

Tentative Program

(as of 25/10/2024)

MONDAY OCTOBER 28, 2024

08:00-08:45	Registration	
08:45-09:00	Opening Ceremony	
09:00-09:45	Andrea Ferrari (Cambridge Graphene Centre / University of Cambridge, UK) Title to be defined	P
09:45-10:15	Michal Otyepka (RCPTM, Czech Republic) Engineering Graphene Derivatives through Tailored Functionalization for Sensing Applications	K
10:15-10:30	Ece Eksin (Izmir Demokrasi University, Turkey) Electrochemical miRNA Detection using Gold-Decorated Reduced Graphene Oxide Modified Paper Electrodes	O
10:30-11:00	Coffee Break / Poster Session	
11:00-11:30	Radek Zboril (Palacky University in Olomouc, Czech Republic.) Single Atom Engineering with Graphene towards Applications in Catalysis, Environmental Technologies and Medicine	K
11:30-12:00	Aristides Bakandritsos (Palacky University of Olomouc, Czech Republic) Tweaking 2D-materials structure for pushing the limits of electrochemical energy storage	K
12:00-12:30	Emmanuel Kymakis (Hellenic Mediterranean University, Greece) Revolutionizing Indoor and Outdoor Photovoltaics with 2D Materials: Boosting Efficiency, Stability, and Scalability	K
12:30-13:30	Cocktail Lunch (offered by NanoBalkan2024 organisers)	
13:30-14:00	Poster Session I	
14:00-14:30	Dhimiter Bello (UMass Lowell, USA) Characterization of nanoparticles and other thermal breakdown products of conventional (AFFF) and replacement fluorine-free firefighting foams (FFF)	K
14:30-14:50	Gjergj Dodbiba (The University of Tokyo, Japan) Measuring Nanoparticle Size Distribution in a Fluid Using an Interactive Force Apparatus	I
14:50-15:10	Armond Daci (University of Prishtina, Republic of Kosovo) Application of fluorescence imaging to assess in vivo the biodistribution of nanoparticles	I
15:10-15:30	Konstantinos Rogdakis (Hellenic Mediterranean University, Greece) Sustainable Resistive Switching Memories Enabled by Halide Perovskites	I
15:30-16:00	Mete Atature (University of Cambridge, UK) Title to be defined	K
16:00-16:40	Coffee Break / Poster Session	
16:40-17:00	Veronica Montes Garcia (University of Strasbourg, France) Functionalized Low-Dimensional Nanostructures for Sensing Applications	I
17:00-17:20	Onur Parlak (Karolinska Institutet, Sweden) Epidermal Sensors for Medical Diagnostics	I
17:20-17:35	Majlinda Vasjari (NanoAlb, University of Tirana, Albania) Integration of smart nanomaterials with advanced nanotechnology for development of nanosensors for water pollution detection	O
17:35-17:50	Dilsat Ozkan-Ariksoysal (Ege University, Turkey) Current approaches based on electrochemical DNA nanobiosensors for genetic diagnosis or analysis of drug-DNA interactions	O
17:50-18:05	Ali Kemal Ateş (Dicle University, Turkey) MoS ₂ -PEDOT:PSS Nanocomposite-Based Electrochemical Sensor for Epirubicin Detection in Biological Samples	O

