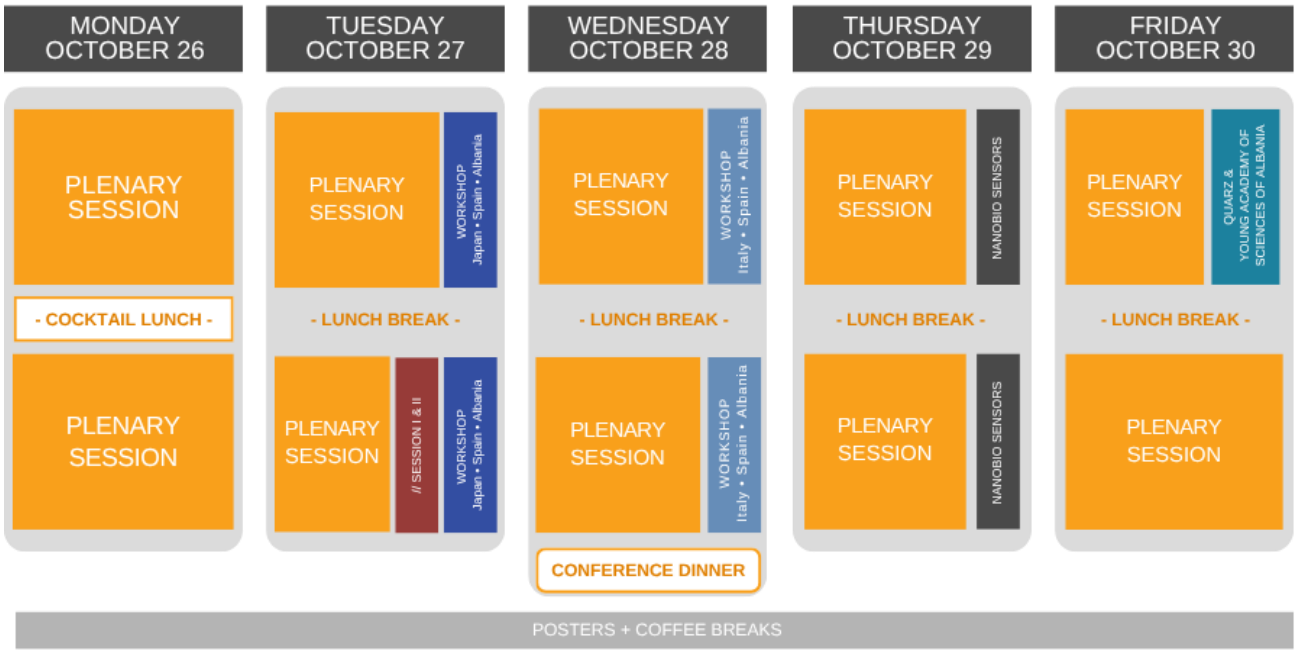
TENTATIVE PROGRAM



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nanoBalkan 2026
October 26-30 • Tirana, Albania

Tentative Program
PLENARY SESSION
(as of 21/10/2026)

