

8TH EDITION OF INTERNATIONAL  
CONFERENCE ON

# 2D MATERIALS & APPLICATIONS

**July 21-22**

**2025**  
PARIS, FRANCE

CONFERENCE PROGRAM



IN-PERSON:  
Van der Valk Hotel Paris CDG Airport,  
351 Av. du Bois de la Pie, 95700  
Paris, France



VIRTUAL: Central  
European Summer  
Time (CEST)



**Day -1  
Monday**

# **8th Edition of International Conference on 2D Materials and Applications**

**July 21-22, 2025 | Paris, France**

**08:00 - 08:30**

**Registrations + Badge Pickup**

**08:30 - 09:00**

**Welcome Address by Moderator**

**09:00 - 10:30**

**Keynote Presentations**

**09:00 - 09:30**

**A.K. Fazlur F Rahman**, Oklahoma School of Science and Mathematics, USA

**Title: Catalytic Conversion of Ethanol to Butanol: Synthesis and Application of Naphthaquinone and Anthraquinone Coordinated Iridium Compounds**

**09:30 - 10:00**

**Reza Ghomashchi**, The University of Adelaide, Australia

**Title: Green Energy Revolution: Distribution Network Infrastructure for hydrogen**

**10:00 - 10:30**

**Jean Michel Mechling**, University of Lorraine, France

**Title: The study of historical mortars from Notre-Dame de Paris cathedral**

**Group Photo & Refreshment Break (10:30-10:50)**

**Expert Panel list member & Moderator: Dr. Jared Jagdeo**

**Technical Session-I (10:50 - 12:50)**

**10:50 - 11:10**

**Goerge Deerberg**, Fraunhofer UMSICHT, Germany

**Title: Carbon Management – From Vision to Industrial Application**

**11:10 - 11:30**

**Li-Ang Lee**, Linkou Chang Gung Memorial Hospital, Taiwan

**Title: Developing a Novel Neck-Wearable Piezoelectric Sensor for Early Carotid Artery Profile Screening in Habitual Snorers: A Pilot Study**

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**11:30 - 11:50**

**Anna Stepashkina**, Zhejiang Lab, China

**Title: Machine Learning Approaches as a Tool for Investigating Properties of Polymer Composites**

**11:50 - 12:10**

**Christine Videlot Ackermann**, Aix Marseille University, France

**Title: Investigations the photostability of Y-series electron acceptors from small molecules to polymers for OPV**

**12:10 - 12:30**

**Kanda Kazuhiro**, University of Hyogo, Japan

**Title: Properties and Classification of Diamond-Like Carbon Films**

**12:30 - 12:50**

**Fred Lisdat**, Technical University Wildau, Germany

**Title: Photoelectrochemical systems for biochemical detection**

**Lunch @ Restaurant (12:50 - 14:00)**

**Technical Session-II**

**14:00 - 14:20**

**Daniel Qi Tan**, GTIIT, China

**Title: Lewis Acid Molten Salt-Derived MXene Electrodes: Dual Oxide Coating and Porosity Engineering for Advanced Energy Storage**

**14:20 - 14:40**

**Haishan Zeng**, University of British Columbia, Canada

**Title: Label-free liquid biopsy based on blood circulating DNA detection using SERS-based nanotechnology for nasopharyngeal cancer screening**

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**14:40 - 15:00**

**Fahimeh Zare, Institute Superior tecnico( IST)- CQE, Portugal**

**Title: Innovative Cellulose Acetate Hybrid Membranes Combined with Integrating Magnetic Nanoparticle Adsorption for Urea Removal from Spent Dialysate**

**15:00 - 15:20**

**Margaret Kabakova, Suny Downstate, USA**

**Title: Red, near-infrared, and blue light do not induce DNA damage in human dermal fibroblasts**

**15:20 - 15:40**

**Xiang Wu, Ningbo University, China**

**Title: A bioinspired switchable adhesive patch with adhesion and suction mechanisms for laparoscopic surgeries**

**Refreshment Break + Poster Presentations (15:40 - 16:10)**

## **Poster 1**

**Emilia Martula, Medical University of Silesia, Poland**

**Title: The new dipyridthiazine derivatives- synthesis, properties analysis and anticancer activity**

## **Poster 2**

**Carlyn Danese, Mount Holyoke College, USA**

**Title: Empirical Potential Influence on Proton Transfer and Trapping in Scandium-Doped Barium Zirconate with Oxygen Vacancies**

