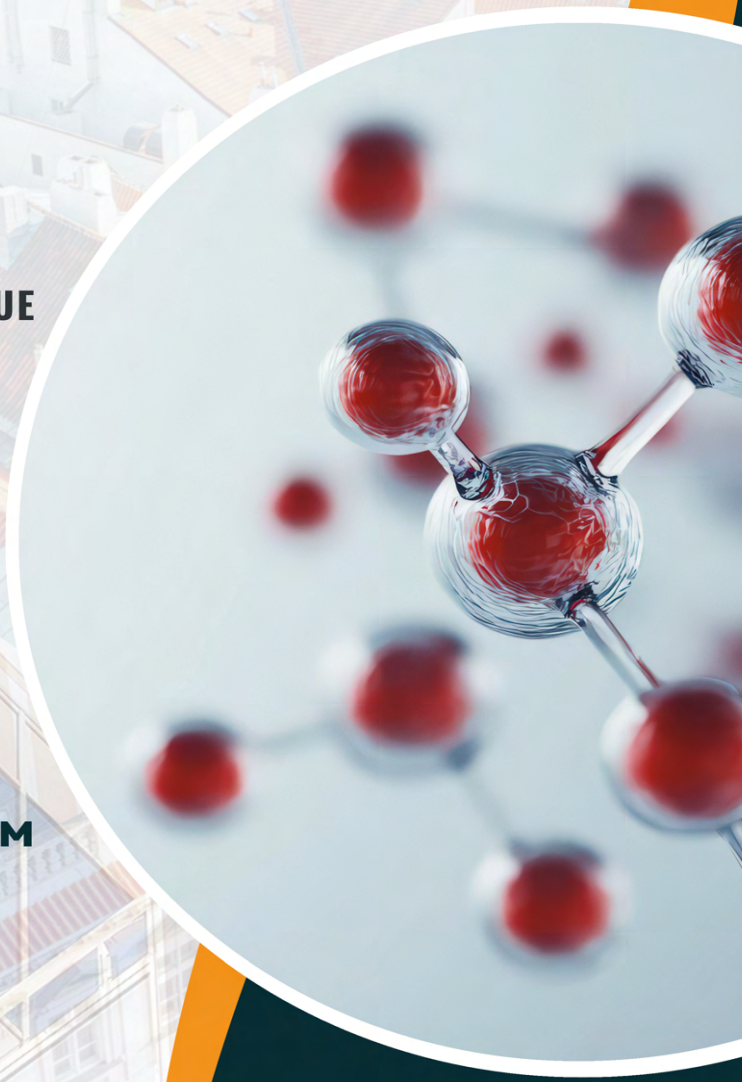
Horizon

INTERNATIONAL CONFERENCE ON CARBON SCIENCE AND TECHNOLOGY

----FROM DISCOVERY TO APPLICATIONS----



NOV 10-12, 2025 | HYBRID

GRAND HOTEL INTERNATIONAL PRAGUE
CZECH REPUBLIC

CENTRAL EUROPEAN TIME

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DAY 1

Monday, November 10, 2025
In-Person
Neklan-Vlasta Room
Grand Hotel International Prague

Meeting Joining Link
https://us06web.zoom.us/j/82099710607?pwd=OjjnQ1BEFFtSWsrg8etDu5h3PLhlVq.1
Meeting ID:820 9971 0607
Passcode:765587

08:00-08:20AM REGISTRATIONS AND BADGE PICK UP
08:20-08:40AM INAUGURATION

Plenary Presentations

Chair: Lenka Matejova, VSB Technical University of Ostrava, Czech Republic

08:40-09:20

Beyond Gunpowder: Exploring the Capability of Carbon-Sulfur Alliance

Teresa J. Bandosz, The City College of New York (CUNY), USA

Teresa J. Bandosz is a Distinguished Professor of Chemistry at The City College of New York. Her research focuses on the synthesis, modification, and applications of nanoporous carbon materials, graphene-based composites, and hybrid materials for environmental protection, catalysis, and energy storage. She has authored over 400 scientific publications and holds multiple U.S. patents. Prof. Bandosz is a Fulbright Senior Scholar, Fellow of the American Carbon Society, and has served on editorial boards of major journals including Carbon and Journal of Colloid and Interface Science. Her pioneering work has significantly advanced the understanding of surface chemistry and adsorption phenomena in functional materials.