MONDAY OCTOBER 26, 2026

08:00-08:45	**Registration**	
08:45-09:00	**Opening Ceremony**	
09:00-09:30	**Raffaele Velotta** (Università degli Studi di Napoli Federico II, Italy) Recognition-Induced Aggregation of Biofunctionalized MXene Hybrid Flakes Enables Ultrasensitive Biosensing	K
09:30-10:00	**Abdelkrim Talbi** (IEMN UMR CNRS 8520, France) Integrated Photonic–Phononic MEMS: From Design and Fabrication to Sensing Applications	K
10:00-11:10	Coffee Break / Poster Session	
11:10-11:40 *online*	**Arzum Erdem Gürsan** (Ege University, Turkey) Ecofriendly Material-Based Biosensors for Electrochemical Monitoring of Nucleic Acid Biointeractions	K
11:40-12:10	**Alfredo de la Escosura-Muñiz** (University of Oviedo, Spain) From diagnostics to antibiotics screening: clinical applications of electrochemical biosensing systems based on nanochannels	K
12:10-12:40 *online*	**Pedro Estrela** (University of Bath, UK) Electrochemical Biosensors and Biodevices for Medical Diagnosis and Water Monitoring	K
12:40-13:00 *online*	**Konstantinos Rogdakis** (Hellenic Mediterranean University, Greece) Electrode-Engineered Lead-Free Perovskite Memristors for Volatile and Non-Volatile Neuromorphic Systems	I
13:00-14:00	Cocktail Lunch (offered by NanoBalkan2026 organisers)	
14:00-14:40 *online*	**Andrea Ferrari** (Cambridge Graphene Centre / University of Cambridge, UK) Title to be defined	P
14:40-15:10	**Cinzia Casiraghi** (University of Manchester, UK) Printable Electronics enabled by Supramolecular 2D Material Inks	K
15:10-15:40 *online*	**Emmanuel Kymakis** (Hellenic Mediterranean University, Greece) Graphene-Enabled Perovskite Photovoltaics: From Outdoor Operando Testing to Agrivoltaics and Neuromorphic Applications	K
15:40-16:00 *online*	**Riccarda Antiochia** (Sapienza Università di Roma, Italy) C-peptide Immunosensor as a novel tool for Diabetes Management	K
16:00-16:30	Coffee Break / Poster Session	
16:30-16:50 *online*	**Marc Clua** (URV, Spain) From Low-Cost Alternative to Revolutionary Applications: High-Performance Platforms Using Paper-Based Electrochemical Sensors	I
16:50-17:20	**Zdenek Sofer** (UCT Prague, Czech Republic) Crystal Growth and Chemical Engineering of Two-Dimensional Magnets, Semiconductors and Dielectrics	K
17:20-17:40 *online*	**Pierangiola Bracco** (Università degli studi di Torino, Italy) Electrospinning as a Versatile Platform for Functional Materials	I
17:40-18:00 *online*	**Laura Gonzalez Macia** (University of Bath, UK) Electrochemical Lateral Flow Assay with Linked Analytics for the Surveillance of Plant Diseases in East Africa	I
18:00-18:30	**Steven Dunn** (London South Bank University, UK) Ultrasound-activated piezoelectric bioconjugates inhibit cell-associated viral spread	K
18:30-18:50	**Suela Kellici** (London South Bank University, UK) Title to be defined	I

TUESDAY OCTOBER 27, 2026

09:00-09:20	**Sefer Avdiaj** (University of Prishtina, Republic of Kosovo) Modeling of Nanopore Properties and Outgassing Behavior in 3D-Printed Polymeric Materials	I
09:20-09:40	**Partizan Malkaj** (Polytechnic University of Tirana, Albania) DC Conductivity Models of Conductive Organic Polymers for Organic Photovoltaic Applications	I
09:40-09:55	**Jesus Alfonso Montero Garcia** (University of Oviedo, Spain) Engineering Nitrogen- and Lanthanide-Co-Doped Polymeric Carbon Dots as Multifunctional Nanotags for Multimodal and Targeted Bioimaging	O
09:55-10:25	Coffee Break / Poster Session	
10:25-10:45 *online*	**Sevinc Kurbanoglu** (Ankara University, Türkiye) Beyond Natural Receptors: The Synergy of Aptamers and Molecularly Imprinted Polymers in Electrochemical Sensing	I
10:45-11:15	**Sibel A. Özkan** (Ankara University, Türkiye) Building Smarter, Sensitive, and Selective MIP Sensors Using Nanomaterial-Embedded Polymers	K
11:15-11:45 *online*	**Massimo De Vittorio** (IIT, Italy) Biopolymer piezoelectric technology for skin sensors and actuators	K
11:45-12:05	**Albana Veseli** (University of Prishtina, Republic of Kosovo) Engineering Nanoimprinted Polyaniline Interfaces by Electropolymerization for Selective Nanoparticle Recognition and Adsorption	I
12:05-13:45	Lunch	
13:45-14:15	**Jose M. Costa-Fernandez** (University of Oviedo, Spain) Functionalized Inorganic Nanomaterials: From Advanced Optical Biosensing to Drug Delivery and Photodynamic Therapy Applications	K
14:15-14:45	**Suna Timur** (Ege University, Turkey) Nanotechnology-Enabled Biosensing Platforms for Translational Point-of-Care Diagnostics	K
14:45-15:05 *online*	**Melike Bilgi Kamaç** (Çankırı Karatekin University, Turkey) Multiplexed Electrochemical Detection of Ovarian Cancer Biomarkers: Handmade and Commercial Electrodes for Point-of-Care Diagnostics	I
15:05-15:25 *online*	**Carlotta Pontremoli** (University of Torino, Italy) A journey in nanomaterials design: from biomedical applications to biocatalysis	I
15:25-15:55 *online*	**Laura Anfossi** (Università degli studi di Torino, Italy) The importance of being 'nano': how nanomaterials are advancing point-of-need diagnostics	K
15:55-16:30	Coffee Break / Poster session	
16:30-18:30	PARALLEL SESSION I	
16:30-18:15	PARALLEL SESSION II	

