

**CONFERENCE**  
PROGRAM



*Joint Event*

9th Edition of World

# Nanotechnology Conference &

7th Edition of International Conference on

# Materials Science and Engineering

28-30

Oct, 2024

Online Event

 **VIRTUAL:**  
Eastern Time (ET)

## DAY 01

Monday, October 28, 2024  
(Virtual)

06:30-07:00	AV Check and Introduction
07:00-08:20, 14:20-15:40	Keynote Presentations
08:20-14:20	Oral Presentations

## DAY 02

Tuesday, October 29, 2024  
(Virtual)

06:30-07:00	AV Check
07:00-08:20, 13:30-16:30	Keynote Presentations
08:20-09:30	Poster Presentations
09:30-13:30	Oral Presentations

## DAY 03

Wednesday, October 30, 2024  
(Virtual)

06:30-07:00	AV Check
07:00-07:40, 13:00-14:20	Keynote Presentations
07:40-13:00	Oral Presentations

## Important Note

- The conference follows Eastern Time (ET) Virtual sessions.
- When the program refers to Local Timings, it means that the timing mentioned is based on the time zone of the presenter's country
- The Virtual presentations will take place in Zoom meetings
- Please remain accessible on Zoom throughout the day as there could be minor program adjustments due to technical issues or presenter no-shows.

# DAY 1

VIRTUAL

OCTOBER 28, 2024

Monday

ET time

Local timings

06:30–07:00 | AV Check and Introduction

@ZOOM MEETING

## KEYNOTE PRESENTATIONS

07:00–07:40

12:00–12:40

**Robert Buenker,**  
University of Wuppertal, Germany

Title: The failure of both Einstein's space-time theory and his equivalence principle and their resolution by the uniform scaling method

07:40–08:20

12:40–13:20

**Marek Nowicki**  
University of Wroclaw, Poland

Title: Porphyrin layers at metal-electrolyte interfaces monitored by EC-STM and CV

## ORAL PRESENTATIONS

08:20–08:40

20:20–20:40

**Musaab Ejaz,**  
Universiti Teknologi PETRONAS (UTP),  
Malaysia

Title: Broadband sound attenuation of shape memory polymer with triangular-honeycomb unit cell metamaterial structural design

08:40–09:00

20:40–21:00

**Liesel L. Estrella-Pajulas,**  
Silliman University, Philippines

Title: Development of panchromatic push-pull dyes for dye-sensitized solar cells using computational and experimental approach

09:00–09:20

14:00–14:20

**Gabriel Beltran,**  
Aragon Institute of Technology, Spain

Title: Development of a digital engineering tool for estimating the impact of micro-defects on the mechanical response of 3D-printed filaments

09:20–09:40

15:20–15:40

**Victor Ciupina,**  
Ovidius University of Constanta,  
Romania

Title: Nitrogen-doped carbon/titan/carbon/aluminium/carbon/silicon thin films: Synthesis by TVA technology and characterization

09:40–10:00

15:40–16:00

**Igor V Shevchenko,**  
M.P. Semenenko Institute of  
Geochemistry, Mineralogy and Ore  
Formation, Ukraine

Title: Structuring of water clusters under the solar influence and their copying by bulk water. Influence of the sun on the night side of the earth

ET time

Local timings

10:00–10:20

15:00–15:20

**Gunther Koller,**

koocoo technology & consulting  
GmbH, Austria

Title: 44 years experience with fibre reinforces polyurethane railway sleepers

10:20–10:40

15:20–15:40

**Zakia Hammou,**

University of Science and Technology  
of Oran, Algeria

Title: Effect of curvature on the dynamic behavior of carbon nanotube reinforced FGM shells

10:40–11:00

17:40–18:00

**Michael Tribelsky,**

Lomonosov Moscow State University,  
Russian Federation

Title: Tailoring subwavelength scale electromagnetic field patterns with the help of nanoparticles

