

7th International Caparica Conference in

**ULTRASONICS 2025**

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**22 – 26  
JUNE**

# HANDSCHEDULE

7th International Caparica Conference on  
Ultrasonic-based applications from analysis to  
synthesis

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## **ULTRASONICS 2025**

**7<sup>th</sup> International Caparica Conference on Ultrasonic-based applications from analysis to synthesis**

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Caparica – Portugal, 2025

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WELCOME

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22<sup>nd</sup> – 26<sup>th</sup> June 2025



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# WELCOME ULTRASONICS 2025

## 7<sup>th</sup> International Caparica Conference on Ultrasonic-based applications from analysis to synthesis

It is with great pleasure that we welcome you to Ultrasonics 2025, held in the coastal setting of Caparica, Lisbon, from June 22 to 26. This international conference represents a vital gathering point for researchers, engineers, clinicians, and innovators who are shaping the future of ultrasound science and technology.

Ultrasonics continues to evolve as one of the most versatile and rapidly expanding fields in contemporary science. The range of applications - from non-invasive diagnostics and therapeutics, to sustainable food processing and advanced materials engineering - reflects the breadth of creativity and technical excellence that defines this community.

This year's edition features an outstanding lineup of plenary speakers who exemplify the field's diversity and depth. Timothy Mason (UK), a pioneer in sonochemistry, has been instrumental in the development of ultrasound-based green technologies. Brijesh Tiwari (Ireland) brings innovative work in ultrasonic food processing and the extraction of bioactive compounds. Anu Subramanian (USA) contributes key advances in biomedical ultrasound, particularly in regenerative medicine and inflammation control. Joseph Kost (Israel) is internationally recognized for his work in ultrasound-mediated drug delivery and non-invasive therapeutic systems.

Andreas Herrmann (Germany) applies ultrasonics to materials synthesis and functional chemistry, while Kwanggeun Lee (South Korea) leads developments in high-frequency transducers and advanced medical imaging. Simon Rabinowitz (USA) is known for integrating ultrasound into clinical hepatology and pediatrics, and Gail ter Haar (UK) stands at the forefront of focused ultrasound therapy in oncology, translating fundamental research into impactful clinical tools.

In the past year alone, the field has seen major scientific breakthroughs. Researchers at Caltech developed an ultrasound-triggered 3D-printed drug delivery system capable of releasing chemotherapy *in vivo*, opening

## WELCOME

new avenues for personalized, implantable therapeutics (Reuters, 2025: <https://www.reuters.com/business/healthcare-pharmaceuticals/health-rounds-ultrasound-triggers-experimental-3d-drug-delivery-implants-2025-05-09>). At NC State University, a novel set of quantitative ultrasound parameters was used to accurately assess lung disease in animal models, representing a critical advance in bedside pulmonary diagnostics (NC State News, 2024: [https://www.sciencedaily.com/releases/2024/08/240813131956.htm?utm\\_](https://www.sciencedaily.com/releases/2024/08/240813131956.htm?utm_)).

Further innovations include the creation of wearable ultrasound devices—flexible, adhesive patches that can monitor muscle and joint activity in real time—ushering in a new era of mobile, non-invasive diagnostics. Focused ultrasound has also been shown to safely open the blood–brain barrier and assist in the reduction of amyloid plaques in Alzheimer’s patients, pointing toward transformative potential in the treatment of neurodegenerative diseases. Additionally, the development of vortex ultrasound techniques for the non-invasive removal of blood clots in cerebral venous thrombosis illustrates the continuing power of ultrasonics to address urgent clinical challenges.

Under the scientific leadership of J.L. Capelo, Ultrasonics 2025 presents an ambitious and forward-looking program that reflects the dynamic and interdisciplinary nature of the field. Through plenary lectures, oral and poster sessions, workshops, and networking opportunities, this conference provides a platform for new ideas to emerge, collaborations to take shape, and applications to transition from the lab to the real world.

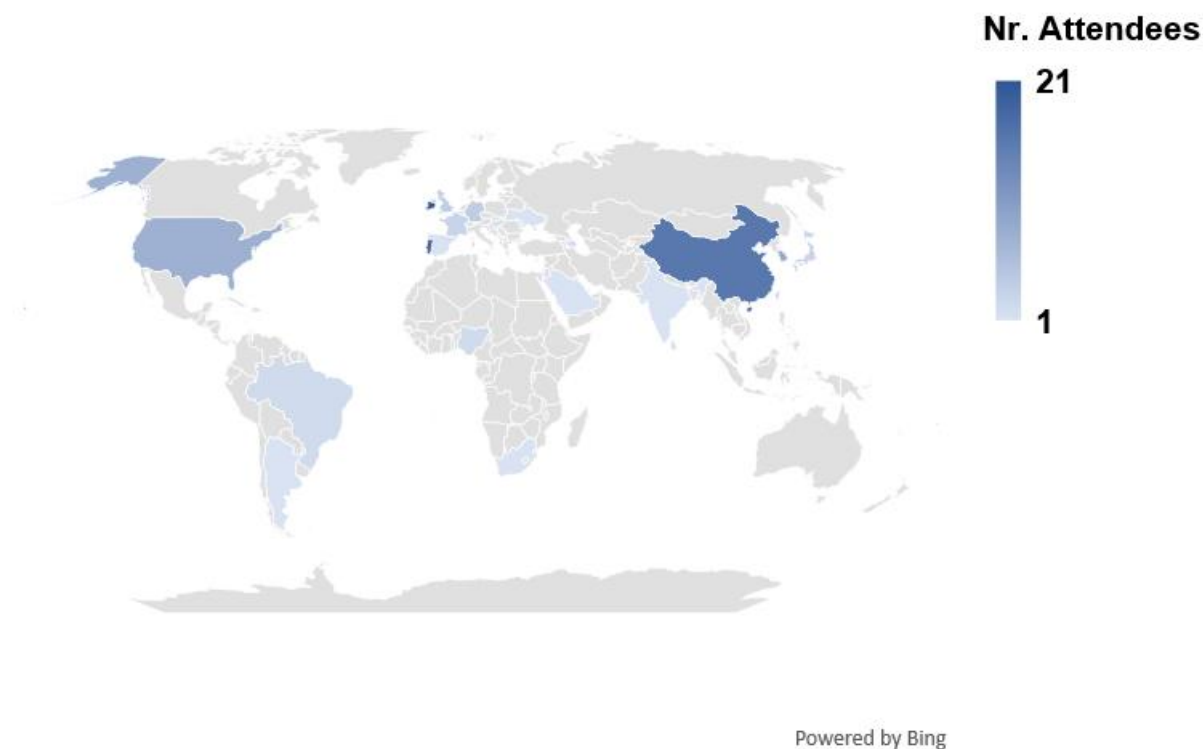
We would like to thank all participants, contributors, and partners for making this event possible. We look forward to an exciting and productive meeting, and to continuing the journey of discovery and innovation in ultrasonics—together.

Caparica, June 2025

José L. Capelo,  
On behalf of the BIOSCOPE Group.



## 7<sup>th</sup> ULTRASONICS 2025 Geographic Distribution of Participants



**Figure 1 - Geographic distribution of delegates at the 7th ULTRASONICS 2025 Conference.** Ireland (21), Portugal (19), China (16), South Korea (9), United States of America (8), Germany (4), UK (4), Croatia (3), France (3), Japan (3), Taiwan (3), United Kingdom (3), Azerbaijan (2), Brazil (2), Israel (2), Nigeria (2), Argentina (1), Belgium (1), Cyprus (1), India (1), Saudi Arabia (1), Serbia (1), South Africa (1), Spain (1), Ukraine (1).