TUESDAY OCTOBER 27, 2026

PARALLEL SESSION I

16:30-16:45	**Marina Serin** (Manisa Celal Bayar University, Turkey) Prototype PMP22 Nanoimmunosensor for Peripheral Neuropathy Diagnostics	O
16:45-17:00	**Candela Melendreras** (University of Oviedo, Spain) Copper NanoMOFs as Dual-Mode Sensors for Food Freshness Monitoring	O
17:00-17:15	**Ada Tushe** (Veneto Institute of Oncology (IOV) - IRCCS, Italy) Reprogramming the cold tumor microenvironment: nanomedicine strategies for Glioblastoma immunotherapy	O
17:15-17:30	**Flamur Sopaj** (University of Prishtina, Republic of Kosovo) Electrochemical degradation of phenylurea on a BDD anode and its electroanalysis by a carbon powder electrode modified with nanoplates	O
17.30-17.50	**Tariq Sajjad** (London South Bank University, UK) Light-Assisted Lithium Storage Beyond Conventional Capacity Limits through Nanoscale Interface Engineering	I
17.50-18.10	**John Buckeridge** (London South Bank University, UK) Accurate Modelling of Materials for Energy and Microelectronic Devices: Band Alignment, Defects and Surfaces in Oxides and Nitrides	I
18.10-18:30 *online*	**Armond Daci** (University of Prishtina, Republic of Kosovo) Oral siRNA nanotherapeutics for experimental colitis: in vivo efficacy and translational perspectives	I

TUESDAY OCTOBER 27, 2026

PARALLEL SESSION II

16:30-16:45 *online*	**Marc Morant Giner** (University of Chemistry and Technology Prague, Czech Republic) HER-active composites prepared by grounding commercial MoS2 with Co/Ag-based cluster in a mortar	O
16:45-17:00	**Ozge Surucu** (Ege University, Turkey) Synthesis of Ferrocene-Based Heterocyclic Monomers and Applications of Ferrocene Functionalized Electrodes in Energy Storage Devices	O
17:00-17:15	**Michał Gackowski** (Poznan University of Medical Sciences, Poland) Interfacial Engineering of TiO2/CeO2 Nanoparticles toward Balanced Photoactivity and Photoprotection	O
17:15-17:35	**Brigita Tomšič** (University of Ljubljana, Slovenia) Nano-Enabled Multifunctionality in Advanced Textiles: From Green Silver Nanoparticles to Hybrid and Smart Textile Platforms	I
17:35-17:55	**Avni Berisha** (University of Pristina ''Hasan Prishtina'', Republic of Kosova) Molecular Nanocages as Platforms for Pollutant Capture and Environmental Remediation: Computational Design Insights	I
17:55-18:15	**Kledi Xhaxhiu** (University of Tirana, Albania) Experimental and theoretical aspects of nano-modifier effects on CPE for extractive stripping voltammetric determination of flavonoids and hormones	I