09:00-09:30	Sibel A. Özkan (Ankara University, Turkey) Nanomaterial Embedded Molecularly Imprinted Polymer Sensors for The Pharmaceutical and Biomedical Assay: Recent Developments and Future Prospects	K
09:30-10:00	Suna Timur (Ege University, Turkey) The Role of Paper-Based and Electrochemical Biosensors in Multiplexed Diagnostics	K
10:00-10:30	Robert S. Marks (Ben Gurion University, Israel) A new lateral capture flow immunoassay configuration for the determination of anti-drug antibodies in patients receiving biologic therapy	K
10:30-11:00	Coffee Break / Poster Session	
11:00-11:20	Eva Hemmer (University of Ottawa, Canada) Shining a Light on Lanthanide-Doped Nanoparticles: From Synthesis to Potential Applications	I
11:20-11:50	Mamas Prodromidis (University of Ioannina, Greece) Generation of Nanomaterials via Spark Discharge: A Rapid, Environmentally Friendly, and Versatile Method for In-Situ Modification of Electrode Surfaces	K
11:50-12:20	Javier Rodríguez-Viejo (UAB / ICN2, Spain) Nano structuring Molecular Glasses via Anomalous Melting and Wrinkle Formation	K
12:20-14:00	Lunch	
PLENARY SESSION		
14:00-14:30	Monica Craciun (University of Exeter, UK) Integration of 2D Materials with Textiles for Wearable Electronics and Beyond	K
14:30-14:45	Petr Jakubec (Univerzita Palackého v Olomouci (CATRIN), Czech Republic) Inkjet Printing for Advanced Electrode Fabrication: Precision, Efficiency, and the Role of Graphene-Based Materials in Electrochemical Applications	O
14:45-15:05	Elena Del Corro (ICN2, Spain) Boosting the performance of nanoporous graphene-based thin-film microelectrodes for neural interfacing	I
15:05-15:35	Zdenek Sofer (UCT Prague, Czech Republic) Xenes – monoelemental 2D materials, their synthesis and applications	K
15:35-15:55	Theodosis Giouis (University of Groningen, The Netherlands) Ex Situ Covalent Functionalization of Germanene via 1,3-Dipolar Cycloaddition: A Promising Approach for the Band Gap Engineering of Group 14 Xenes	I
15:55-16:10	Coffee Break / Poster session	
16:10-16:30	Marijana Petković (University of Belgrade, Serbia) Biomolecular changes in cervical cancer cells by non-stabilised and albumin-stabilised colloidal N-TiO ₂ nanoparticles: SR FTIR spectroscopical approach	I
16:30-17:00	Gianni Ciofani (IIT, Italy) Piezoelectric cellular stimulation: An innovative approach for brain cancer therapy	K
17:00-17:30	Nunzio Denora (Università degli Studi di Bari Aldo Moro, Italy) Biomimetic Nanoparticles via Microfluidics: Advancing Precision Cancer Therapy	K
17:30-17:45	Nicola d'Avanzo (Magna Graecia University of Catanzaro, Italy) Bioinspired thermoresponsive nanovesicles for improved melanoma targeting	O
17:45-18:15	Majlinda Lako (Newcastle University, UK) Retinal organoids: a window into our eyes during development and disease	K

WEDNESDAY OCTOBER 30, 2024

09:00-09:30	Shimshon Belkin (The Hebrew University of Jerusalem, Israel) Bio-detection of buried landmines by autonomous microbial-electronic modules	K
09:30-09:45	Toufic El Beaino (CIHEAM-IAMB, Italy) Exploring of Nano-biomolecules for the Detection and Control of Bacterial Plant Diseases	O
09:45-10:05	Erhan Zor (Necmettin Erbakan University, Turkey) A Nanobiomaterial as Test Membrane for Lateral Flow Assays	I
10:05-11:05 Coffee Break / Poster session		
11:05-11:35	Massimo De Vittorio (IIT, Italy) Nanomachined tapered optical fibers for recording and controlling neural	K
11:35-12:05	Sergio Moya (CIC BiomaGUNE, Spain) Biological Fate of Nanocarriers and In vivo Protein Corona studies	K
12:05-12:25	Driton Vllasaliu (King's College London, UK) Milk NanoVesicles for Oral Delivery of Nucleic Acids	I
12:25-14:00 Lunch		
14:00-14:30	Yasuaki Einaga (Keio University, Japan) Electrochemical CO ₂ reduction by Boron-doped Diamond Electrodes	K
14:30-15:00	Daniel Maspoch (ICN2, Spain) Clip-off Chemistry: Synthesis by Bond Cleavage	K
15:00-15:20	Takeshi Kondo (Tokyo University of Science, Japan) Spray-coated Diamond Electrode for Sulfuric Acid Electrolysis	I
15:20-15:40	Takashi Uemura (The University of Tokyo, Japan) Metal-Organic Frameworks for Advanced Polymers	I
15:40-16:00	Mai Tomisaki (Kyushu University, Japan) Decoupled Water Electrolysis Toward Selective Generation of Hydrogen and Oxygen	I
16:00-16:30 Coffee Break / Poster Session		
16:30-16:50	Yuya Oaki (Keio University, Japan) Soft Layered Conjugated Polymers for Advanced Sensing	I
16:50-17:05	Marc Parrilla (University of Antwerp, Belgium) 3D-printed microneedle-based electrochemical sensing devices for plant health assessment	O
17:05-17:20	Gylxhane Kastrati (University of Pardubice, Czech Republic) Multiparameter Monitoring of Oral Health Biomarkers Using Integrated Flexible Sensors	O
17:20-17:35	Lukas Spichal (CATRIN, Palacky University, Czech Republic) AI-Enhanced Optical and Electrochemical Biosensing for High-Throughput Plant Phenotyping: From Nano-Scale to Whole Plant Analysis	O
17:35-17:50	Lorenzo Sembranti (Università di Pisa, Italy) Electrochemical biosensor for the quantification of Urea in dialysate and blood	O
17:50-18:10	Erman Salih Istifli (Cukurova University, Turkey) Title to be defined	I
18:10-18:25	Flamur Sopaj (University of Prishtina "Hasan Prishtina", Republic of Kosovo) Kinetics of bromophenol blue oxidation on carbon felt anode and anode induced graphene oxide nanoparticles	O
18:25-18:40	Albana Veseli (University of Prishtina "Hasan Prishtina", Republic of Kosovo) Alternative Approaches for Graphene Oxide Synthesis and Their Application in Advancing Electrochemical Methods	O