09:20-10:00

Carbon Engineering to Transform Next Generation Energy and Energy Storage Industry

Mohini M. Sain, University of Toronto, Canada

Mohini M. Sain is the Endowed Ford Motor Canada Chair in Sustainable Materials and Director of the Centre for Biocomposites and Biomaterials Processing at the University of Toronto. A global pioneer in bio-based and low-carbon materials, he is renowned for leading the Biocar Initiative and advancing sustainable innovations in automotive and industrial sectors. With over 750 peer-reviewed publications and numerous patents, Prof. Sain has received major recognitions including the North American Entrepreneurship Award, Plastic Innovation Award, and KALEV PUGI Award. His research has led to 50+ technology transfers and the founding of several start-ups such as Greencore Composites Inc. and GreenNano Technologies Inc. Internationally recognized as a Carbon XPrize finalist and a Fellow of the Royal Society of Chemistry, Prof. Sain continues to drive global innovation in green manufacturing and carbon conversion technologies.

10:00-10:40
(Virtual)

Advanced Carbon-based Energy Storage Materials Empowered by Lithium Bond Chemistry

Qiang Zhang, Tsinghua University, China

Qiang Zhang is a leading researcher in advanced energy materials at the Dept. of Chemical Engineering, Tsinghua University. He is the chief scientist of the national key research and development program "New Energy Vehicle", aims at to research energy chemistry and energy materials and related chemical engineering science. His work focuses on lithium–sulfur batteries, lithium metal anodes, and nanostructured energy materials. He has made pioneering contributions to understanding electrode–electrolyte interfaces and developing high-performance, sustainable energy storage systems. Prof. Zhang has authored over 300 peer-reviewed papers with high citations and serves on the editorial boards of several top journals. Recognized among the Highly Cited Researchers by Clarivate, he continues to shape the future of next-generation battery technologies through innovative nanomaterials design and electrochemical engineering.

10:40-11:00 COFFEE BREAK

Keynote Presentations

11:00-11:30

UHV Exfoliation and Functionalization of 2D Materials

Martin Kalbac, J. Heyrovský Institute of Physical Chemistry, Czech Republic

Martin Kalbac is a senior scientist at the J. Heyrovský Institute of Physical Chemistry, Czech Academy of Sciences. His research focuses on carbon nanomaterials, particularly graphene and carbon nanotubes, with emphasis on their synthesis, spectroscopy, and applications in energy conversion. He has made significant contributions to Raman spectroscopy studies of low-dimensional materials and their functionalization. Dr. Kalbac has authored numerous high-impact publications and leads several national and international research projects advancing the understanding of carbon-based nanostructures for sustainable technologies.

11:30-12:00

Magnetism and Light Emission and in Organic Molecules

Juan Casado, University of Málaga, Spain

Juan Casado is a distinguished professor in the Department of Physical Chemistry at the University of Málaga, Spain. His research focuses on molecular materials, organic electronics, and conjugated systems, with a special emphasis on spectroscopy and electronic structure of π-conjugated compounds, radical species, and functional organic materials. He has authored numerous peer-reviewed publications and contributed significantly to the understanding of structure–property relationships in advanced organic and carbon-based materials for optoelectronic and energy applications.

12:00-12:30

Fullertubes: 35 Years of Hunting for the Long-missing Families of End-Capped, Tubular Carbon Cage Molecules

Steven Stevenson, Purdue University, Fort Wayne, IN, USA

Steven Stevenson is a Professor of Chemistry at Purdue University Fort Wayne, renowned for his pioneering research in fullerene chemistry and nanocarbon materials. He played a key role in the discovery and characterization of endohedral fullerenes (metallofullerenes) and continues to advance studies in carbon nanostructures, nanomaterials synthesis, and their applications in energy and biomedical fields. He has published extensively in high-impact journals and is recognized internationally for his contributions to nanoscience and carbon chemistry.

12:30-13:00

Catalytic Transformation of Carbon Dioxide under Atmospheric Pressure

Toshiyuki Moriuchi, Osaka Metropolitan University, Japan

Toshiyuki Moriuchi is a Professor of Chemistry at Osaka Metropolitan University. His research focuses on coordination chemistry, organometallic synthesis, and bioinspired catalysis. He has made significant contributions to the design of metal complexes for functional materials and catalytic transformations, authoring numerous publications in leading chemistry journals.