WEDNESDAY OCTOBER 28, 2026

09:00-09:20	**Bashkim Ziberi** (University of Tetova, Republic of North Macedonia) High-Flux Entangled Photon Generation via Clinical Megavoltage Radiotherapy Beams for Quantum Imaging and Theranostics	I
09:20-09:40	**Tomasz Osmalek** (Poznan University of Medical Sciences, Poland) Microemulsion-Based Topical Formulations of NSAIDs and Antifungal Drugs: Enhancing Skin Penetration and Therapeutic Efficacy	I
09:40-10:10	**Josep Nogués** (ICN2, Spain) Magnetoplasmonic Monocytes with unprecedented magnetic strength and photothermal efficiency for Enhanced Nanotherapies	K
10:10-10:30 *online*	**Francesca Petronella** (CNR, Italy) Plasmonic–Biomolecular Interfaces for Optical Detection and Photothermal-Assisted Nanomedicine	I
10:30-11:00	Coffee Break / Poster session	
11:00-11:30	**Ulku Anik** (Mugla Sitki Kocman University, Turkey) Mimicking Virus–Host Interactions at the Nanoscale: A New Strategy for Biosensor Design	**K**
11:30-11:50	**Ariola Bacu** (University of Tirana, Albania) How cell-biosensors fingerprinting of toxicity can shed light on the marine water quality-Case studies in Albania.	**I**
11:50-12:10	**Erhan Zor** (Necmettin Erbakan University, Türkiye) Nanopaper as a Promising Sustainable Platform for Biosensors	**I**
12:10-12:30 *online*	**Serpil Tekoglu** (Johannes Kepler University Linz, Austria) Bio-derived Conductive Materials for Sustainable Bioelectronics and Biosensing	**I**
12:30-12:50 *online*	**Ying Fu** (University of Strathclyde, UK) Highly Sensitive Bioelectronics for Healthcare Applications	**I**
12:50-14:00	Lunch	
14:00-14:30	**Nunzio Denora** (Università degli Studi di Bari Aldo Moro, Italy) Microfluidics and Biomimicry: Advanced Nanomedicines for Homotypic Tumor Targeting	K
14:30-14:50	**Attilio Marino** (IIT, Italy) In situ Piezoelectric Peptide Self-Assembly for Remote Antitumor Stimulation	I
14:50-15:10	**Merita Xhetani** (University of Tirana, Albania) Nanotechnology-enabled Gene Chip platforms for precision breast cancer genomics: First Albanian experience	I
15:10-15:30 *online*	**Hiroshi Aoki** (National Institute of Advanced Industrial Science and Tech. (AIST), Japan) In-Situ and Non-Enzymatic Selective Detection of Biomarkers in Biological Samples on Boron-Doped Diamond Electrodes	I
15:30-15:50	**Kei Noda** (Keio University, Japan) S-scheme Based Composite Photocatalysts using Nanostructured Semiconductors	I
15:50-16:20 *online*	**Yasuaki Einaga** (Keio University, Japan) Recent Development of Diamond Electrochemistry	K
16:20-16:50	Coffee Break / Poster Session	
16:50-17:05	**Sumika Hashimoto** (Keio University, Japan) Effect of Electrolyte Composition for CO2 Electroreduction on the Performance of Direct Formic Acid Fuel Cells	O
17:05-17:20	**Sachiko Kawakami** (Keio University, Japan) Effect of External Magnetic Field on Oxygen Evolution Reaction at Permalloy Electrodes	O
17:20-17:40 *online*	**Francesca Polli** (Sapienza University of Rome, Italy) From Structural Design to Electrochemical Performance: Tuning Nanomodified 3D-Printed Electrodes by Fused Deposition Modeling	I
17:40-18:00	**Valbona Aliko** (University of Tirana, Albania) Decoding the Blood–Nanoplastic Interactome: Erythrocytes as Sentinel Cells in Next-Generation Nanotoxicology	I
18:00-18:15 *online*	**Valentina Testa** (University of Torino, Italy) NanoMIPs breaking into immunochemical assays: from small molecules to proteins	O