11:00–11:20

15:00–15:20

**Amey Kossi Bollanigni,**

University of Lome/Formatech  
Institute, Togo

Title: Law of distribution of quantities of shells on Togolese Littoral

11:20–11:40

20:50–21:10

**Sujit Kumar Bandyopdhyay,**

Meghnad Saha Institute of  
Technology, India

Title: Studies on multifunctional nanostructured materials

11:40–12:00

18:40–19:00

**Osman Adiguzel,**

Firat University, Turkey

Title: Shape memory effect and diffusionless phase transformation in shape memory alloys

12:00–12:20

12:00–12:20

**Iuliana Laura Calugaru,**

Industrial Waste Technology Center,  
Canada

Title: Half-charring of dolomite mineral for applications in the passive treatment of mining effluents

12:20–12:40

12:20–12:40

**Valeriy A Buryachenko,**

Micromechanics & Composites LLC,  
United States

Title: Multiscale modeling of advanced heterogeneous materials

12:40–13:00

17:40–18:00

**Martin Krus,**

Fraunhofer Institute for Building  
Physics, Germany

Title: Sustainable building material made from bulrush with numerous unique selling points

13:00–13:20

13:00–13:20

**Hassan Nawaz,**

University of Pittsburgh, United States

Title: The art and science of metal-organic frameworks (MOFs): A journey from conventional to contemporary techniques

13:20–13:40

13:20–13:40

**Robert Guidoin,**

Universite Laval, Canada

Title: Adverse events following transvaginal polypropylene mesh implantation to treat pelvic floor disorders: an explanatory study of explanted devices

ET time

Local timings

13:40–14:00

13:40–14:00

**Raj Mukhopadhyay,**  
Carnegie Mellon University, United States

Title: Synthesis and characterization of modified mineral–biochar composite and its application for removing perfluorooctanoic acid from water

14:00–14:20

19:00–19:20

**Imen Ksouri,**  
University of Sfax, Tunisia

Title: The impact of short and long term ageing in glycol water mixture on mechanical behavior of polyamide 6/glass fibers materials and recovery of properties after desorption process

## KEYNOTE PRESENTATIONS

14:20–15:00

14:20–15:00

**Will Skene,**  
Montreal University, Canada

Title: Color control of electrochromes by structural modification

15:00–15:40

12:00–12:40

**Ephraim Suhir,**  
Portland State University, United States

Title: Failure oriented accelerated testing in electronics and photonics materials engineering: Types, roles, attributes, modeling

# DAY 2

VIRTUAL

OCTOBER 29, 2024

Tuesday

ET time

Local timings

06:30–07:00 | AV check

@ZOOM MEETING

## KEYNOTE PRESENTATIONS

07:00–07:40

22:00–22:40

**Raman Singh,**  
Monash University–Clayton Campus,  
Australia

Title: Circumventing challenges in developing CVD graphene coating on mild steel: A disruptive approach to remarkable/durable corrosion resistance

07:40–08:20

14:40–15:20

**Michael I Tribelsky,**  
Moscow State University, Russian  
Federation

Title: Highlighting recent advancements in electromagnetic field subwavelength tailoring using nanoparticle resonant light scattering and related topics

## POSTER PRESENTATIONS

08:20–08:30

21:20–21:30

**Sang Hyeon Im,**  
Dong Eui University, Korea, Republic  
of

Title: A study on the demagnetizing factor of a hollow cylindrical magnetic materials

08:30–08:40

21:30–21:40

**Sang Hyeon Im,**  
Dong Eui University, Korea,  
Republic of

Title: A study on the effect of magnetic interaction between ferromagnetic materials using Preisach model

08:40–08:50

16:40–16:50

**Tsisana Gavasheli,**  
Ivane Javakishvili Tbilisi State  
University, Georgia

Title: Comparative study of the domain wall pinning in cobalt micropowders and nanowires by the two nuclear magnetic resonance methods

08:50–09:00

15:50–16:10

**Kalinichenko Alexander,**  
Belarusian State Technological  
University, Belarus

Title: Increasing the fatigue strength of aluminum alloy parts using composite coatings for aerospace engineering

09:00–09:10

16:00–16:10

**Nuha Al Harbi,**  
Umm Al Qura University, Saudi Arabia

Title: Structural and optical properties of flexible polymer nanocomposites films for optoelectronics applications