13:00-13:10 DISCUSSION TIME & GROUP PHOTO

13:10-14:00 LUNCH

CHAIR TALK

14:00-14:30

Utilization of Theoretical Approach in Carbon Engineering

Lenka Matějová, VSB – Technical University of Ostrava, Czech Republic

Lenka Matějová is an Associate Professor at the VSB – Technical University of Ostrava. Her research focuses on photocatalysis, nanomaterials, and semiconductor-based catalysts for environmental and energy applications. Her research focused on the material preparation and waste valorization group and specialized in advanced materials and green technologies. She has published extensively on the synthesis and characterization of titanium dioxide-based nanocomposites and other advanced functional materials.

Oral Presentations

Advances in Carbon Materials: From Synthesis to Catalysis and Applications

Chair: Csaba Cserhati, University of Debrecen, Hungary

14:30-14:50	**Biomass-based Carbon Supports Electrocatalysts in Fuel Cells** Michael Wark, Carl von Ossietzky University Oldenburg, Germany
14:50-15:10	**Fabrication of Carbon-like Layers on the Surface of Nano-sized Pores through *In-situ* Polymerization Method** Hirotaka Ihara, Kumamoto University, Japan
15:10-15:30	**Xylene Adsorbents Produced by Microwave Pyrolysis of Various Types of Waste** Zuzana Jankovská, Institute of Environmental Technology, CEET, VSB-TUO, Czech Republic
15:30-15:50	**Reevaluating How the Distribution and Size of Basal and Edge-oriented Graphene Sheets Influence the Voltammetric Responses of Aromatic Molecules** Stanislav Hason, Institute of Biophysics of the CAS, Czech Republic
15:50-16:10	**Exploring Carbon Nanostructures: Plasma Synthesis of Graphene-based Materials and their Applications** Mineo Hiramatsu, Meijo University, Japan
16:10-16:20	COFFEE BREAK

Chair: Michele Cacioppo, University of Palermo, Italy

16:20-16:40	**New Carbon Capture and Utilization (CCUS) using Electrolysis of Concentrated Seawater and Double Accelerated Mineral Carbonations** Sangmin Lee, Kongju National University, South Korea
16:40-17:00	**New Biochars for Water Treatment Applications** Andreas Taubert, University of Potsdam, Germany
17:00-17:20	**Use of Graphene Derivatives in Innovative Solutions for Sustainable Processes** Daniela Plachá, VŠB-Technical University of Ostrava, Czech Republic
17:20-17:40	**Microbial Electrosynthesis for CO_2 Upcycling to Value-added Platform Chemicals *via* Microbe-electrode Hybrid Process** Jung Rae Kim, Pusan National University, South Korea
17:40-18:00	**Carbon Adsorbent from Red Mombin Seeds Doped with Metal Oxides for Adsorption of Ammonia and Xylene in Gas Phase** José Antonio Moscol Ortiz, Universidad Nacional de Ingeniería, Perú
18:00-19:00	POSTERs & DRINKS

Poster Presentation

POSTER-1 **Highly Sensitive and Selective Detection of Volatile Aromatic Hydrocarbons using Bilayer Oxide Chemiresistors with Catalytic CeO_2**
Yoon Seong-Young, Kongju National University, South Korea

POSTER-2 **Highly Selective and Sensitive Detection of Methylbenzenes using Co_3O_4 Bilayer Sensors with Nanoscale TiO_2 and SnO_2 Overlayers**
Seo Jung-Hoo, Kongju National University, South Korea

POSTER-3 **Highly Conductive Graphene Oxide Quantum Dots as an Anode Additive for an Enhanced Sodium Ion Intercalation and Structural Stability of Sodium Ion Battery**
Hyung Kee Seo, Jeonbuk National University, South Korea
Deok Jin Lee, Jeonbuk National University, South Korea

POSTER-4 **Enhanced Stability and Performance of Li-CO_2 Batteries using Si-doped $Li1.4Al0.4Ti_{1.6}(PO_4)_3$ Solid Electrolyte**
Insoek Seo, Jeonbuk National University, South Korea