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# COMMITTEES

# CONFERENCE CHAIRS

## José Luis Capelo Martínez



Full Professor

Head of the Bio-analytics & Proteomics Laboratory  
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 Chairman of the PROTEOMASS Scientific Society

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Dr. J. L. Capelo got his PhD from the University of Vigo (2002), made a post-doc in the IST-UL in Lisbon (2002-2005) and then was appointed as a researcher at REQUIMTE (FCT-UNL, 2005-2009). Then, he moved to the University of Vigo as PI (2009-2012). He was appointed assistant professor in the NOVA FCT in 2012, where he is currently based. In 2017, he got a position in Analytical Proteomics at NOVA FCT and became an associate professor of Biochemistry in the Department of Chemistry at NOVA FCT. In 2024, he became a full professor of Biochemistry at the same institution. Dr. Capelo is a Fellow of the Royal Society of Chemistry and a member of the Portuguese Chemistry Society.

He is the head of the Bio-analytics & Proteomics Laboratory and co-head of the BIOSCOPE Research Group ([www.bioscopegroup.org](http://www.bioscopegroup.org)), Chairman of the PROTEOMASS Scientific Society, and Founder co-CEO of the Chemicals start-up Nan@rts. Dr. Capelo has developed research on the following topics: (i) Quantification of metal and metals species in environmental and food samples, (ii) new methods to speed protein identification and quantification using mass spectrometry-based workflows, (iii) accurate bottom-up protein quantification, (iv) Bacterial identification using mass spectrometry, (v) fast determination of steroids in human samples; (vi) biomarker discovery, (vii) Application of dyes and chemosensor to the detection/ quantification of metals and (viii) new applications of Nanoparticles in nanoproteomics and nanomedicine. Dr. Capelo has mentored 12 PhDs.

## Carlos Lodeiro Y Espiño



Full Professor

Head of the Nanosynthesis, Chemosensors and Spectroscopy Laboratory  
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Professor C. Lodeiro graduated in Chemistry in 1995 and received his PhD in chemistry in 1999 by the University of Santiago de Compostela, Spain. In 1999 he moved to the NOVA University Lisbon (UNL), Portugal as a European Marie Curie postdoctoral researcher in a project concerning molecular devices and machines, and in 2004 he became a fellow researcher and invited assistant lecturer at the REQUIMTE-CQFB, Chemistry Department (UNL). In 2008 Dr. Lodeiro got the habilitation in Chemistry in Spain, and a year later in 2009 he moved to the University of Vigo, Faculty of Sciences of Ourense (FCOU), Spain as IPP (Isidro Parga Pondal) researcher-lecturer. In 2012 became Assistant Professor at the Chemistry Department UCIBIO-REQUIMTE Laboratory in the NOVA Science and Technology School, UNL. Dr. Lodeiro is Fellow of the Royal Society of Chemistry since 2014 and member of the Portuguese Chemistry Society since 2002 and the American Chemical Society since 2016. In 2017 got the habilitation in Inorganic Analytical Chemistry in Portugal at the FCT-UNL and became Associate Professor in the Chemistry Department FCT-UNL. Presently he co-leads the BIOSCOPE research group ([www.bioscopegroup.org](http://www.bioscopegroup.org)), he is CEO of the PROTEOMASS Scientific Society, and Founder coCEO of the Chemical start-up Nan@rts. His research interest comprises (i) physical-organic and physical-inorganic chemistry of dyes and chemosensors, (ii) synthesis of Functionalized Nanoparticles, Nanocomposites and



Nanomaterials (iii) applications of nanomaterials in environmental research, (iv) application of nanomaterials in bio-medical research, (v) supramolecular analytical proteomics, and (vi) Onco and Nanoproteomics. C. Lodeiro has mentored 12 PhDs.

## Elisabete Oliveira

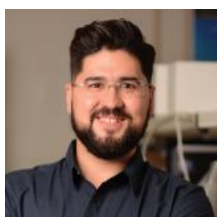


Head of the Laboratory for Mesoporous Silica Nanoparticles, Imaging and Drug Delivery  
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Dr. E. Oliveira graduated, in 2006, in Applied Chemistry from FCT- Nova University Lisbon, Portugal, in 2007 obtained a master's in biotechnology and completed a PhD degree in Biotechnology in 2010, at the same University. In 2013, she obtained a second PhD degree in "Food Science and Technology" by the Science Faculty of Ourense Campus at the University of Vigo, Spain. Currently, she is Assistant Researcher at LAQV-REQUIMTE FCT NOVA (Portugal). In 2008, E. Oliveira received the prize in Creativity and Quality in Research Activity in sensors area, attributed by Foundation Calouste Gulbenkian, Portugal and in 2016 she was awarded with the Prize For Women in Science, "Medalhas de Honra L'Oréal Portugal para as Mulheres na Ciência" in the field of health Sciences. Her scientific interests are focused in (i) synthesis of new bio-inspired emissive ligands as fluorescence chemosensors, (ii) supramolecular chemistry (Photophysics and photochemistry), (iii) applications in vitro (solution and solid studies) and in vivo (cell imaging studies); (iv) synthesis of new emissive nanomaterials, as Quantum Dots and Mesoporous Silica nanoparticles for dual drug delivery and biomarker discovery in biological samples, and (v) Antibacterial studies of cargo-delivery mesoporous nanoparticles.

## Hugo Miguel Santos



Head of the Laboratory for Biological Mass Spectrometry – Isabel Moura - BIOSCOPE Research Group, LAQV-REQUIMTE, Department of Chemistry – NOVA School of Science and Technology, NOVA University Lisbon (Caparica, Portugal) Chief Proteomics Technology Officer PROTEOMASS Scientific Society  
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HM Santos began his career in Proteomics in 2007, embarking on a joint PhD program in Biochemistry at NOVA University Lisbon (Portugal) and the Turku Centre for Biotechnology (Finland) working with state-of-the-art MS instrumentation for biomedical research. H.M. Santos took up a post-doc at the University of Vigo (2010-12 to 2011-03) followed by a move to the Institute of Biomedicine and Biotechnology (Barcelona, Spain, 2011-04 to 2012-12) to advance biomedical applications of mass spectrometry and translational research. In 2013 H.M. Santos moved to FCT NOVA to continue his research in Biological Mass Spectrometry. Currently, he is Assistant Researcher at LAQV-REQUIMTE FCT NOVA (Portugal). H.M. Santos is Member of the Royal Society of Chemistry. His scientific interests are focused on (i) Identification of molecules involved in complex biological processes, characterize their structure and monitor how their abundance may change during these processes, in order to gain insights into the underlying molecular mechanisms; (ii) nano-proteomics and nano-medicine; (iii) application of chemosensor to the detection/quantification of metals; (iv) Mass spectrometry analysis of organic molecules, metal complexes and supramolecular systems. To date, he has supervised six PhD students to completion and is currently mentoring an additional four.