09:10–09:20

15:10–15:20

**Hassan Idriss Abaker Idriss,**  
Africa City of Technology (ACT), Sudan

Title: DFT calculation of ZnO iron doped optical and optoelectronic properties using quantum espresso

ET time Local timings

09:20–09:30 15:20–15:40

**Tymoshok Nataly,**  
Zabolotny Institute of Microbiology  
and Virology of the National Academy  
of Sciences of Ukraine, Ukraine

Title: Selenium biotransformation into Nano–Se by probiotics

## ORAL PRESENTATIONS

09:30–09:50 21:30–21:50

**Vladimir G Chigrinov,**  
Hong Kong University of Science and  
Technology, Hong Kong

Title: Azodye photoaligned nanolayers for liquid crystal: New trends

09:50–10:10 20:50–21:10

**Wariya Nirachonkul,**  
Chiang Mai University, Thailand

Title: The enhanced cytotoxic effect of curcumin on leukemic stem cells via CD123–targeted nanoparticles

10:10–10:30 16:10–16:30

**Andrey Belousov,**  
Kharkiv National Medical University,  
Ukraine

Title: Efficiency of nanoparticles (Micromage–B) in the complex treatment of multiple sclerosis

10:30–10:50 16:30–16:50

**Andrey Belousov,**  
Kharkiv National Medical University,  
Ukraine

Title: Innovative method of nanotechnology application in the complex treatment of multiple sclerosis

10:50–11:10 15:50–16:10

**Robert Buenker,**  
University of Wuppertal, Germany

Title: The failure of both einstein’s space–time theory and his equivalence principle and their resolution by the uniform scaling method

11:10–11:30 20:40–21:00

**Sharda Sundaram Sanjay,**  
Ewing Christian College, An  
Autonomous PG College of University  
of Allahabad, India

Title: Specification of the surface of nanomaterials through functionalization

11:30–11:50 18:30–18:50

**Delia Teresa Sponza,**  
Dokuz Eylul University, Turkey

Title: Photodegradation of endocrine disruptors namely methyl p–hydroxybenzoate and ethyl 4–hydroxybenzoate with N–doped BiOBr nanocomposite

11:50–12:10 16:50–17:10

**Samuel Chisa Dike,**  
Rivers State University, Nigeria

Title: Deploying nanotech for sustainable energy transition in Nigeria

12:10–12:30 17:10–17:30

**Sylwia Wcislik,**  
Kielce University of Technology,  
Poland

Title: Effect of mono and hybrid nanofluids on contact angle and heat transfer rate

12:30–12:50 13:30–13:50

**Viviane Pilla,**  
Federal University of Uberlândia UFU,  
Brazil

Title: Photophysical evaluation of aqueous carbon dots synthesized from several raw materials for bioapplication

ET time

Local timings

12:50–13:10

12:50–13:10

**Azzedine Bensalem,**  
Long Island University, United States

Title: Synthesis, characterization, and mechanical properties of nano metal-substituted hydroxyapatite and metal oxides/hydroxyapatite nanocomposites

13:10–13:30

11:10–11:30

**Bahman Zohuri,**  
Galaxy Advanced Engineering, Mexico

Title: Nanotechnology in nuclear reactors: Innovations in fusion and fission power generation

## KEYNOTE PRESENTATIONS

13:30–14:10

13:30–14:10

**Thomas J Webster,**  
Interstellar Therapeutics, United States

Title: The impact of nanomedicine: 30,000 orthopedic nano implants with no failures and still counting

14:10–14:50

15:10–15:50

**Paulo Cesar De Morais,**  
Catholic University of Brasilia, Brazil

Title: Logistic-modified mathematical model for tumor growth treated with nanosized cargo delivery system