Notes

DAY 2

Tuesday, November 11, 2025
In-Person
Neklan-Vlasta Room
Grand Hotel International Prague

Meeting Joining Link
https://us06web.zoom.us/j/82099710607?pwd=OjjnQ1BEFFtSWsrg8etDu5h3PLhlVq.1
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Frontiers in Multidimensional Materials and Nanotechnology

Chair: Camelia Matei Ghimbeu, CNRS, France

Keynote Talk

09:00-09:30

Tubular 1D Van der Waals Heterostructures

Gerard Tobías-Rossell, VSB – ICMAB-CSIC, Spain

Gerard Tobías-Rossell is a Research Professor at the Institut de Ciència de Materials de Barcelona (ICMAB-CSIC), where he has led the Nanoengineering of Carbon and Inorganic Materials (NanoCIM) group since 2009. He holds a degree in Chemistry (2000) and a PhD in Materials Science (2004), both from the Universitat Autònoma de Barcelona (UAB). His research focuses on the development of advanced nanomaterials for biomedical and energy applications, particularly in the fields of nanooncology and theranostics. Notable projects include the development of radioactive nanocapsules for cancer therapy and diagnosis, as well as lithium neutron capture therapy using carbon nanohorns. Dr. Tobías-Rossell has coordinated several international research projects, such as the ITN project RADDEL, and currently leads the ERC-funded projects NEST (Nanoengineering of radioactive seeds for cancer therapy and diagnosis) and TARLIT (Targeted nanohorns for lithium neutron capture therapy).

Oral Presentations

09:30-09:50	**Catalytic Decomposition of Methane (CH_4) using Thermal Spray Coatings** Pratidhwani Biswal, Fraunhofer IGP, Germany
09:50-10:10	**Mechanochemical Approach for the Fabrication of Carbon Based (Nano) Composites: From Environmental Remediation to Electrochemical Sensing Devices** Antonio Turco, CNR Nanotec Institute of Nanotechnology, Italy
10:10-10:30	**Bilayer Oxide Semiconductors with Catalytic Overlayers: Toward High-performance Gas Sensors** Seong-Yong Jeong, Kongju National University, South Korea
10:30-10:50	**Growth Kinetics of $ZnAl_2O_4$ in Different Geometries in ZnO/Al_2O_3 Bilayers** Csaba Cserháti, University of Debrecen, Hungary
10:50-11:10	COFFEE BREAK
11:10-11:30	**2D and 3D Nanostructures of Carbon *via* Organic, Inorganic and Physico-chemical Routes Nanoscale** Paul Simon, Max-Planck-Institute for Chemical Physics of Solids, Germany
11:30-11:50	**Engineering Carbon Dots as Multifunctional Nanomaterials** Michele Cacioppo, University of Palermo, Italy
11:50-12:10	**Steel Industry's Clean Revolution Towards Decarbonisation - Pathways, Sustainability, Societies** Frank Roegener, TH Köln Institut für Anlagen- und Verfahrenstechnik, Germany

12:10-12:30	**Epitaxial Graphene on SiC for Floquet Engineering and Spintronics** Paola Barbara, Georgetown University, Washington, D.C., USA
12:30-12:50	**Advanced Carbon Materials *via* Catalytic Carbonization** Paul O Connor, YERRAWA, The Netherlands
12:50-13:00	DISCUSSION TIME
13:00-14:00	LUNCH