# SCIENTIFIC COMMITTEE

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**Andreas Herrmann | PhD**

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***Kwanggeun Lee | PhD***

*Dongguk University (South Korea)*

***Anu Subramanian | PhD***

*University of Alabama-Huntsville (USA)*

***Joseph Kost | PhD***

*Ben-Gurion University (Israel)*

***Simon Rabinowitz | PhD***

*Downstate Health Sciences University (USA)*

***Gail ter Haar | PhD***

*The Institute of Cancer Research (UK)*



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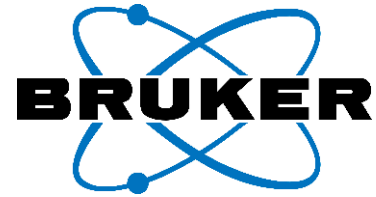
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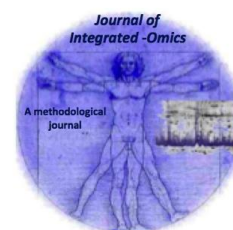
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# **PLENARY LECTURES**

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## **Timothy Mason**

PL1. Monday, June 23rd, 9:00 AM

Coventry University (UK)

***“Sonochemistry and Sonomechanobiology - Exploring the Links”***

## **Andreas Herrmann**

PL2. Monday, June 23rd, 9:40 AM

Aachen University (Germany)

***“Sonopharmacology and Sonogenetics: Controlling the Activity of Drugs, Proteins and Nucleic Acids by Ultrasound”***

## **Brijesh Tiwari**

PL3. Tuesday, June 24th, 9:00 AM

Teagasc Food Research Centre (Ireland)

***“Ultrasonics in Agri-Food Innovation: Bridging the Gap from Lab Discovery to Industrial Scale-Up”***

## **Kwanggeun Lee**

PL4. Tuesday, June 24th, 9:40 AM

Dongguk University (South Korea)

***“Effects of ultrasound on the structural and physicochemical properties of various extracts from food materials”***

## **Anu Subramanian**

PL5. Wednesday, June 25th, 9:00 AM

University of Alabama-Huntsville (USA)

***“Inflammation Control in Cartilage Repair and Regeneration: Understanding the Basis of Ultrasound in Mitigating Inflammation and Promoting Repair”***

## **Joseph Kost**

PL6. Wednesday, June 25th, 9:40 AM

Ben-Gurion University (Israel)

***“Ultrasound for a noninvasive selective cancer therapy”***

## **Simon Rabinowitz**

PL7. Thursday, June 26th, 11:20 AM

Downstate Health Sciences University (USA)

***“E-POCUS (Endoscopic POCUS) implementation to study esophageal remodeling in eosinophilic esophagitis (EoE).”***

## **Gail ter Haar**

PL8. Thursday, June 26th, 12:00 AM

The Institute of Cancer Research (UK)

***“Histotripsy: the new cavitation kid on the block”***



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# **KEYNOTE PRESENTATIONS**



# KEYNOTE PRESENTATIONS

## **Kyungho Yoo**

KN1 Monday, June 23rd, 11:30 AM

Yonsei University (South Korea)

***“Artificial Intelligence Assisted Transcranial Focused Ultrasound”***

## **Jeong Kyu Kim**

KN2 Monday, June 23rd, 11:50 AM

Daegu Catholic University (South Korea)

***“Application of ultrasound in the salivary gland surgery”***

## **Hersh Sagreiya**

KN3 Monday, June 23rd, 12:10 PM

University of Pennsylvania (USA)

***“Unsupervised Learning Approach for Treatment Effectiveness Monitoring Using Contrast-Enhanced Ultrasound and Curvature Learning”***

## **Toru Omodani**

KN4 Monday, June 23rd, 12:30 PM

Tokyo Advanced Orthopaedics (Japan)

***“Ultrasound-Guided Percutaneous Ultrasonic Tenotomy for Refractory Patellar Tendinopathy in High-Level Athletes: A Case Series”***

## **Xianglu Zhu**

KN5 Tuesday, June 24th, 11:30 AM

Wiley (China)

***“Wiley Empowers the Publication of Research Outcomes in Ultrasound Science and Its Interdisciplinary Fields in Food and Health Science”***

## **Brindusa Dragoi**

KN6 Tuesday, June 24th, 11:50 AM

University of Novi Sad (Serbia)

***“Ultrasound-Assisted Extraction Using Natural Deep Eutectic Solvents (NADES) for Enhanced Recovery of Bioactive Compounds”***

## **Ronald Halim**

KN7 Tuesday, June 24th, 12:10 PM

Ben-Gurion University (Israel)

## **Rodrigo Costa-Felix**

KN8 Wednesday, June 25th, 11:30 AM

Brazilian National Institute of Metrology (Brazil)

***“Ultrasound-Assisted Extraction Using Natural Deep Eutectic Solvents (NADES) for Enhanced Recovery of Bioactive Compounds”***

## **Daniel Anang**

KN9 Wednesday, June 25th, 11:50 AM

Manchester Metropolitan University (UK)

***“Enhancing Salt Reduction in Meat Products through Ultrasound Technology: A Novel Approach”***

**Yinfei Zheng**

KN10 Wednesday, June 25th, 12:10 PM

**Jaesok Yu**

KN11 Wednesday, June 25th, 12:30 PM

DGIST (South Korea)

***“Ultra-sensitive Silicon-photonics optomechanical ultrasound sensor for photoacoustic microscopy: a feasibility study”***

**Moshen Gavahian**

KN12 Thursday, June 26th, 9:00 AM

National Pingtung University of Science and Technology (Taiwan)

***“Ultrasound-assisted Food Processing: Enhancing Sustainability through Bioactive Extraction and Retention”***

**Petros Mouratidis**

KN13 Thursday, June 26th, 9:20 AM

The Institute of Cancer Research London (UK)

***“Transcriptomic profiling of the immune response in orthotopic pancreatic tumours exposed to boiling histotripsy”***

**Gisandro Reis de Carvalho**

KN14 Thursday, June 26th, 9:40 AM

Federal Institute of Education, Science and Technology (Brazil)

***“High-Intensity Ultrasound as Alternative to Improve Barley Malt Production”***

**Pierre G  lat**

KN15 Thursday, June 26th, 10:00 AM

University College London (UK)

***“OptimUS: An open-source Python library for 3D ultrasonic wave propagation”***



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JUNE**

# **PROGRAM BY DAY**

*Sunday, June 22<sup>nd</sup>*

17:30–19:00	Conference Registration   Hall Room Costa Azul – 8 <sup>th</sup> floor
19:30	Welcome Dinner & Portuguese Fado Music Performance

**DAY 1 – Monday, June 23<sup>rd</sup> – Room Costa Azul (8<sup>th</sup> Floor)**

8:30	<b>Opening session   Room Costa Azul – 8<sup>th</sup> floor</b>	
	<i>Chair: José L. Capelo (Portugal)</i>	
9:00 - 9:40	<b>Plenary 1.</b>	<b>Timothy J. Mason</b> , Coventry University (UK)
	<i>Sonochemistry and Sonomechanobiology - Exploring the Links</i>	
9:40 - 10:20	<b>Plenary 2.</b>	<b>Andreas Herrmann</b> , Aachen University (Germany)
	<i>Sonopharmacology and Sonogenetics: Controlling the Activity of Drugs, Proteins and Nucleic Acids by Ultrasound</i>	
10:30 - 11:30	<b>Coffee Break   Poster Session &amp; Networking</b>	
11:30 - 11:50	<b>Keynote 1.</b>	<b>Kyungho Yoon</b> , Yonsei University (South Korea)
	<i>Artificial Intelligence Assisted Transcranial Focused Ultrasound</i>	
11:50 - 12:10	<b>Keynote 2.</b>	<b>Jeong Kyu Kim</b> , Daegu Catholic University (South Korea)
	<i>Application of ultrasound in the salivary gland surgery</i>	
12:10 - 12:30	<b>Keynote 3.</b>	<b>Hersh Sagreiya</b> , University of Pennsylvania (USA)
	<i>Unsupervised Learning Approach for Treatment Effectiveness Monitoring Using Contrast-Enhanced Ultrasound and Curvature Learning</i>	
12:30 - 12:50	<b>Keynote 4.</b>	<b>Toru Omodani</b> , Tokyo Advanced Orthopaedics (Japan)
	<i>Ultrasound-Guided Percutaneous Ultrasonic Tenotomy for Refractory Patellar Tendinopathy in High-Level Athletes: A Case Series.</i>	
13:00 - 14:30	<b>Lunch</b>	
	<i>Chair: Timothy Mason (UK)</i>	
14:30 - 14:45	<b>O.A1  </b>	<b>Kausik Sarkar</b> , George Washington University (USA)
	<i>Pressure sensitivity of contrast microbubbles for subharmonic aided pressure estimation (SHAPE)</i>	
14:45 - 15:00	<b>O.A2  </b>	<b>Alexey S. Peshkovsky</b> , Industrial Sonomechanics LLC (ISM) (USA)
	<i>Scalable Ultrasonic Manufacturing of Nano-Formulations for Enhanced Pharmacokinetic Performance of Bioactive Compounds</i>	



