design and Architecture, Bilkent

University

Contact:

e.fasllija@bilkent.edu.tr

NFOS