Chair: Amir Fahmi, Hochschule Rhein-Waal, Germany

14:00-14:20	**Carbon Materials for Na-ion Technology: From Batteries to Capacitors** Camélia Matei Ghimbeu, CNRS, France
14:20-14:40	**Unidirectional Hybrid Nanomat Towards Triboelectric Nanogenerators Devices** Amir Fahmi, Hochschule Rhein-Waal, Germany
14:40-15:00	**Preparation of Bio-sourced Catalytic Biochar-based Materials** Ksenia Parkhomenko, ICPEES, CNRS, Strasbourg University, France
15:00-15:20	**Innovative Pilot-scale Technologies for Monitoring and Removal of Microplastics in Aquatic Environments** Teresa Poerio, Institute on Membrane Technology, National Research Council of Italy (ITM-CNR), Italy
15:20-15:40	**Tailoring Syngas Composition *via* CO_2 Electroreduction on Atomically Dispersed NiFe Catalysts Supported on N-Doped Porous Carbon** Elias Rodriguez Jara, Institute of Ceramic and Glass (ICV-CSIC), Spain
15:40-16:00	BREAK
16:00-16:20	**Applications of 2D Semiconducting Layered Inorganic Nanomaterials in Electrochemical Water Splitting Reactions** Rui J. C. Gusmao, University of Chemistry and Technology, Prague, Czech Republic
16:20-16:40	**Influence of Support and Catalyst Layers Deposited on the Surface of Conducting Substrates Using Various Thin Film Deposition Techniques on the Structure of Vertically Aligned Carbon Nanotubes** Lilla Nánai, University of Miskolc, Hungary
16:40-17:00	**Modifying the Yeast Stress Response to Improve Biotechnology Properties** Tomas Grousl, Institute of Microbiology of the CAS, Prague, Czech Republic
17:00-17:20	**Low-resistivity Paste Containing Cu@Ag Flakes for HJT Solar Cell Electrodes *via* Optimization of Mixed Ag Salts and Solvents** Jong-Hyun Lee, Seoul National University of Science and Technology, South Korea
17:20-17:40 (Virtual)	**Carbon-inspired Metamaterials** Kenneth M. Golden, University of Utah, Salt Lake City, Utah, USA

DAY 3

Wednesday, November 12, 2025
In-Person
Neklan-Vlasta Room
Grand Hotel International Prague

Meeting Joining Link
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Meeting ID:820 9971 0607
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Innovations in Chemistry for a Sustainable Future

Chair: Tsutomu Minegishi, The University of Tokyo, Japan

Keynote Talk (Virtual)

08:20-08:50

Emerging Advanced Materials and Technologies to Answer to Society Demands

Rodrigo Ferrão Paiva Martins, CENIMAT|i3N – Centre for Nanostructured Materials and Nanotechnologies, President, European Academy of Sciences (EURASC)Portugal

Rodrigo Martins is a leading figure in the field of materials science, specializing in optoelectronic materials, nanotechnologies, and microelectronics. As the coordinator of CENIMAT|i3N, Prof. Martins has been instrumental in advancing research in transparent electronics, paper-based electronics, and flexible devices. He is also the founder and director of CEMOP/UNINOVA, a Centre of Excellence in Microelectronics and Optoelectronics Processes. His significant contributions have earned him several accolades, including the Gold Medal of Merit and Distinction from the Municipality of Almada and the Doctor Honoris Causa degree from the Dunărea de Jos University of Galați, Romania. He is actively involved in the scientific community as a member of the Scientific Council of the European Research Council and the Advisory Board of Horizon 2020 for Advanced Materials, Nanotechnology, Biotechnology, and Manufacturing.

Keynote Talk (Virtual)

08:50-09:20

Advanced Atomic Characterization of Carbon Nanomaterials *via* Electron Microscopy

Raúl Arenal, Instituto de Nanociencia y Materiales de Aragón (INMA) University of Zaragoza, Spain

Raúl Arenal is a Senior Researcher at the Instituto de Nanociencia y Materiales de Aragón (INMA), a joint center of the University of Zaragoza and the Spanish National Research Council (CSIC). He leads the Nanoscopy on Low Dimensional Materials (NLDM) group at the Laboratorio de Microscopias Avanzadas (LMA). With a Ph.D. in Solid-State Physics from the University of Paris-Sud (Orsay, France, 2005), Dr. Arenal has authored over 280 peer-reviewed publications. His research focuses on advanced electron microscopy techniques, particularly in situ transmission electron microscopy (TEM), to investigate the structural and electronic properties of nanomaterials. Dr. Arenal's work has significantly contributed to the understanding of low-dimensional materials, including carbon-based nanostructures, and their applications in various technological fields.