## PROGRAM BY DAY

15:00 – 15:15	<b>O.A3   Xinyu Wang</b> , University of Electronic Science and Technology of China (China) <i>Advanced Perovskite based X-ray Detection and Imaging Applications using Ultrasonic Spraying Techniques</i>
15:15 – 15:30	<b>O.A4   Ivan M. Suarez-Castellanos</b> , LabTAU, INSERM (France) <i>Modulating the Neurochemical Environment with Focused Ultrasound: Insights from In Vitro and In Vivo Models</i>
15:30 – 15:45	<b>O.A5   Wang Chengyong</b> , Guangdong University of Technology (China) <i>Acoustic manufacturing technology of high-performance components and regulation mechanisms</i>
15:45 – 16:15	<b>Coffee Break   Poster Session &amp; Networking</b>  <i>Chair: Andreas German (Germany)</i>
16:15 – 16:30	<b>O.A6   Noboru Sasaki</b> , Hokkaido University (Japan) <i>Diagnose and monitor urothelial carcinoma of dogs using ultrasound imaging and urine proteomics</i>
16:30 – 16:45	<b>O.A7   Madhumitha Dhanasekaran</b> , King Abdullah University of Science and Technology (Saudi Arabia) <i>Acoustic Cavitation Driven protein colloid formation: Structural Mechanism and Rheological Insights</i>
16:45 – 17:00	<b>O.A8   Marco Garcia-Vaquero</b> , University College Dublin (Ireland) <i>Laboratory/pilot scale ultrasound technologies for protein extraction from faba bean</i>
17:00 – 17:15	<b>O.A9   Youness Boukarkour</b> , Université de Poitiers (France) <i>Controlling radicals generation towards selective sonoelectrocatalytic reactions by coupling high-frequency ultrasound with electrochemistry</i>
17:15 – 17:30	<b>O.A10   Eliot Botosoa</b> , Artois University (France) <i>Development of methodology for the pilot-scale ultrasound treatment for the removal of pesticides residues from fresh zucchinis</i>

**DAY 2 – Tuesday, June 24<sup>th</sup> – Room Costa Azul (8<sup>th</sup> Floor)***Chair: José L. Capelo (Portugal)*

**9:00 – 9:40    Plenary 3.    Brijesh Tiwari, Teagasc – Irish Agriculture and Food Developmental Authority (Ireland)**

*Ultrasonics in Agri-Food Innovation: Bridging the Gap from Lab Discovery to Industrial Scale-Up*

**9:40 – 10:20    Plenary 4.    Kwanggeun Lee, Dongguk University (South Korea)**

*Effects of ultrasound on the structural and physicochemical properties of various extracts from food materials*

**10:30 – 11:30    Coffee Break | Poster Session & Networking**

*Chair: Brijesh Tiwari (Ireland)*

**11:30 – 11:50    Keynote 5.    Xianglu Zhu, Wiley (China)**

*Wiley Empowers the Publication of Research Outcomes in Ultrasound Science and Its Interdisciplinary Fields in Food and Health Science*

**11:50 – 12:10    Keynote 6.    Aleksandra Mišan, University of Novi Sad (Serbia)**

*Ultrasound-Assisted Extraction Using Natural Deep Eutectic Solvents (NADES) for Enhanced Recovery of Bioactive Compounds*

**12:10 – 12:30    Keynote 7.    Ronald Halim,**

*Available Soon*

**12:40    Conference Picture (Room Costa Azul 8<sup>th</sup> Floor)**

**12:50 – 14:00    Lunch**

**14:15 – 20:00    Visit to Lisbon Downtown**

## DAY 3 – Wednesday, June 25<sup>th</sup> – Room Costa Azul (8th Floor)

Chair: José L. Capelo (Portugal)

9:00– 9:40	<b>Plenary 5.</b>	<b>Anu Subramanian</b> , University of Alabama-Huntsville (USA)
		<i>Inflammation Control in Cartilage Repair and Regeneration: Understanding the Basis of Ultrasound in Mitigating Inflammation and Promoting Repair</i>
9:40 – 10:00	<b>Keynote 8.</b>	<b>Rodrigo Costa-Felix</b> , Brazilian National Institute of Metrology (Brazil)
		<i>Measurement uncertainty for ultrasound applications: a fundamental tool for improving experimental reliability</i>
10:00 – 10:20	<b>Keynote 9.</b>	<b>Daniel Anang</b> , Manchester Metropolitan University (UK)
		<i>Enhancing Salt Reduction in Meat Products through Ultrasound Technology: A Novel Approach</i>
10:30 – 11:30	<b>Coffee Break   Poster Session &amp; Networking</b>	
11:30 – 11:50	<b>Keynote 10.</b>	<b>Yinfei Zheng</b> ,
		<i>Available soon</i>
11:50 – 12:10	<b>Keynote 11.</b>	<b>Jaesok Yu</b> , DGIST (South Korea)
		<i>Ultra-sensitive Silicon-photonics optomechanical ultrasound sensor for photoacoustic microscopy: a feasibility study</i>
12:10 – 12:25	<b>O.A11  </b>	<b>Divya Aggarwal</b> , Teagasc Food Research Centre (Ireland)
		<i>Batch optimisation of ultrasound-assisted alkaline extraction of oat proteins and its scale-up in a laboratory ultrasonic continuous reactor</i>
12:25 – 12:40	<b>O.A12  </b>	<b>Monjurul Hoque</b> , Teagasc Food Research Centre (Ireland)
		<i>Scalable ultrasound assisted extraction of pectin from apple pomace for biodegradable packaging applications</i>
13:00 – 14:00	<b>Lunch</b>	
		Chair: Anu Subramanian (USA)
14:15 – 14:30	<b>O.A13  </b>	<b>Joncer Naibaho</b> , Teagasc Food Research Centre (Ireland)
		<i>Evaluation of ultrasound-assisted extraction (UAE) for chitosan extraction from different treated shrimp shells</i>

