

## 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 6](#)



Get to know the new YAN Board-Members and ECO.

### Job announcements [page 8](#)



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

### Publications [page 9](#)



This month discover a publication on underwater acoustics  
from the Institute of Structural Analysis of the Leibniz University  
Hannover, Germany.

## Board's Highlights



NEWS

Get to know the new YAN Board Members and ECO, the Early Career Opportunities Event during Forum Acusticum 2020.

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PUBLI

Read about a publication on modeling the noise mitigation of a bubble curtain.

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## Upcoming Events



### February 2020

**17<sup>th</sup> - 19<sup>th</sup> — Medyna 2020** — Mediterranean Conference on Structural Dynamics and Vibroacoustics. Napoli, Italy



**18<sup>th</sup> - 21<sup>th</sup> — DENORMS** — Designs for Noise Reducing Materials and Structures Action Final event. Coimbra, Portugal



**20<sup>th</sup> — Public workshop** — Hands-on workshop Destin. Florida, USA



**25<sup>th</sup> — Public workshop** — Digitization of Urban Noise and Sound in a Smart Nation. Singapore, Singapore



### March 2020

**16<sup>th</sup> - 17<sup>th</sup> — ICVPB 2020** — International Conference on Voice Physiology and Biomechanics. Grenoble, France



**16<sup>th</sup> - 19<sup>th</sup> — DAGA 2020** — 46. Annual German Conference on Acoustics. Hannover, Germany



**31<sup>st</sup> — UKAN SIG-VA Vibro-Acoustics Masterclass.** Liverpool, United Kingdom



### April 2020

**20<sup>th</sup> - 24<sup>th</sup> — FA 2020** — Forum Acusticum. Lyon, France



**28<sup>th</sup> - 29<sup>th</sup> — Acusti.cat 2020** — 3rd Catalan Congress of Acoustics. Sant Cugat del Vallès, Spain



## Upcoming Deadlines



### February 2019

**10<sup>th</sup> — ACOUSTICS 2020** — IoA ACOUSTICS. Chester, United Kingdom.  
**Abstract submission**



**10<sup>th</sup> — SHA 2020** — Symposium on Hydroacoustics. Leba, Poland.  
**Abstract submission**



**13<sup>th</sup> — ICASSP 2020** — International Conference on Acoustics, Speech, and Signal Processing. Barcelona, Spain. **Paper submission**



**13<sup>th</sup> — ICASSP 2020** — International Conference on Acoustics, Speech, and Signal Processing. Barcelona, Spain. **Author registration**



**17<sup>th</sup> — BNAM 2020** — Baltic-Nordic Acoustics Meeting. Oslo, Norway.  
**Paper submission**



**29<sup>th</sup> — Acustica 2020** — Iberian Acoustics Congress. Faro, Portugal.  
**Abstract submission**



Announce here !

Your company opened a position related to acoustics ?

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

[yan@euracoustics.org](mailto:yan@euracoustics.org)

## Upcoming Deadlines



### March 2019

**15<sup>th</sup> — Internoise 2020** — International Congress and Exposition on Noise Control Engineering. Seoul, Korea. **Abstract submission**



**17<sup>th</sup> — FA 2020** — Forum Acusticum. Lyon, France.  
**Paper submission**



**23<sup>th</sup> — SHA 2020** — Symposium on Hydroacoustics. Leba, Poland.  
**Paper submission**



**26<sup>th</sup> — Quiet Drones** — A Symposium on Noise from UASs/UAVs. Paris, France.  
**Paper submission**



**27<sup>th</sup> — ACOUSTICS 2020** — IoA ACOUSTICS. Chester, United Kingdom.  
**Paper submission**



**31<sup>st</sup> — DAGA 2020** — 46. Annual German Conference on Acoustics. Hannover, Germany. **Paper submission**



**31<sup>st</sup> — ISNVH 2020** — International Styrian Noise, Vibration and Harshness Congress. Graz, Austria. **Paper submission**



**31<sup>st</sup> — ICBEN 2020** — Congress on Noise as a Public Health Problem. Stockholm, Sweden. **Paper submission**



**31<sup>st</sup> — Hearing in noise** — CeLyA Summer School 2020. Lyon, France.  
**Registration Deadline**



## April 2019

**15<sup>th</sup> — Acustica 2020** — Iberian Acoustics Congress. Faro, Portugal.  
**Paper submission**



**24<sup>th</sup> — ICUA 2020** — International Conference on Underwater Acoustics.  
Southampton, United Kingdom. **Paper submission**



Did we miss a date ?

**Behind the YAN, there're  
humans you can help!**

The agenda listing is all gathered by hand: if you think we missed something relevant, don't hesitate to tell us!

**[yan@euracoustics.org](mailto:yan@euracoustics.org)**

## News



### New board members!

The board of the YAN constantly evolves, getting new members and saying goodbye to others after a while. Recently, the board has gotten two new members: Elie Abi Raad and Theo Cavaliere, which we introduce to you today.

The YAN has plenty of projects and is **always looking for more people** to join the adventure and help us make them happen. If you want to try helping the acoustics community, be involved in international collaborations and get hands-on experience in driving challenging projects, contact us!

#### About Théo

Hi! I am Théo, 25, and current board member of the YAN.

I grew up in the countryside near Avignon, in southern France, where I stayed for the most part until high-school. During those years, I've developed an interest into making music using computers. It helped me understand the link between the design of audio signals and the underlying maths and physics of acoustics. At this point I was determined to pursue graduate studies. Then, I first took a BSc in engineering sciences, followed by a MSc of research in acoustics. Currently in the last year of my PhD at LAUM, France, I work



on numerical modelling of anisotropic and graded porous media.