Oral Presentations

09:20-09:40	**Electrochemical Devices for Carbon Neutrality** Tsutomu Minegishi, The University of Tokyo, Japan
09:40-10:00	**Iron-catalyzed Direct Transformation of Alcohols as a Carbon Source** Kento Okabayashi, Osaka Metropolitan University, Japan
10:00-10:20	**Light-assisted Nanocomposite Gas Sensors with Data-driven Classification for Low-power Selective Detection** Jaroslav Otta, Institute of Physics, University of Tartu, Estonia
10:20-10:40	**Engineering the Electronic and Optical Properties of Ti_2X (X = C, N) MXenes Using Oxygen and Fluorine Surface Groups** Se-Hun Kim, Jeju National University, South Korea
10:40-11:00	**Multi-material 3D Printing at the Nanoscale** Dmitry Momotenko, Carl von Ossietzky Universität Oldenburg, Germany
11:00-11:20 (Virtual)	**Surface-termination-dependent Oxidation Pathways in Ti_3C_2Tx MXenes** David Beke, Wigner RCP, Hungary
11:20-11:40	**High Time to Revise the Conditions of Testing PV Modules** Rupendra Kumar Sharma, Czech Technical University in Prague, Czech Republic
11:40-12:00	**MWCNTs with Different Electrochemical Behaviors Modulate Neuronal Cell Functioning Invivo: A Novel Therapeutic Tool for CNS Degenerative Diseases** Silvana Fiorito, National Research Council, Rome, Italy
12:05-13:30	LUNCH AND DEPARTURES

DAY 3

Wednesday, November 12, 2025
Virtual | Central European Time

Meeting Joining Link
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Chair: Abhishek Kumar Gupta, University of St Andrews, United Kingdom

Plenary Talk

12:05-12:45

Static- and Oscillating-electric Fields and their Impact on Peptide Plaques (of Alzheimer's Disease)

Sason Shaik, Institute of Chemistry, The Hebrew University of Jerusalem Israel

Sason Shaik is a distinguished quantum chemist renowned for his pioneering work in chemical bonding, reactivity, and the development of new paradigms in theoretical chemistry. He currently serves as the Director of the Lise Meitner-Minerva Center for Computational Quantum Chemistry and leads a research group within the Institute of Chemistry. Prof. Shaik's research interests encompass valence bond theory, charge-shift bonding, and the mechanistic understanding of metalloenzymes, particularly cytochrome P450. He has made significant contributions to elucidating the electronic structures and reactivity.

Keynote Talks

12:45-13:15

Bridging Blue Biorefinery and Green Chemistry: Innovative Processes for the Next Generation of Sustainable Materials

Sónia Patrícia Marques Ventura, CICECO – University of Aveiro, Portugal

Sónia Ventura is an Assistant Professor at the University of Aveiro's Department of Chemistry and serves as the coordinator of Group 4 at CICECO, focusing on Renewable Materials and Circular Economy. Her research interests encompass sustainable biorefinery processes, the valorization of microalgal biomass, and the development of green solvents for the extraction of bioactive compounds. Dr. Ventura has contributed to over 230 publications, including journal articles, book chapters, and conference proceedings, and has an h-index of 26 In addition to her academic role, Dr. Ventura is actively involved in the scientific community as a member of the European Algae Biomass Association's extended board and has participated in various outreach activities promoting women in science.

13:15-13:45

Structural Control of Carbon Materials without Catalysts

Yasuhiro Yamada, Chiba University, Japan

Yasuhiro Yamada is an Associate Professor in the Graduate School of Science at Chiba University, Japan. Following his doctoral studies, he worked at the National Institute of Advanced Industrial Science and Technology and Nippon Chemi-Con Corp. in 2009. He joined Chiba University as an Assistant Professor in 2009 and was promoted to Associate Professor in 2019.Prof. Yamada's research focuses on the structural control and precise structural analysis of carbon materials, particularly in the context of defects in carbon materials. His work has been recognized with several awards, including the Academic Award from The Carbon Society of Japan in 2023 Chiba University. He has authored numerous publications in the field, contributing significantly to the understanding of carbon materials and their applications.