14:30 - 14:45	<b>O.A14   Giulia Romano</b> , Teagasc Food Research Centre (Ireland)
	<i>Ultrasound-Assisted Hydrodynamic Cavitation for Efficient Protein and Starch Recovery from Potato Processing By-Products</i>
14:45 - 15:00	<b>O.A15   Eugenia Mazzara</b> , Teagasc Food Research Centre (Ireland)
	<i>Effect of ultrasound treatment on mannitol crystallization from Alaria esculenta seaweed extract</i>
15:00 - 15:15	<b>O.A16   Rahel Suchintita Das</b> , University College Dublin (Ireland)
	<i>Polysaccharide-protein composite extracts from residue of brown seaweed Alaria esculenta: Influence of ultrasonication compared against other advanced technologies on extraction efficiency, structural, and functional properties</i>
15:15 - 15:30	<b>O.A17   Anim Ujong</b> , Teagasc Food Research Centre (Ireland)
	<i>Wastewater to Food Ingredient: Ultrasonic-assisted and Enzymatic-assisted Extraction for Efficient Recovery of Taurine from Spent Ham Curing Brine</i>
15:30 - 16:15	<b>Coffee Break   Poster Session &amp; Networking</b>
	<i>Chair: Joseph Kost (Israel)</i>
16:15 - 16:30	<b>O.A18   Shon George Shiju</b> , University College Cork (Ireland)
	<i>Synergistic Ultrasound-Microwave Extraction of Humic Substances from Dairy Digestates</i>
16:30 - 16:45	<b>O.A19   Soudabeh Ghalamara</b> , Teagasc Food Research Centre (Ireland)
	<i>Upcycling Bovine Blood: Innovative Ultrasound-Assisted Processing for Functional Ingredient Recovery and Sustainable Food Systems</i>
16:45 - 17:00	<b>O.A20   Zwonaka Mapholi</b> , Stellenbosch University (South Africa)
	<i>Insights into scalable Ultrasound-Assisted Techniques for seaweed polysaccharides extraction – an investigation of kinetics and mass transfer processes.</i>
	<i>Chair: José L. Capelo (Portugal)</i>
17:00- 17:05	<b>SG.01   Wenrui Dong</b> , Teagasc Food Research Centre (Ireland)
	<i>Ultrasound Assisted Salmon By-products Valorisation: Oil Biorefinery and Encapsulation with Polyphenol Extract</i>
17:05 - 17:10	<b>SG.02   Bashar Badamasi Lailaba</b> , Department of Science Kebbi State Polytechnic Dakingari (Nigeria)
	<i>Acoustical Study of Pure Synthesized NiFe<sub>2</sub>O<sub>4</sub>Nanofluids at Different Concentration and Temperatures by using 5 MHz Ultrasonic Waves</i>

## PROGRAM BY DAY

17:10 - 17:15	<b>SG.03   Mohamed Aâtach, University of Liege (Belgium)</b>
	<i>Cementation of Platinum-Group Metals onto Copper: Feasibility, Kinetics, and the Effect of Ultrasound</i>
17:15 - 17:20	<b>SG.04   Jack Prendeville, Teagasc Food Research Centre (Ireland)</b>
	<i>Ultrasound Assisted Extraction of Protein from Duckweed.</i>
17:20- 17:25	<b>SG.05   Hyunjeong Park, Dongguk University (South Korea)</b>
	<i>Enhancing the physicochemical properties of cold brew Robusta and decaffeinated coffee through ultrasound-assisted soaking and extraction</i>
17:25 - 17:30	<b>SG.06   Hyojin Jeon, Dongguk University (South Korea)</b>
	<i>Analysis of <math>\alpha</math>-dicarbonyl compounds, furans, and volatile compounds in cold brew coffee prepared by ultrasound-assisted soaking and extraction.</i>
17:30 - 17:35	<b>SG.07   Zexin Wang, Zhejiang University (China)</b>
	<i>Design, Fabrication, and Characterization of high-frequency PMUT for Transcranial Neurostimulation</i>
17:35 - 17:40	<b>SG.08   Chi Yun Li, National Pingtung University of Science and Technology (Taiwan)</b>
	<i>Ultrasonication to enhance physicochemical properties of freeze-dried bananas</i>
17:40 - 17:45	<b>SG.09   Yu-Xuan Chen, National Pingtung University of Science and Technology (Taiwan)</b>
	<i>A feasibility study of ultrasound-assisted valorization of coffee silver skin into extract with high antioxidant capacity</i>
17:45 - 17:50	<b>SG.10   Heather Kenny, University College Dublin (Ireland)</b>
	<i>Optimization of alginate pre-extraction processes by green solvents and technologies for the development of high intensity ultrasound-aided alginate production</i>
17:50 - 17:55	<b>SG.11   Maozhong Wu, Guangdong University of Technology (China)</b>
	<i>Effect of longitudinal-bending elliptical ultrasonic vibration assistance on electrosurgical cutting and hemostasis</i>
17:55 - 18:00	<b>SG.12   Ronan O' Brien, Teagasc Food Research Centre (Ireland)</b>
	<i>A green approach for protein extraction from <i>Porphyra</i> sp. using sequential alkaline and ultrasound-assisted based methodology.</i>
18:00 - 18:05	<b>SG.13   Alejandro Sánchez, CIAL (CSIC-UAM, Spain)</b>
	<i>Use of ultrasound for the extraction of carbohydrates and proteins from olive oil pomace</i>

**18:05 - 18:10 SG.14 | Darian Volarić, Thalassotherapia Crikvenica (Croatia)**

*How does low-intensity pulsed ultrasound effect intramembranous ossification compared to the autologous bone gold standard?*

**18:10 - 18:15 SG.15 | Daniel Silva, University College London (UK)**

*Effect of Therapeutic Ultrasound on Biomimetic Models of Cancer*

**18:30 - 19:30 Chillout Poster Session – Room Costa Azul (8<sup>th</sup> Floor)**

**20:00 - 21:00 Gala Dinner – Atlantida Restaurant – 8<sup>th</sup> Floor**

**21:00 - 22:00 Classical music concert & Poster Award Ceremony**

**22:00 - 00:00 Galician Queimada – Drinking together International Party**



## DAY 4 – Thursday, June 26<sup>th</sup> – Room Costa Azul (8<sup>th</sup> Floor)

Chair: José L. Capelo (Portugal)

**9:00 - 9:20      Keynote 12.      Moshen Gavahian**, National Pingtung University of Science and Technology (Taiwan)

*Ultrasound-assisted Food Processing: Enhancing Sustainability through Bioactive Extraction and Retention*

**9:20 - 9:40      Keynote 13.      Petros Mouratidis**, The Institute of Cancer Research London (UK)

*Transcriptomic profiling of the immune response in orthotopic pancreatic tumours exposed to boiling histotripsy.*

**9:40 - 10:00      Keynote 14.      Gisandro Reis de Carvalho**, Federal Institute of Education, Science and Technology (Brazil)

*High-Intensity Ultrasound as Alternative to Improve Barley Malt Production*

**10:00 - 10:20      Keynote 15.      Pierre Gélat**, University College London (UK)

*OptimUS: An open-source Python library for 3D ultrasonic wave propagation*

**10:20 - 11:20      Coffee Break | Poster Session & Networking**

Chair: Brijesh Tiwari (Ireland)

**11:20 - 12:00      Plenary 7.      Simon Rabinowitz**, Downstate Health Sciences University (USA)

*E-POCUS (Endoscopic POCUS) implementation to study esophageal remodeling in eosinophilic esophagitis (EoE).*

**12:00 - 12:40      Plenary 8.      Gail ter Haar**, The Institute of Cancer Research London (UK)

*Histotripsy: the new cavitation kid on the block*

**12:40 - 13:00      Shotgun Award Ceremony & Closing Ceremony**

**13:00 - 14:30      Lunch**

## POSTER PRESENTATIONS

### P.1 | Marina Stramarkou, Teagasc Food Research Centre (Ireland)

*Holistic Valorisation of Blue Whiting and Boarfish Using Ultrasound Technology for the Recovery of Oil and Proteins*

### P.2 | Bate Li, Technological University Dublin (Ireland))

*Evaluating Ultrasound-Assisted Techniques for Protein Extraction: Implications for Environmental Sustainability*

### P.3 | Yuchen Ban, Teagasc Food Research Centre (Ireland)

*Ultrasound-Assisted Enzymatic Extraction of Proteins from Sunflower Oilseed Meal: Optimization Using Mixture Design and Response Surface Methodology*