THURSDAY OCTOBER 29, 2026

09:00-09:20 *online*	**Pietro Ibba** (Libera Università di Bolzano, Italy) From Sustainable Materials to Smart Orchards: Flexible Sensors for Plant and Fruit Monitoring	I
09:20-09:40	**Majlinda Vasjari** (University of Tirana, Albania) Nanobiosensors for pesticide residues in agriculture / food industries	I
09:40-10:10 *online*	**Can Dincer** (TUM, Germany) Disposable sensors for next-generation healthcare and beyond	K
10:10-11:10	Coffee Break / Poster Session	
11:10-11:40 *online*	**Sushanta Mitra** (University of Waterloo, Canada) Wrapping Liquids with Liquids: Ultrafast Encapsulation for Smart Capsules	K
11:40-12:00	**Bajramshahe Shkodra** (Universität der Bundeswehr München, Germany) Electrolyte-Gated Graphene FET for Rapid and Label-Free Biosensing	I
12:00-13:40	Lunch	
13:40-14:10	**Fernando Novio Vazquez** (ICN2, Spain) Polydopamine-like Hybrid Metal–Phenol Nanoparticles for theranostic applications	K
14:10-14:40 *online*	**Laura M. Lechuga** (ICN2, Spain) Nanophotonic Platforms for Rapid, Multiplexed, and Decentralized Biosensing	K
14:40-15:00 *online*	**Filiz Kuralay** (Hacettepe University, Turkey) Functionalized Surfaces for Bioapplications: Advanced Sensors and Smart Drug Delivery	I
15:00-15:20	**Andrea Idili** (University of Rome Tor Vergata, Italy) Programming Disorder: Computational–Experimental Engineering of Aptamer Nanoarchitectures for Biosensing	I
15:20-15:40 *online*	**Alessandro Porchetta** (University of Rome “Tor Vergata”, Italy) CRISPR-based Signal Transduction Enables Enzyme Activity Detection	I
15:40-16:10	Coffee Break / Poster Session	
16:10-16:40 *online*	**Klaas-Jan Tielrooij** (Eindhoven University of Technology, The Netherlands) Unconventional nanoscale heat transport in 2D materials	K
16:40-17:10	**Peter Lieberzeit** (University of Vienna, Austria) Solid-Phase Synthesis of Molecularly Imprinted Polymer Nanoparticles: Getting Closer to True Antibody Mimics?	K
17:10-17:30	**Arjan Korpa** (University of Tirana, Albania) Engineering strength through nanomolecular design of advanced cementitious materials	I
17:30-17:50	**Arianit Reka** (University of Tetova, Republic of North Macedonia) Valorization of Industrial Waste for Sustainable Construction Materials	I
17:50-18:10	**Pinar Kara** (Ege University, Türkiye) Electrochemical Aptasensors in Cancer Diagnosis: From Biomarker Detection to Personalized Medicine	I
18:10-18:25	**Barbara Blasiak** (The Henryk Niewodniczański Institute of Nuclear Physics Polish Academy of Sciences, Poland) Molecular Magnetic Resonance Imaging of Cancer using 9.4T MRI and Paramagnetic Nanoparticles	O

FRIDAY OCTOBER 30, 2026

09:00-09:20	**Anila Hoda** (Academy of Sciences of Albania, Albania) From Genes to Nano: Integrating Bioinformatics with Nanotechnology for Sustainable Animal Genetic Resources Conservation	I
09:20-09:40	**Bartolomeo Della Ventura** (Università degli Studi di Napoli Federico II, Italy) A Sensitive and Simple Smartphone-Based Lateral Flow Assay for PSA Detection Using Core–Satellite Magnetic Nanoparticles	I
09:40-10:00	**Ardian Jusufi** (ETH and UZH Institute for NeuroInformatics, Switzerland) Title to be defined	I
10:00-10:50	Coffee Break	
10:50-11:10	**Aziz Genc** (ICN2, Spain) Linking Atomic-Scale Structural Evolution to Catalytic and Thermoelectric Performance	I
11:10-11:40	**Jean Christophe Lacroix** (Université Paris Cité, France) Electrochemistry does the impossible: Robust and Reliable Molecular Junctions	K
11:40-12:00	**Gjylije Hoti** (University of Turin, Italy) What Do Synthetic Conditions of Bio-Based Nanoporous Sponge Systems Actually Control?	I
12:00-12:30	**Fetah Podvorica** (University of Prishtina, Republic Kosovo) Tethering glassy carbon and coal surfaces with thin layers alkylammonium ions	K
12:30	CLOSING & NANOBALKAN2027 ANNOUNCEMENT	

