



2nd Capacity Building Workshop

AGENDA

Date

9.5. - 13.5. 2022

Venue

Online event

Organized by

Gheorghe Asachi Technical University of Iași, Romania

Fraunhofer Institute, Germany

University of Salamanca, Spain

[**Click here to register for the workshop**](#)

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\(MS Teams\)**](#)



Day 1: Monday, 09.05.2022

<p>15:00-15:30 (Germany & Spain) 16:00-16:30 (Romania)</p>	<p>Opening Session <i>Host: Nicolae Lucanu (Project Coordinator; Gheorghe Asachi Technical University of Iasi, Romania)</i></p>
	<ul style="list-style-type: none"> ▪ All participants welcome
<p>15:30-17:30 (Germany & Spain) 16:30-18:30 (Romania)</p>	<p>Session 1: 'Robotics' <i>Host: Philipp Radler (Fraunhofer Institute, Germany)</i></p>
<p>Speakers</p>	<ul style="list-style-type: none"> ▪ Julian Rosenkranz (Fraunhofer IPA): "5G in the clinic" ▪ Prof. Dr. Ioan Doroftei (Professor, Faculty of Mechanical Engineering TUIASI): "Social Robots and Human-Robot Interaction" ▪ Armin Schäfer (Fraunhofer IPA): "BEC guidoo - Robotic assistant for fast, precise needle placement" ▪ Dr. Alina Baci (Lecturer, Faculty of Electrical Engineering, Energetics and Applied Informatics TUIASI): "Performant control methods in power supply systems for autonomous robots"

Day 2: Tuesday, 10.05.2022	
10:00-12:00 (Germany & Spain) 11:00-13:00 (Romania)	Session 2: 'Behaviour Analysis' <i>Host: David Pérez-González (University of Salamanca, Spain)</i>
Speakers	<ul style="list-style-type: none"> ▪ Prof. Dr. Nicolae Botezatu (Assistant Professor, Faculty of Automatic Control and Computer Engineering TUIASI): "Assistive Systems for Improved Healthcare" ▪ Prof. Dr. Stefan Sütterlin (Albstadt-Sigmaringen University): "Human Factor in Cybersecurity" ▪ Dr. Jorge Valero (University of Salamanca): "Incorporation of new cells into the mouse adult brain: from behavior to microscopy"
12:00-14:00 (Germany & Spain) 13:00-15:00 (Romania)	Session 3: 'Artificial Intelligence' <i>Host: David Pérez-González (University of Salamanca, Spain)</i>
Speakers	<ul style="list-style-type: none"> ▪ Lennart Karstensen (Fraunhofer IPA): "Learning-Based Autonomous Vascular Guidewire Navigation without Human Demonstration in the Venous System of a Porcine Liver" ▪ Dr. Vitor Viera (INOVA GmbH) ▪ Prof. Dr. Iulian Ciocoiu (Professor, Faculty of Electronics, Telecommunications and Information Technology TUIASI): "AI oriented research at ETTI Iasi" ▪ Dr. Ángel Canal Alonso (University of Salamanca): "Event prediction in epilepsy, an artificial intelligence approach" ▪ Dr. Jorge Valero (University of Salamanca): "Tools for image analysis" ▪ Iulian Ciocoiu (TUIASI): "AI oriented research at ETTI Iasi" ▪ Dr. Marius Gavrilescu (Lecturer, Faculty of Automatic Control and Computer Engineering TUIASI): "Intelligent data processing for healthcare applications"