## **Poster 3**

**Hsun-Feng Hsu, National Chung Hsing University, Taiwan**

**Title: Fabrication of Reduced Graphene Oxide Films on Silicon Nanowire Arrays via Photocatalytic Reduction Method and Their Applications in Infrared Light Sensing**

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**Technical Session-II continues -----**

**16:10 - 16:30**

**Adhmoorthy Prasannan**, National Taiwan University of Science and Technology, Taiwan

**Title: Development of amine/carboxylic terminal functionalities thermo-responsive pluronic coated biodegradable polymer-based micro drug carrier for regeneration of osteoarthritis in vitro**

**16:30 - 16:50**

**Jolly Bhadra**, Qatar University, Qatar

**Title: Triboelectric Nanogenerators based on biodegradable Sodium Alginate/ZnO-Co3O4 polymer nanocomposites**

**16:50 - 17:10**

**Iryna Skorocho**d, National Academy of Sciences of Ukraine, Ukraine

**Title: Effect of the Nanocomposite Complex Bacterial Preparation Azogran on the Phenolic Profiles of Different Barley Varieties under Abiotic Stress Conditions**

**17:10 - 17:30**

**Valerie Pralong**, CNRS, France

**Title: Design of new cathode material used as electrode for Li-Na-K-ion batteries**

**17:30 - 17:50**

**Zolile Wiseman**, Central University of Technology, South Africa

**Title: Digital data storage device using sodium alginate**

**Day 1 Concludes**

**Panel Discussions**

**Day -1  
Monday**

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**10:00 - 10:25**

**Serzhik Sargsyan**, National Polytechnic University of Armenia, Russia

**Title: Nanocomposites of metallic silver in a matrix of 1-vinyl-1,2,4-triazole and N-vinylcaprolactam copolymer**

**10:25 - 10:50**

**Jeyavani Vijayakrishnan**, CSIR- National Chemical Laboratory, India

**Title: Remarkable SO<sub>2</sub> and H<sub>2</sub>S Resistant Ability on CO Oxidation by Unique Pd/WO<sub>3</sub> 3D Hollow Sphere Nanocatalyst: Correlating Structure–Activity Relationships on SO<sub>2</sub> Exposure**

**10:50 - 11:15**

**Divyanshi Mangla**, K.R. Mangalam University, India

**Title: Novel Glutaraldehyde crosslinked Chitosan/GMA/Nickel oxide nanoparticles for Tetracycline, Ofloxacin and Lead removal**

**11:15 - 11:40**

**Abbas Alshehabi Jaafar**, Bahrain Polytechnic, Bahrain

**Title: On the plasmon contribution to X-ray electron emission spectroscopy background: q-statistical analysis**

**11:40 - 12:05**

**Pelin Kilic**, Ankara University, Turkey

**Title: Ensuring quality and consistency in cellular therapeutics: analytical insights from residual protein assessment**

**12:05-12:30**

**Osman Adiguzel**, Firat University, Turkey

**Title: Chemical Factors and Crystallographic Transformations Governing Reversibility in Shape Memory Alloys**

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**12:55-13:20**

**Wolfgang Quapp**, Leipzig University, Germany

**Title: Potential Energy Surfaces, Newton Trajectories and Optimal Oriented External Electric Fields**

**13:20-13:45**

**Maria Betânia de Freitas Marques**, Universidade Federal de Alfenas, Brazil

**Title: Evaluating the thermal behavior of materials and determining the kinetics of thermal phenomena for industrial applications**

**13:45-14:10**

**Fernando Pinto Coelho**, Federal University of Alagoas, Brazil

**Title: The sustainability of beach-cast seaweed biomass for Biorefinery processes: Calorific power heating studies with macroalgae**

**14:10-14:35**

**Terry Hendricks**, Blue Origin, USA

**Title: Review of Latest Advances in Thermoelectric Generation Materials, Devices, and Technologies**

**11:40 - 12:05**

**Daron I. Freedberg**, OVRR/CBER/FDA, USA

**Title: Unveiling solution glycan conformations**

**Day 2 Concludes**



**WE WISH TO SEE YOU AGAIN AT  
THE NEXT VERSION**

**Global Summit on Materials  
Science & Engineering  
(MATERIALS-2025)**

**May 06-07, 2026**

**Amsterdam | The Netherlands**

**[https://unitedresearchforum.com/materials-  
conference/](https://unitedresearchforum.com/materials-conference/)**

**[Email: director@urforum.org](mailto:director@urforum.org)**