7th Workshop
NANOTECHNOLOGIES FOR 21st CENTURY

Cooperation event between Albania, Japan and Spain

Tentative Program
(as of 21/10/2026)

OCTOBER 27, 2026

08:55-09:15	Welcome by the organizers and representatives of the Embassies of Japan and Spain in Tirana
	SPAIN
09:15-09:30	**José M. Costa-Fernández** (University of Oviedo, Spain) Advanced Spectroscopic Approaches for Functional Nanomaterials: From Comprehensive NMs Characterization to Bioimaging and Nanobiotechnology Applications
09:30-09:45	**Dr. Marc Clua Estivil** (Universitat Rovira i Virgili, Spain) High-Performance Sensing Arrays Using Paper-Based Electrochemical Sensors
09:45-10:00	**Dr. Aziz Genç** (ICN2, Spain) GAeN at ICN2: Advanced Electron Nanoscopy for Collaborative Nanoscience and Materials Research
10:00-10:15	**Dr. Danilo Echverri** (IBEC, Spain) Laser-engraved rGO nanostructured electrodes for (bio)sensing applications
10:15-10:45	Coffee break and networking
	JAPAN
10:45-11:00 *online*	**Prof. Yasuaki Einaga** (Keio University, Japan) Recent Development of Diamond Electrochemistry
11:00-11:15 *online*	**Dr. Hiroshi Aoki** (National Institute of Advanced Industrial Science and Technology, Japan) Sensor Arrays for Rapid and Simple Analysis of Fish Genome DNAs from Fish-Inhabiting Environmental Water
11:15-11:30	**Prof. Kei Noda** (Keio University, Japan) Thin-Film Preparation and Device Application of Polymer Semiconductors
	ALBANIA
11:30-11:45	**Prof. Dr. Fetah Podvorica** (University of Prishtina (NanoAlb)) Electrochemical Grafting of Material Surfaces with Aryl Diazonium Salts
11:45-12:00	**Prof. Dr. Valbona Aliko** (University of Tirana (NanoAlb)) Decoding the Blood-Nanoplastic Interactome: Erythrocytes as Sentinel Cells for Emerging Nanotoxicological Paradigms
12:00-12:15	**Prof. Dr. Magdalena Cara** (Agricultural University of Tirana (NanoAlb)) Nanotechnology-Assisted Strategies for Plant Pathogen Detection and Management: Advancing Agricultural Innovation
12:15-12:30	**Ana Ameda** (University of Tirana) A Novel BDDP-Modified Screen-Printed Carbon Electrode for Electrochemical Sensing
12:30-12:45	**Prof. Dr. Arjan Korpa** (University of Tirana (NanoAlb)) Transforming Inert Materials into High-Performance Cementitious Components through Innovative Activation Strategies
12:45-14:00	Lunch
14:00-14:15	**Prof. Dr. Partizan Malkaj** (Polytechnic University of Tirana (NanoAlb)) Nanotechnology in Polymer Photovoltaic Cells: Innovations for Renewable Energy in Albania
14:15-14:30	**Prof. Dr. Kledi Xhaxhiu** (University of Tirana (NanoAlb)) Nanomaterial Surface Modifications Supported by Theoretical Calculations for Enhanced Electrode Performance in ESV
14:30-14:45	Brainstorming and session closing
14:45	**Closing remarks**

4th Workshop
STATE OF THE ART ON NANOTHERAPEUTICS AND NANODIAGNOSTICS

Cooperation event between Albania, Italy and Spain

Tentative Program
(as of 21/10/2026)