Day 3: Wednesday, 11.05.2022

<p>10:00-12:00 (Germany & Spain) 11:00-13:00 (Romania)</p>	<p>Session 4: 'Biomedical Sensors' <i>Host: Philipp Radler (Fraunhofer Institute, Germany)</i></p>
<p>Speakers</p>	<ul style="list-style-type: none"> ▪ Prof. Dr. Günther Zeck (TU Wien): "High-density electrode arrays in biomedical applications" ▪ Prof. Dr. Romeo Ciobanu (Professor, Faculty of Electrical Engineering, Energetics and Applied Informatics TUIASI): "New insights on bio-medical sensors development" ▪ Jan Ringkamp (Fraunhofer IPA): "M2OLIE / Intra-interventional Quality Assurance in Ablation Therapy" ▪ Prof. Dr. Radu Bozomitu (Professor, Faculty of Electronics, Telecommunications and Information Technology TUIASI): "Topics in eye tracking algorithms" ▪ Philipp Radler (Fraunhofer IPA): "Data processing pipeline for multimodal vital sensor data analysis"
<p>13:00-15:00 (Germany & Spain) 14:00-16:00 (Romania)</p>	<p>Session 5: 'Biomedical Techniques' <i>Host: Sabrina Hartmann (Fraunhofer Institute, Germany)</i></p>
<p>Speakers</p>	<ul style="list-style-type: none"> ▪ Stefan Scheuermann (Fraunhofer IPA): "RT-DC: Real-Time Deformability Cytometry" ▪ Mario Graeve (Fraunhofer IPA): "Sorting Organoids" ▪ Dr. Camin Dean (German Center for Neurodegenerative Diseases/Charité Berlin): "Synaptic Dysfunctions" ▪ Sabrina Hartmann (Fraunhofer IPA): "Characterization of the trans-Dimerisation of the Amyloid-Precursor-Protein using Scanning Force Spectroscopy" ▪ Laura Rueda-Gensini (Universidad de los Andes, Bogotá): "Dopaminergic Neuro-Immune Co-culture Systems Model Parkinson's Disease Microenvironments In vitro" ▪ Thomas Gabriel Schreiner (PhD student, Faculty of Electrical Engineering, Energetics and Applied Informatics TUIASI): "Implantable devices for cerebral amyloid-beta clearance – impact on neurodegenerative diseases" ▪ Dr. Rubén Deogracias (University of Salamanca): "Using ES cells as a brain therapy" ▪ Dr. Adrián Santos-Ledo (University of Salamanca): "Zebrafish, a small model to test big things"

Day 4: Thursday, 12.05.2022

13:00-15:00 (Germany & Spain) 14:00-16:00 (Romania)	Session 6: 'Women in Neuroengineering' <i>Host: Sabrina Hartmann (Fraunhofer Institute, Germany)</i>
Speakers	<ul style="list-style-type: none"> ▪ Prof. Dr. Michela Chiappalone (Associate Professor of Bioengineering, University of Genova, Italy): "Women in science: my personal story in the field of neuroengineering" ▪ Ramona Perfetti (Frauen&Business): "Women&Business" ▪ Dr. Iuliana Nichersu (Steinbeis Europa): "Funding Opportunities for innovative ideas" ▪ Otilia Zvoristeanu (PhD student, Faculty of Automatic Control and Computer Engineering TUIASI)

Day 5: Friday, 13.05.2022

10:00-12:00 (Germany & Spain) 11:00-13:00 (Romania)	Session 7: 'Rehabilitation' <i>Host: Nicolae Lucanu (Project Coordinator; Gheorghe Asachi Technical University of Iasi, Romania)</i>
Speakers	<ul style="list-style-type: none"> ▪ Dr. Danut Irimia (Lecturer, Faculty of Electrical Engineering, Energetics and Applied Informatics TUIASI): "BCI for rehabilitation" ▪ Prof. Robert Lupu (Assistant Professor, Faculty of Automatic Control and Computer Engineering TUIASI): "IT systems for neuromotor recovery" ▪ Cristina Magda Cazacu (PhD student, Faculty of Mechanical Engineering TUIASI): "Mechatronic Platforms for Ankle Rehabilitation" ▪ Prof. Dr. Michael Tangermann (Donders Institute, Radboud University, Nijmegen): "Closed-Loop Neurotechnology, Brain Signal Decoding, Brain-Computer Interfaces"
12:00-12:30 (Germany & Spain) 13:00-13:30 (Romania)	Closing Session <i>Host: Nicolae Lucanu (Project Coordinator; Gheorghe Asachi Technical University of Iasi, Romania)</i>
	<ul style="list-style-type: none"> ▪ All participants welcome