In the past few years, I had the opportunity to participate in different scientific events since the LAUM has a significant impact on French and European research in acoustics. I always try to integrate myself into the different communities, and to give a hand to organising committees.

This is also why I joined the YAN in the middle of last year, in order to help at organising events and enhance the interactions within the community.

Moreover, I currently am one of the co-chair of the YRAM (Young Researchers in Acoustic Metamaterials) association, through which we have organized two conferences, in Spain and Italy. It is called SAM (Symposium on Acoustic Metamaterials) and aims at fostering the interaction of young researchers in the topic, with the help of the DENORMS Cost Action.

Otherwise, I am passionate about non-linear multi-objective optimizations, and everything number-related; per se, online tactical shooters video games, learning digits of pi and speed-solving the Rubik's cube etc. So, it's no small thing to say that I am an overall nerd.



## News



### About Elie



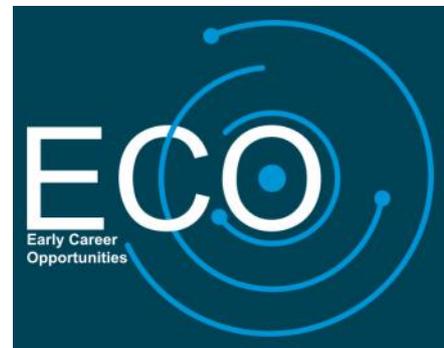
Elie Abi Raad got his Bachelor's in Mechanical Engineering at the American University of Beirut (Lebanon) in 2015 and his Masters in Mechanical Engineering with a focus on Acoustics at the Université Paris-Saclay (France) in 2017.

He is currently doing his PhD and working as a research assistant at the Institute for Technical Acoustics in Aachen, Germany. His research focuses on the vibroacoustics of Ultrasonic Welding: using the airborne and structure-borne sound to analyse and understand the process. Outside of work, Elie spends time with music, boxing, and chess. He has been part of the YAN team since October 2019.

### ECO - Early Career Opportunities

During Forum Acusticum 2020, April 20th-4th, the YAN and its partners will organise a number of events. Particularly, in collaboration with the Early Career Special Interest Group of the UK Acoustics Network, we will organise ECO. This Early Career Opportunity event will allow acousticians looking for job opportunities to meet academics and companies with open positions.

More info on registration and special date will be communicated soon.



## Job Announcements

**Environmental Consultant (Noise Engineer)**, Via Consultancy. West Bridgford, Nottinghamshire, United Kingdom.

**Deadline: February 21, 2020**



**Principal Acoustics Consultant**, Cass Allen. Manchester, United Kingdom.



**Senior Technical Officer (Environmental Protection)**, Kirklees Council. Huddersfield, United Kingdom.



**Control Engineer for Building Acoustics**, Applus. Rubí, Spain.



**Acoustics Engineer**, Tenneco. Rybnik, Poland.



**Noise, Acoustics and Vibrations Team Leader**, RWDI. Milan, Italy.



**Référent Méthodes Acoustiques** (in French), ONERA: French Aerospace Lab. Auvergne-Rhône Alpes, France.



**Acoustical Engineer**, Atlas Copco Group. Antwerp, Belgium.



**Development Engineer Acoustics**, Brose Group. Belgrade, Russia.



**Development Engineer for Acoustic Sensors**, MED-EL. Innsbruck, Austria.



## Publications



### Modeling the noise mitigation of a bubble curtain

The bubble curtain is one of the most used measures to reduce underwater pile driving noise. A model of the local distribution of the effective wavenumber was developed. The bubble size distribution was derived from tank measurements. The local distribution of the air fraction was determined by means of an integral method. In a preliminary step, the transfer characteristics of a bubble curtain were studied. The results show a decrease of the transmission coefficient for higher frequencies and additionally for lower water depths. For lower frequencies,  $\lambda/2$ -transmission can be observed. Examining the noise mitigation of a bubble curtain under offshore conditions, a model of the acoustical scenario was developed. Two different offshore measurement sites are described in detail and compared to the modeling results. The distance between bubble curtain and the pile was identified as an important parameter affecting the noise mitigation. The presented approach shows an appropriate representation of the noise mitigation and allows, due to its generic definition, for future investigations of various aspects, e.g., the influence of the soil or the effect of an extra pile near system on the noise mitigation.

### About the author

Tobias Bohne is a research associate at the Institute of Structural Analysis of the Leibniz University Hannover. In his work, he focuses



mainly on the modelling of noise mitigation systems for offshore pile driving noise. Since 2016, he leads a group of two young ambitious acousticians with the focus on sound propagation of onshore and offshore wind turbine noise.

In the field of acoustics, Tobias is fascinated by the great interdisciplinarity with, for example, the fluid mechanics. In his first paper in this field, Tobias proposes a modelling approach of the noise mitigation of a bubble curtain. He combines an acoustic model of the bubbles with an accurate submodel of the fluid dynamics.

Tobias has a Bachelor degree in the field of Naval Architecture and Offshore Engineering from the University of Applied Sciences of Bremen and a Master degree in Mechanical engineering from the University Bremen. He wrote his Master Thesis together with Airbus in the field of thermofluid dynamic.

INFOS

**Author:** Tobias Bohne  
**Affiliation:** Institute of Structural Analysis, Leibniz University Hannover, Germany

**Contact:**  
*t.bohne@isd.uni-hannover.de*