OCTOBER 28, 2026

9:15-9:30	Welcome, Organizers & Representatives from the Albanian Institutions, Academy of Sciences of Albania, Embassies of Italy and Spain in Tirana
	ITALY
09:30-09:45 *online*	**Emanuela Fabiola Craparo** (University of Palermo, Italy) From Formulation to Precision Therapy: Nanomedicine Strategies for Inflammatory Lung Diseases
09:45-10:00	**Antonio Lopalco** (University of Bari Aldo Moro, Italy) Direct Powder Extrusion 3D Printing for Personalized Medicines: Tailoring Dosage Forms, Solid-State Properties and Drug Release
10:00-10:15 *online*	**Francesco Puoci** (University of Calabria, Italy) Beyond mRNA: Materials Design and Microfluidic Engineering of Non-Viral Nanocarriers for DNA Delivery
10:15-10:30 *online*	**Nella Rossini** (RENASCO, Italy) Plasma Surface Engineering of Materials for Bioanalytical and Cell Culture Applications
10:30-11:00	Brainstorming & Coffee break
	SPAIN
11:00-11:15 *online*	**Laura Lechuga** (ICN2, Spain) Nanophotonic Biosensors for Precision Nanomedicine and Decentralized Diagnostics
11:15-11:30	**Fernando Novio Vázquez** (UAB, Spain) Nanoscale coordination polymers: multifunctional nanoplatforms for biomedical applications
11:30-11:45	**Massimo Urban** (ICN2, Spain) From DIY to Market: Accessible Fabrication Strategies for Electrochemical Sensors
11:45-12:00	**Claudio Parolo** (Interfibio Research Group, Department of Chemical Engineering, University Rovira i Virgili; Barcelona Institute for Global Health, Spain) From Clinical Need to Point-of-Care Malaria Diagnostics: Translational Nanobiosensing for Diagnosis and Prognosis
12:00-12:15	**Alfredo Alfredo de la Escosura-Muñiz** (University of Oviedo, Spain) Novel biosensing strategies based on nanoparticles and nanochannels for point-of-care clinical applications
	ALBANIA
12:15-12:30	**Bianka Hoxha** (Catholic University "Our Lady of Good Counsel", Albania) Microfluidics-Assisted Development of Nanocarrier Systems for Enhanced Oral Delivery of Therapeutic Peptides and Proteins
12:30-12:45	**Magdalena Cara** (Agricultural University of Tirana, Albania) Nano-Enabled Pesticides in Sustainable Agriculture: Environmental Feasibility, Regulatory Challenges, and Evidence from a Nano-Copper Vineyard Case Study
12:45-13:00	**Niko Hyka** (University of Medicine, Albania) A New Era of Continuing Education through EdTech: Human in the Loop AI Agents for an Evidence to Credential Cycle in the Health Professions
13:00-13:15	**Bashkim Ziberi** (University of Tetova, North Macedonia, NanoAlb) Quantum Entanglement in Medical Imaging
13:15-13:30	Wrap-up and Closing remarks

NANOBIOSENSORS SCHOOL

Tentative Program

(as of 21/10/2026)

OCTOBER 29, 2026

09:00-09:10	**Organizing comitee** Welcome & introduction
09:10-09:40	**Claudio Parolo** (Barcelona Institute for Global Health, Spain) Target Product Profiles: The Missing Link Between Nanobiosensor Innovation and Clinical Practice
09:40-10:10	**Peter Lieberzeit** (University of Vienna, Austria) Biomimetic detection explained through molecularly imprinted polymers: why and how?
10:10-10:40 *online*	**Laura Anfossi** (Università degli studi di Torino, Italy) Nanomaterial-Based Signal Reporters in Lateral Flow Immunoassays: Principles, Performance and Analytical Trade-Offs
10:40-11:00	Coffee Break
11:00-11:30	**Timon Grosch and Can Dincer** (TUM, Germany) Facemask-Integrated Biosensor for Wearable Real-Time Metabolic Monitoring of VO_2, VCO_2 and Breath Lactate
11:30-12:00	**Andrea Idili (**University of Rome Tor Vergata, Italy) Continuous Monitoring DNA-based Biosensors
12:00-12:30	**Albana Veseli** (University of Prishtina, Republic of Kosovo) Building Better Electrochemical Sensors for Food and Water Analysis: Lessons from Electrode Modification
13:00-14:30	Lunch Break
14:30-15:00	**Panagiota Kalligosfyri** (University of Naples "Federico II", Italy) Design, Print, Sense: a practical introduction to 3D printing workflows for biosensor fabrication
15:00-15:30 *online*	**Yasuaki Einaga** (Keio University, Japan) From Lab Research to Practical Applications: Electrochemical Sensors Based on Boron-doped Diamond Electrodes
15:30-15:40	Closing remarks