### P.4 | Antria Filippou, Cyprus University of Technology (Cyprus)

*Agar-based breast tissue tumour model phantom for MRgFUS breast applications*

### P.5 | Nan Lin, Teagasc Food Research Centre (Ireland)

*Ultrasound-Microwave Assisted Innovative Oat Hull Valorisation of Arabinoxylan and Structure Effects*

### P.6 | O. Olikh, University of Kyiv (Ukraine)

*Ultrasound and Engineering of Si/PEDOT:PSS structures*

### P.7 | Bernardo Libonatti, Universitat Politècnica de Catalunya (Spain)

*Sonochemical Approach for the Functionalisation and Nanotransformation of Lignocellulosic Biomass*

### P.8 | Eliot Botosoa, Artois University (France)

*Development of methodology for the pilot-scale ultrasound treatment for the removal of pesticides residues from fresh field-grown zucchinis*

## SHOTGUN POSTERS

### SG.01 | Wenrui Dong, Teagasc Food Research Centre (Ireland)

*Ultrasound Assisted Salmon By-products Valorisation: Oil Biorefinery and Encapsulation with Polyphenol Extract*

### SG.02 | Bashar Badamasi Lailaba, Department of Science Kebbi State Polytechnic Dakingari (Nigeria)

*Acoustical Study of Pure Synthesized  $\text{NiFe}_2\text{O}_4$  Nanofluids at Different Concentration and Temperatures by using 5 MHz Ultrasonic Waves*

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7th International Caparica Conference in

**ULTRASONICS 2025**

**WWW.ULTRASONICS2025.COM**

**22 – 26  
JUNE**

# **GENERAL INFORMATION**



### ***Conference Language***

English is the ULTRASONICS 2025 official language. No simultaneous translation is provided.

### ***Certificate of Attendance***

The Certificate of Attendance can be found in the conference pack for all the attendees.

### ***Liability and Insurance***

Registration fees do not include insurance coverage for participants regarding personal accidents, illness, cancellations by any party, theft, loss, or damage to personal belongings. The ULTRASONICS 2025 Conference and the Organizing Secretariat accept no liability for such incidents. Any disputes related to payment and participation will be governed and interpreted per the laws of Portugal. The parties irrevocably submit to the jurisdiction of the courts of Portugal, specifically within the Lisbon metropolitan area, for any disputes or issues arising from or related to participation in the ULTRASONICS 2025 conference. Cancellations must be made in writing. For cancellations made five months before the conference, 90% of the registration fee will be refunded. After this period, no refunds will be issued. In the event that the conference is cancelled or postponed due to natural causes or any other reasons beyond the control of the Organizing Committee, a voucher will be issued for participation in the next edition of the conference. No refunds will be provided.

### ***Program Changes***

Due to circumstances beyond the control of the Organization and ULTRASONICS 2025, last-minute changes to the programme may be unavoidable. All the information in this program is accurate as of the day of printing (June 14<sup>th</sup>, 2025).

### ***Disclosure of Information***

Proceedings Book is available for download at the conference website <https://ultrasonics2025.com>  
- Password for the book of abstracts: **S2aCrU@Li5SpCNaTcOIRA**

### ***Privacy Policy***

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## CONFERENCE VENUE



### *TRYP LISBOA CAPARICA MAR*

The conference venue, TRYP Lisboa Caparica Mar, is located in a charming village just a short 5-minute drive from Lisbon. It is situated near one of the most beautiful Atlantic beaches in Portugal, offering a perfect blend of convenience and scenic beauty.

<https://www.tryplisboacaparica.com>

### *HOW TO REACH THE HOTEL VENUE*

From any place in Lisbon to the Congress Venue (Hotel TRYP LISBOA CAPARICA MAR) a taxi must be taken to the following address:

Avenida General Humberto Delgado, 47  
2829-506 Costa da Caparica - Lisbon, Portugal  
GPS. **38.641507 [N], -9.236489 [W]**

To ensure your smooth arrival at the conference venue, TRYP Lisboa Caparica Mar Hotel, from Lisbon Airport, we would like to provide you with the following transportation options. Please note that these recommendations have been carefully selected for your convenience:

- Uber Pickup point at Lisbon Airport. The Uber pick-up and drop-off point at Lisbon Airport is at the Departure area in Terminal 1. The Departures area is located on the first floor. After exiting the terminal, cross the street and wait for the Uber driver you requested on your app at the 'kiss & fly' parking lot. If you can't find your driver, contact him or her through the app.
- Taxi: Exiting the airport, you will find a taxi rank where licensed taxis are readily available. We strongly suggest choosing a licensed taxi with a meter to ensure a reliable and efficient journey. The estimated travel time from the airport to the hotel is approximately 20 to 30 minutes, depending on traffic conditions.

- Private Transfer: For a more personalised and comfortable experience, we highly recommend arranging a private transfer in advance. This option guarantees a seamless and stress-free journey directly to the hotel. (Contacts: Ms Isabel Morais [ismorais@hotmail.com](mailto:ismorais@hotmail.com)).
- Car Rental: If you prefer the flexibility of having your own vehicle, you can rent a car at Lisbon Airport. (<https://www.aeroportoisboa.pt/en/lis/access-parking/for-your-full-comfort/car-rental>). The hotel provides parking facilities for guests.
- Public Transportation: While public transportation is available, it may require multiple transfers and take longer to reach the hotel. However, if you prefer this option, you can take the metro from the airport to a central station, such as Cais do Sodré or Pragal, and then transfer to a bus or taxi for the final leg of the journey to the hotel.
- Avoid the following hours to travel from Lisbon to Caparica (most likely traffic jam): 18-21h
- Avoid the following hours to travel from Caparica to Lisbon (most likely traffic jam): 07-09:30h
- Always ask for a ticket from the taxi driver.

#### **RECOMMENDED WAY TO TAKE A TAXI OR UBER/BOLT AT THE LISBON AIRPORT**

1. Before arriving at the airport, Download the App to your smartphone
2. Call the Car from Airport Departures Zone

#### **RECOMMENDED PRIVATE UBER CHOFER FOR WAITING FOR YOU AT THE LISBON AIRPORT**

Ms. Isabel Morais

Tlf: 351 934 640 813

Email: [ismorais@hotmail.com](mailto:ismorais@hotmail.com)

Fixed price: €40

## LOCAL INFORMATION

### Host Capital

#### Lisbon



Discover the captivating allure of Lisbon, a city steeped in history and cultural richness since its establishment as the Portuguese capital in the mid-13th century. With a Mediterranean climate and a blend of ancient traditions and contemporary lifestyles, Lisbon offers a unique tapestry of character and charm.

According to legend, Lisbon was founded by Ulysses, but historical evidence points to the Phoenicians as its likely founders. The city's name, "Olissipo," derives from the Phoenician words "Aliss Ubbo," meaning "enchanted port," a testament to its captivating maritime heritage. Lisbon holds a special place among Europe's top tourist destinations and has received numerous accolades over the years. Its timeless allure is complemented by warm hospitality, as locals embrace visitors with a familial embrace.

During your visit to Lisbon Downtown, scheduled on Tuesday, June 24th, as part of the 7<sup>th</sup> ULTRASONICS 2025 programme, you will have the opportunity to explore the city's recommended tourist spots. Immerse yourself in the vibrant atmosphere, indulge in the renowned Fado music, and experience the genuine warmth and welcoming spirit that define Lisbon.

Prepare to be captivated by Lisbon's intriguing history, delightful cuisine, and the seamless blending of old-world charm and modern vibrancy. Join us on this extraordinary journey and uncover the wonders of Lisbon, a city that invites you to make unforgettable memories.