THURSDAY OCTOBER 31, 2024

09:00-09:20	Nilgun Baydogan (Istanbul Technical University, Turkey) Progress in the Inactivation of SARS-CoV-2 Using Nanolayers Composed of Doped Metal Oxides Synthesized via Sol-Gel Processing	I
09:20-09:35	Ortensia Ilaria Parisi (University of Calabria, Italy) Molecularly Imprinted Polymers (MIPs) as Synthetic Antibodies for Inhibiting SARS-CoV-2 Omicron Variant	O
09:35-09:55	Cecilia Cristea ("Iuliu Hațieganu" University of Medicine and Pharmacy, Romania) DNA nanotechnology for personalized medicine: from selection to advances therapeutics	I
09:55-10:10	Ada Tushe (Veneto Institute of Oncology (IOV) - IRCCS, Italy) Development and Characterization of Two Novel Nanomedicine-based Approaches to Restore the Anti-tumor Activity of the Immune System in Glioblastoma Patients	O
10:10-10:40	Fatih Inci (Bilkent University, Turkey) Decoding Cell Dust: Unlocking Insights for Disease Diagnosis	K
10:40-11:10	Coffee Break / Poster Session	
11:10-11:30	Angela Assunta Lopedota (Università degli studi di Bari Aldo Moro, Italy) Beyond Nanoparticles: Advanced Microencapsulation Techniques in Paediatric Pharmaceutical Formulations - A Comprehensive Analysis of the Prilling/Vibration Method and Case Studies	I
11:30-11:45	Antonia Mancuso (Magna Graecia University of Catanzaro, Italy) Nanomedicine as potential response in vitiligo disorder and social impairment	O
11:45-12:15	Firat Guder (Imperial College London, UK) Wearable reconfigurable metamaterials and origami inspired implantable sensors for human-machine interfaces	K
12:15-12:45	Francesco Trotta (University of Turin, Italy) Cyclodextrin based cross-linked and branched polymers: synthesis and applications	K
12:45-13:15	Poster Session II	
13:15-14:15	Lunch	
14:15-14:45	Pavel Banáš (CATRIN - Palacky University Olomouc, Czech Republic) Advancing Molecular Simulations: The Role of Force Field Development and Big Data Mining	K
14:45-15:15	Arjan Durrezi (Indiana University Indianapolis, USA) Developing Trustworthy, Causal, and Aligned Artificial Intelligence	K
15:15-15:45	Aitor Mugarza (ICN2, Spain) Atomically precise porous graphene nanoarchitectures: from synthesis to devices	K
15:45-16:00	Alex Laikhtman (Holon Institute of Technology (HIT), Israel) Plasma-Treated and Doped WS ₂ Nanoparticles for Energy Applications	O
16:00-16:30	Coffee Break / Poster Session	
16:30-18:45	PARALLEL SESSION 1 (PHD STUDENTS)	
16:30-18:45	PARALLEL SESSION 2 (ALBANIA)	

