

GLOBAL SUMMIT ON
**MATERIALS SCIENCE
& ENGINEERING**

July 21-22

2025
PARIS, FRANCE

CONFERENCE PROGRAM

ISBN: 978-1-917892-15-5



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**

Global Summit on Materials Science and Engineering

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 Skorochod, 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 -2
Tuesday**

Global Summit on Materials Science and Engineering

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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 SO₂ and H₂S Resistant Ability on CO Oxidation by Unique Pd/WO₃ 3D Hollow Sphere Nanocatalyst: Correlating Structure–Activity Relationships on SO₂ 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

**Day -2
Tuesday**

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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)