For more information regarding public transportation, please see:

- Metropolitano de Lisboa: <https://www.metrolisboa.pt/en/>
- Carris – Transportes Públicos Lisboa (Bus): <http://www.carris.pt/en/home/>
- TST – Transportes Sul do Tejo (Bus): <https://www.tsuldotejo.pt/?idioma=2>
- Tratejo Soflusa (Boat): <https://ttsl.pt/>
- Fertagus (Train): <https://www-fertagus.pt/en>



## Host city

### Almada



As you immerse yourself in the scientific contributions within these pages, we invite you to discover some notable landmarks and destinations in the area. One such emblematic monument is the Santuário do Cristo-Rei, a towering masterpiece located in Almada. Standing at an impressive height of 110 meters, this statue was erected in 1959 and offers a breathtaking panoramic view of the capital city and the picturesque Tagus estuary. Inspired by the Cristo Redentor monument in Rio de Janeiro, the outstretched arms of Christ welcome both tourists and pilgrims alike, leaving an indelible impression.

Venture to the "other side" or the "south bank" of Lisbon, where you'll find the renowned Costa de Caparica. This stretch of coastline has earned a well-deserved reputation as one of the region's most beloved beach destinations. With its golden sands and inviting waters, it entices visitors seeking relaxation and rejuvenation.

### Convento dos Capuchos



The elegant lines of the Capuchos convent set the point of equilibrium with the magnificent view reached from its viewpoint. Perched in a privileged location overlooking the Atlantic, this serene sanctuary offers an unrivalled panoramic view that stretches from Lisbon to the Serra de Sintra, the Bay of Cascais, the Bugio, the Tower of S. Julião, the Serra da Arrábida, and Cabo Espichel.



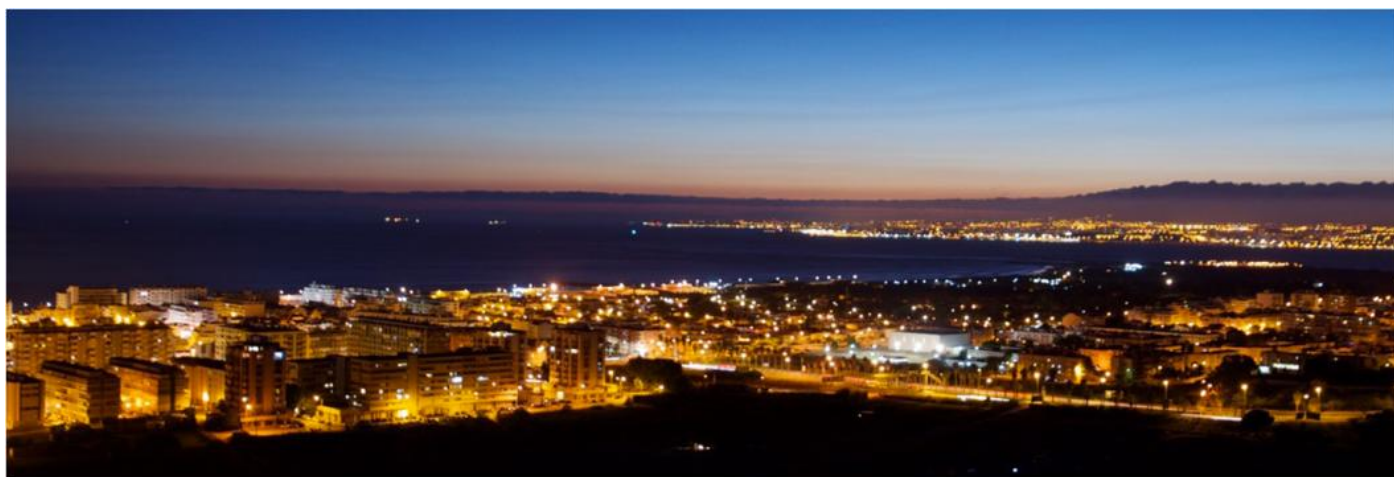
## GENERAL INFORMATION

Built in the 16th century as a place of worship for the Franciscan Friars, the Capuchos Convent embodies simplicity and austerity, reflecting the principles cherished by its founders. Even after more than 400 years, this sacred site remains steeped in tranquillity, providing a haven for meditation and solitude, just as its first inhabitants sought.

Meticulously restored by the Almada Town Hall, the convent seamlessly combines its original charm with modern amenities, creating an ideal cultural space particularly dedicated to the realm of music. Surrounded by idyllic gardens and embraced by the serenity of the sea, the Capuchos Convent is a sanctuary that transports visitors away from the bustling city, offering a respite for those seeking solace in heritage and nature.

Whether you are a lover of architectural marvels, a seeker of spiritual serenity, or an admirer of natural beauty, a visit to the Capuchos Convent is an absolute must. Immerse yourself in its timeless allure, where history whispers through its halls, and the stunning vistas ignite a sense of wonder.

### Costa da Caparica



Discover the hidden gem of Costa da Caparica, a dynamic and contemporary coastal town cherished by locals but often overlooked by international tourists. Prepare to be captivated by the awe-inspiring coastline, renowned for its expansive sandy beaches, breathtaking sunsets, invigorating surf, and stunning natural landscapes, all conveniently located within a short 20-minute drive from central Lisbon.

During the summer, the Portuguese flock to Costa da Caparica, drawn by its inviting beaches, warm and welcoming family atmosphere, and the vibrant beach parties that continue late into the night at the secluded beach bars. It's a place where memories are made, laughter echoes through the air, and the spirit of celebration thrives.

Whether you seek relaxation on pristine shores, the thrill of riding the waves, or a lively beachside soirée, Costa da Caparica offers an unparalleled experience. Embrace the vibrant energy of this coastal paradise, where the fusion of natural beauty, friendly locals, and endless seaside adventures await.

## Telecommunications

There are three major mobile telephone operators in Portugal that you can roam with MEO, NOS, and Vodafone. The digital mobile telephone transmission protocols are based on GSM technology, operating at frequencies of 900 and 1800MHz. Please contact your operator provider for further details.

Special numbers:

Lisbon Police: +351 21 765 4242

GNR Costa da Caparica: +351 212 909 340

Cacilhas Fireman: +3551 212 900 030

Lisbon airport: +351 21 8413500, [lisbon.airport@ana.pt](mailto:lisbon.airport@ana.pt)

## SOCIAL PROGRAM

We hope that ULTRASONICS 2025 will be an enjoyable event. The ULTRASONICS 2025 Social Events will be a pleasant addition to the conference sessions and offer a great networking opportunity.

### *Welcome Dinner*

Sunday, June 22<sup>nd</sup>, 2025

Starting at 19:30

Venue: Hotel TRYP Lisboa Caparica Mar – Atlântida Room 8th Floor



Exclusive to all registered conference attendees and their accompanying guests, **registered at the venue with the conference pack**. The primary objective is to create opportunities for meaningful encounters that foster positive relationships between community members.

We want to provide a pleasant reception dinner for all our participants upon their arrival at ULTRASONICS 2025. The musical performance will be by Boemia do Fado.

### ***Visit to Lisbon Downtown***

Tuesday, June 24<sup>th</sup>, 2025

Starting at 14:15 – 20:00



by Granito at <https://pixabay.com>

Open to all registered delegates and accompanying persons. We invite you to find out more during your visit to Lisbon Downtown on Tuesday, June 24<sup>th</sup>, as scheduled in the programme, following our ULTRASONICS 2025 recommended tourist spots.