PARALLEL SESSION 1 - PhD Students

16:30-16:40	Nerea de Mariscal i Molina (Institut Català de Nanociència i Nanotecnologia, Spain) Point-of-Care Haemoglobin Detection for Anaemia Diagnosis	O
16:40-16:50	S. Irem Kaya (University of Health Sciences, Turkey) Selective determination of bortezomib with a plant-based nanoflower-modified electrochemical MIP sensor	O
16:50-17:00	Huseyin Senturk (Ege University, Turkey) Impedimetric aptasensor for the determination of patulin mycotoxin with levan modified electrodes	O
17:00-17:10	Fatma Selen Gunden (Ege University, Turkey) A new approach in electrochemical biosensing technology using 3D printed carbon electrodes	O
17:10-17:20	Riyako Matsuoka (Keio University, Japan) Electroreduction of Furfural on a Diamond Electrode	O
17:20-17:30	Risa Ogawa (Keio University, Japan) Electrochemical Measurement of Antiglaucoma Drug Brimonidine Using Boron-Doped Diamond Microelectrodes	O
17:30-17:40	Ziping Zhang (Keio University, Japan) An Indirect Electrochemical Detection of Creatinine In Urine Samples Using A Boron-Doped Diamond Electrode	O
17:40-17:50	Esma Yildiz (Ege University, Turkey) Electrochemical Determination of Uric Acid by Halloysite Nanotube Modified Electrode	O
17:50-18:00	Liridon Sopaj (University of Prishtina "Hasan Prishtina", Republic of Kosovo) Acute exposure to ambient fine particulate matter (PM 2.5) extracted from Prishtina and Obiliq urban area induces cardiac electrophysiological changes in rats	O
18:00-18:10	Kerem Tok (Ege University, Turkey) Functionalization of Magnetic Nanoparticles with Tryptophan and Isatin for Enhanced Glioblastoma Treatment	O
18:10-18:20	Vllaznim Mula (University "Fehmi Agani" in Gjakova, Republic of Kosovo) Monitoring Volatile Organic Compounds in Indoor and Outdoor Air Using Passive Sampling in Milan, Italy	O

PARALLEL SESSION 2 Albania

16:30-16:45	Gledjan Caka (University of Tirana, Albania) Analysis of mutations affecting the KLK15 gene in prostate cancer	O
16:45-17:00	Ledia Vasjari (University of Tirana, Albania) Behind the curtains of nanotechnology	O
17:00-17:15	Avni Berisha (University of Prishtina / NanoAlb, Republic of Kosovo) Exploring Aryl Radicals as Multifunctional Agents for (Nano)material Surface Modification: A Comprehensive Review with a Focus on DFT Analysis	O
17:15-17:30	Kledi Xhaxhiu (NanoAlb, Albania) Challenges in Assessing Albanian Wine Quality through Their Total Antioxidant Content	O
17:30-17:45	Arjan Korpa (University of Tirana, Albania) Rhodamine B Decomposition in Water Using Metal-Doped TiO ₂ Photocatalysts supported on Zeolite or Nano-Graphite Substrates	O
17:45-18:00	Fetah Podvorica (University of Prishtina, Republic of Kosovo) Chemical grafting of coal surface with mixed alkyl-aryl layers	O
18:00-18:15	Anila Hoda (Agricultural University of Tirana, Albania) Integrating nanotechnology with mercuric reductase from bacteria for enhanced mercury bioremediation	O
18:15-18:30	Sefer Avdiaj (University of Prishtina, Republic of Kosovo) Nanoscale Insights into Helium Diffusion and Permeation in Polymer Bottles	O

09:00-09:20	Filiz Kuralay (Hacettepe University, Turkey) Polymer-based surfaces and their sensing applications	I
09:20-09:40	Pinar Kara (Ege University, Turkey) Title to be defined	I
09:40-09:55	Sezin Yuksel (Ege University, Turkey) A Graphene Oxide-Based Electrochemical Biosensor for the Detection of Pathogenic Microorganisms	O
09:55-10:25	Arzum Erdem Gürsan (Ege University, Turkey) Recent electrochemical biosensors with nanomaterials based applications: Biointeractions to Diagnostics	K
10:25-11:00	Coffee Break	
11:00-11:15	Francesca Garganese (University of Bari Aldo Moro, Italy) Applications of Oxford Nanopore Technologies to Juvenile Aphrophoridae Niche	O
11:15-11:35	Anila Bello (UMass Lowell, USA) Per- and Polyfluoroalkyl Substances (PFAS) in the Environment: An Overview of Three Case Studies	I
11:35-11:55	Valentin Mirceski (University of Skopje, North Macedonia) Methodological development of voltammetry: theory and applications	I
12:00	CLOSING & NANOBALKAN2025 ANNOUNCEMENT	