Oral Presentations

13:45-14:05	**Hybridization of Catalytic Water Splitting and Bioethanol Conversion As a Realistic Strategy for the Mitigation of CO_2 Emission** Tohru Setoyama, Mitsubishi Chemical Corp., Japan
14:05-14:15 (POSTER)	**Highly Conductive Graphene Oxide Quantum Dots as an Anode Additive for an Enhanced Sodium Ion Intercalation and Structural Stability of Sodium Ion Battery** Shahd Boud, Jeonbuk National University, South Korea
14:15-14:35	BREAK
14:35-14:55	**Bio-inspired and Bio-derived, Sustainable, Methods for Production and Activation of Graphene (Composites) for Energy Production/Storage** Izabela Janowska, ICPEES, CNRS, France
14:55-15:15	**Chemistry of Supported Single Layer Graphene CO Adsorption and H_2 Dissociation** Luca Vattuone, Genoa University, Italy
15:15-15:35	**Methane Production and Stability of the Electricity Grid** Miroslaw Szukiewicz, Technical University of Rzeszów, Poland
15:35-15:55	**Waste-derived Activated Carbon and Composites for Energy Storage Application** Akshita Singh, Indian Institute of Technology Roorkee, India ICPEES-CNRS, University of Strasbourg, Strasbourg, France
15:55-16:15	**N-autodoped Carbon from WWTP Sludge as Matrix for Ultra-high Sulfur Cathodes in Metal-S Batteries** Azahara Cardoso Almoguera, Universidad de Córdoba, Spain
16:15-16:35	**Carbon-based Materials for Next-generation Energy Devices: Insights into Synthesis, Characterization, and Application** Jennifer Laverde, Instituto Tecnológico Metropolitano de Medellín -itm, Colombia
16:35-16:55	**Unraveling the Structural Sensitivity of Metal Catalysts in Ethylene Hydroformylation: Insights from Theory and Experiments** Sourav Ghoshal, Kalinga Institute of Industrial Technology (KIIT) Deemed to be University, India

16:55-17:15 **Borassus Husk Fibre/Epoxy Composites: Experimental Analysis of Physical, Thermal, Flexural, and Dynamic Mechanical Properties for High-performance Applications**
Md Atiqur Rahman, University of Bolton, UK

17:15-17:30 BREAK

Chair: Umapada Pal, Instituto de Física, Universidad Autónoma de Puebla (BUAP), Mexico

17:30-17:50 **Magnetic Biopolymer-based Nanosorbents: Fast, Efficient and Sustainable Water Purification**
Ana Luísa Daniel-da-Silva, University of Aveiro, CICECO, Portugal

17:50-18:10 **Development of Red to Near-infrared TADF Emitters and Their Diverse Applications**
Abhishek Kumar Gupta, University of St Andrews, United Kingdom

18:10-18:30 **Probing Isotope-selective Breathing in MIL-53 *via In Situ* Electron Paramagnetic Resonance Spectroscopy**
Muhammad Fernadi Lukman, Leipzig University, Germany

18:30-18:50 **$NiFe_2O_4$/Reduced Graphene Oxide Nanocomposite for Electrochemical Acetaminophen Sensing**
Umapada Pal, Instituto de Física, Universidad Autónoma de Puebla (BUAP), Mexico

18:50-19:10 **Metal-organic Frameworks for Hydrocarbon Separation**
Meiyan Gao, University of California, Berkely, CA, USA

19:10-19:30 **Improving Single Photon Emission from vdW Materials *via* Atomic Engineering**
Shengxi Huang, Rice University, Houston, TX, USA

19:30-19:50 **High Performance N-I-P GaAsSb Core-shell Nanowires-based Near-infrared Photodetectors on Graphene**
Shanthi Iyer, North Carolina A&T State University, Greensboro, NC, USA

19:50-20:10 **A Unified Quantum-dynamic Framework for Predicting Circularly Polarized Emission in Chiral-conjugated Polymers**
Dmitri Kilin, North Dakota State University, Fargo, ND, USA

20:10-20:30 **Proteins as Electron Transport Media: Special Role or Structural Coincidence?**
Sudipta Bera, Weizmann Institute of Science, Israel

20:30-20:50 **Electrifying Catalytic CO_2 Conversion Reactive Process**
Blaz Likozar, National Institute of Chemistry, Slovenia

20:50-21:10 **Synthesis of Graphene Oxide-silver (GO-Ag) Nanocomposite TFC RO Membrane to Enhance Morphology and Separation Performances for Groundwater Desalination, (case study) Marsa Alam Area- Red Sea**
Heba Isawi, Desert Research Center, Egypt

21:10-21:30 **Nonlinear Spectroscopy in Chlorophyll Dimers Embedded in an Asymmetric Phonon Bath**
Mohamad Toutounji, UAE University, United Arab Emirates

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WE WISH TO SEE YOU AT PARIS 2026

October 26-28, 2026

CO-IN Symposia

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