QUARZ &
Young Academy of Sciences of Albania

Tentative Program
(as of 21/10/2026)

The Quartz Program, in collaboration with The Young Academy of Sciences of Albania, is pleased to organize this workshop, bringing together young researchers and PhD students from diverse scientific disciplines to present their research, exchange ideas, and foster interdisciplinary dialogue. The workshop will feature a broad range of emerging research topics, including environmentally extended input-output analysis and its applications in the circular economy, civil liability for AI-enabled medical devices within the EU regulatory framework, machine learning techniques in geomagnetism, computational neuroscience, and bioinformatics in pharmaceutical biotechnology, with a focus on the journey from molecular data to drug discovery. By bringing together young researchers working across environmental sciences, law and technology, geosciences, neuroscience, and biotechnology, the workshop aims to create opportunities for knowledge exchange, scientific networking, and collaboration, while highlighting the innovative research being conducted by Albania's next generation of scientists.

OCTOBER 30, 2026

	Ervisa Ndoka (University of Tirana) **Elona Shehu** (Mediterranean University of Albania, Young Academy of Science) **Blisard Zani** (University of Tirana, Young Academy of Science) Environmentally extended input-output analysis in circular economy research: mapping methods, indicators, sectors and research gaps
	Xhon Skenderi (Young Academy, Academy of Sciences of Albania) **Olta Qejvani** (University of Durres "Aleksander Moisiu", Young Academyof Science) Civil liability for AI-enabled medical devices under the EU regulatory
	Klaudjo Peqini (University of Tirana, Young Academy of Science) Machine Learning techniques in geomagnetism
	Xhilda Dhamo (University of Tirana) From synchronization analysis to RL-Dirven control in fNIRS visibility networks
	Gledjan Caka (University of Tirana, NanoAlb group) Bioinformatics in pharmaceutical biotechnology: from molecular data to drug discovery
	Ledia Vasjari (University of Tirana) **Ilva Naco** (University of Tirana, NanoAlb group) Deltamethrin-Induced Cytotoxicity: A Basis for Nanotechnology-Based Approaches in Environmental Toxicology

POSTER LIST

(as 21/10/2026)

Poster number	
30	**Ana Ameda** (University of Tirana, Albania) Environmental Assessment of Lead in Albanian Rivers and Lakes
21	**Avni Berisha** (University of Pristina 'Hasan Prishtina', Republic of Kosova) Mushroom Extracts for Sustainable Protection of Mild Steel in Acidic Media: Experimental and Molecular-Level Evaluation
6	**Adhurim Bresa** (University of Prishtina, Republic of Kosovo) Resveratrol-Loaded Nanocarriers for Topical Psoriasis Therapy
4	**Magdalena Cara** (Agricultural University of Tirana, Albania) Combined sanger and minion nanopore sequencing for the molecular characterization of strawberry-associated fungi and watermelon mosaic virus in zucchini
38	**Besarta Cheliku Ramadani** (Mother Teresa University, Republic of North Macedonia) Effect of Fuel Type on the Structural and Morphological Characteristics of LnMn0.5Fe0.5O3 Perovskites
39	**Xhilda Dhamo** (University of Tirana, Albania) AI-Driven Synchronization Control in fNIRS-Derived Brain Networks
7	**Dion Dragaj** (University of Prishtina, Republic of Kosovo) Bridging the Gap: Quality Control and Regulatory Pathways for Clinical Nanomedicines
31	**Mariam Fatima** (University of Naples Federico II, Italy) Recognition-Induced Assembly of Biofunctionalized MXene/AuNP Nanohybrids for DLS-Based IgG Biosensing
22	**Artur Gabrielyan** (National Polytechnic University of Armenia, Armenia) Catalytic properties of dimethylsulfoxide modificated kaolinite, Al2O3 and SiO2 supported Pt nanocatalysts in n-heptane reforming prepared by impregnation method
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