### ***Chillout Shotgun Poster Session***

Wednesday, June 25<sup>th</sup>, 2025

Starting at 18:45 – 19:30

Venue: Roof - HOTEL TRYP LISBOA CAPARICA MAR

Open to all registered delegates and accompanying persons. You are welcome to participate in the shotgun poster session by enjoying the chillout cocktail on the roof of the hotel venue TRYP LISBOA CAPARICA MAR.

### ***Gala Dinner & Classical Music Concert***

Wednesday, June 25<sup>th</sup>, 2025

Starting at 20:00

Venue: Hotel TRYP Lisboa Caparica Mar – Atlântida Room 8th Floor





Exclusive to all registered conference attendees and their accompanying guests, **registered at the venue with the conference pack**. We are pleased to present diverse culinary delights inspired by Almada's rich gastronomic heritage. Nestled in a region blessed with a mild climate, fertile soil, and strong maritime connections, the local cuisine reflects the harmonious fusion of these elements.

Almada's gastronomy is intrinsically tied to the sea and its bountiful offerings. Fresh fish and shellfish abound due to its proximity to the Atlantic Ocean, forming the foundation of many renowned local specialities. Prepare to indulge in the region's flavours, including the delectable Fish Stew crafted with the finest ingredients from the sea. In addition to savouring the culinary delights, we invite you to immerse yourself in a mesmerising musical performance by a classical Dueto of violin and harp. Let the enchanting melodies transport you to a world of harmony and bliss.

Join us as we celebrate Almada's vibrant culinary traditions and artistic talents during this extraordinary event.

### *Galician Queimada*

Wednesday, June 25<sup>th</sup>, 2025

Starting at 22:00

Venue: Hotel TRYP Lisboa Caparica Mar – Atlântida Room 8th Floor



Open to all registered delegates and accompanying persons. The Queimada is a punch made from Galician *aguardiente* (orujo from Galicia, grappa in Italy, bagaço in Portugal, cachaça in Brazil)—a spirit distilled from the rest of winemaking—and flavoured with special herbs or coffee, plus sugar, lemon peel, orange peel, coffee beans, and cinnamon. It is traditionally prepared in a hollow pumpkin.

Typically, the *queimada* is set alight. While preparing the punch, a spell or incantation (*concur* in Galician) is recited so that special powers are conferred to the *queimada* and those drinking it.

## *Drinking Together*

Wednesday, June 25<sup>th</sup>, 2025

Starting at 22:30

Venue: Hotel TRYP Lisboa Caparica Mar – Atlântida Room 8th Floor



Feel free to bring a delightful beverage representing your country to share during our convivial gathering after the Gala Dinner. This unique opportunity allows us to engage in lively conversations about our places of birth or current residence, offering a fascinating glimpse into our diverse cultures and backgrounds.

As a tradition, participants often bring renowned beverages from their respective countries. Americans may bring their signature bourbon, Italians share the refreshing taste of limoncello or fine wines, Polish attendees showcase their renowned vodka, and Israeli participants proudly present their exceptional wines. The Chinese community brings the distinctive baiju, while our Japanese friends contribute sake and shochu. The list continues, celebrating the rich tapestry of global flavours and traditions. For those who prefer non-alcoholic options, we welcome an assortment of enticing beverages to suit everyone's preferences. During these moments of camaraderie and cultural exchange, lasting memories are made, fostering deeper connections and creating cherished experiences at ULTRASONICS 2025.

# PRESENTATIONS INSTRUCTIONS

At ULTRASONICS 2025, plenary lectures, KPRK talks, keynote lectures, oral communications, shotgun communications, shotgun posters, and poster communications will be presented.

SESSION TYPE	TOTAL LENGHT	PRESENTATION	Q&A
Plenary Lecture (PL)	40 min	30 min	10 min
Keynote Presentations (KN)	20 min	17 min	3 min
Oral Communications (O)	15 min	12 min	3 min
Shotgun Communication (SG)	5 min.	5 min	n/a

## PLENARY LECTURES (PL)

Each Plenary Speaker is allotted **30 minutes** for their presentation, followed by a 10-minute question-and-answer (Q&A) session.

## KEYNOTE PRESENTATIONS (KN)

Each Keynote Speaker is allotted **17 minutes** for their presentation, followed by 3 minutes Q&A.

## ORAL COMMUNICATIONS (O)

Oral Communications is allotted **12 minutes** for their presentation, followed by 3 minutes for Q&A.

## SHOTGUN COMMUNICATION & POSTER (SG)

Shotgun communications will be 5 minutes of presentations (no questions) + Poster (A0, must fit onto an 841 mm wide by 1189 mm long) that will be displayed and discussed during the Chillout Shotgun Poster Session.

The best Shotgun Communications and Shotgun Posters presented during the conference will be awarded a certificate and a gift from the PROTEOMASS Scientific Society. The SG Communication and SG Posters will be selected by online voting, and all the conference attendees can vote once. Selection criteria will be based on excellent research, innovation, and presentation.

## POSTER COMMUNICATIONS (P)

Posters should be A0 (they must fit onto an 841 mm wide by 1189 mm long poster). During the poster sessions, each author must stand near the poster for Q&A.

The best posters presented during the conference will be awarded a certificate and a gift from the PROTEOMASS Scientific Society. The best posters will be selected by online voting, and all



## GENERAL INFORMATION

conference attendees can vote (one vote per attendee). Selection criteria will be based on excellent research, innovation, and presentation.

### INSTRUCTIONS FOR ALL SPOKEN PRESENTATIONS

- All spoken presentations must be uploaded at the registration **desk HALFDAY before** the scheduled presentation date.
- The conference rooms will be equipped with **PowerPoint OFFICE 365** laptops.
- **Using your own laptop is not allowed.**
- **Apple platform is not supported;** ensure your files are PC-compatible. Before the start of your session, visit the conference room to check your presentation, familiarise yourself with the audio-visual equipment and meet the chairperson.

### MS POWERPOINT PRESENTATIONS SPECIFICATIONS

- Videos and pictures must be in the same folder as the MS PowerPoint presentation. They must be copied into the folder before being inserted into the presentation. Videos included in the presentation shall have the following extensions: ".avi", ".mpeg", ".mov," or ".wmv"
- JPG, GIF, and BMP compressed images are the preferred file formats for inserted images (other types of extensions will also be accepted, provided that they are recognised by PowerPoint OFFICE 365)
- Use Microsoft Windows 10 or 11 default system font. Otherwise, please provide a font package for later installation.
- Please use PowerPoint OFFICE 365 (\*.pptx) to guarantee your presentation will open successfully on an on-site PC.
- Presentations must be designed in 16:9 format.
- For MAC-Users: Export your Keynote presentation to PowerPoint for Mac or export it to PDF. Be aware of the need to edit/reformat the presentation - fonts, images, and charts – especially when exporting to PowerPoint for Mac. For embedded movies, please use the possibility of "Quicktime" to save the movie in "\*.mpeg 1(2)" or "\*.avi" format.

7th International Caparica Conference in

**ULTRASONICS 2025**

**WWW.ULTRASONICS2025.COM**

**22 – 26  
JUNE**

**AWARDS**

# AWARDS

## *BEST POSTERS & SHOTGUNS PRIZES*

The PROTEOMASS Scientific Society will recognize outstanding contributions by presenting certificates and awards to the top three presentations in each of these categories:

- Shotgun Communications
- Shotgun Posters
- Poster Presentations

Eligibility is based on the excellence and originality of the research. Winners will be determined by online voting during the conference—please scan the QR code on your identification badge to cast your vote.



**PROTEOMASS**  
SCIENTIFIC SOCIETY



**BIOSCOPE  
RESEARCH**  
IN THE FOREFRONT OF SCIENCE





**BOOK OF ABSTRACTS**  
**ULTRASONICS 2025**