14:50–16:30

14:50–15:30

**Hossein Hosseinkhani,**  
Innovation Center for Advanced Technology, Matrix, Inc., United States

Title: Artificial Intelligence (AI) in biomedical engineering



# DAY 3

VIRTUAL

OCTOBER 30, 2024

Wednesday

ET time Local timings

06:30–07:00 | AV check

@ZOOM MEETING

## KEYNOTE PRESENTATIONS

07:00–07:40 12:00–12:40

**Rafal Kozubski,**  
Jagiellonian University in Krakow,  
Poland

Title: Atomistic simulation of chemical ordering phenomena in nanostructured intermetallics

## ORAL PRESENTATIONS

07:40–08:00 22:40–23:00

**Saheli Biswas,**  
Commonwealth Scientific and  
Industrial Research Organisation  
(CSIRO), Australia

Title: Material challenges with proton conducting ceramics for intermediate temperature hydrogenation/dehydrogenation applications

08:00–08:20 22:00–22:20

**Alexander S Gournik,**  
Institute of Automation and Control  
Processes, Russian Federation

Title: Make experiments more efficient: Two simple and powerful approaches. Mg<sub>2</sub>Si growth for photovoltaic and thermoelectric applications

08:20–08:40 20:20–20:40

**Nasimuddin,**  
Institute for Infocomm Research,  
Singapore

Title: Reconfigurable antenna structures using tunable materials

08:40–09:00 18:10–18:30

**D R Patil,**  
North Maharashtra University, India

Title: (0, 1 and 2) Dimensional hybrid architecture of the synthesized materials leads the smart sensing of the gaseous species at low / room temperature

09:00–09:20 21:00–21:20

**Lixiong Shao,**  
Shanghai Jiao Tong University, China

Title: Enhanced grain refinement, precipitates regulation and improved mechanical properties of cast Al–Li alloy by Ti addition and heat treatment

09:20–09:40 14:20–14:40

**Babaghayou Meriam Imane,**  
Higher Normal School of Laghouat,  
Algeria

Title: Exploring heterogeneity in the properties of monolayer LDPE greenhouse films under natural ageing

09:40–10:00 19:10–19:30

**Ravi Kikar Sinha,**  
Unaffiliated Indian Researcher, India

Title: Decentralisation of power through use of portable nuclear machines without excretion

ET time

Local timings

10:00–10:20

17:00–17:20

**I Engin Ture,**Anadolu Plasma Technology Center,  
Turkey**Beycan Ibrahimoglu,**Anadolu Plasma Technology Center,  
Turkey

Title: Examination of the p–T phase diagram of pure substances

10:20–10:40

15:20–15:40

**Joanna Karasiewicz,**Adam Mickiewicz University Poznan,  
Poland

Title: Organofunctional silicon compounds – Synthesis and application as anti-biocorrosion coating

11:00–11:20

20:00–20:20

**Ludmila I. Kveglis,**Sarsen Amanjolov East Kazakhstan  
University, Kazakhstan

Title: Study of electron–beam welding joints of steels 12Cr18Ni10Ti and 36NiCrTiAl on their structure and characteristics

11:20–11:40

18:50–19:10

**Maryam Shokravi,**Energy Institute of Higher Education,  
Iran (Islamic Republic of)

Title: Dynamic buckling of smart sandwich beam subjected to electric field based on hyperbolic piezoelectricity theory

11:40–12:00

11:40–12:00

**Anis Rahman,**Applied Research & Photonics, Inc,  
United States

Title: Nanotechnology and T–ray imaging for enabling a smarter AI and LLMs for medical diagnostics and other applications

12:00–12:20

17:00–17:20

**Nacro Alioune,**

Unicaen, France

Title: Multi–scale modeling and simulation of high–contrast composite materials : second–order gradient theory

12:20–12:40

17:20–17:40

**Mohamed Abdelhedi,**

Faculty of Sciences of Sfax, Tunisia

Title: Ultrasonic velocity as a novel geophysical method for high–quality aggregate exploration

12:40–13:00

18:40–19:00

**Mohammad El Ilani,**

Beirut Arab University, Lebanon

Title: Effect of impact load on posttension slabs reinforced with fiber Reinforced Polymers (RFP), using numerical analysis

## KEYNOTE PRESENTATIONS

13:00–13:40

13:00–13:40

**Hai Feng Ji,**

Drexel University, United States

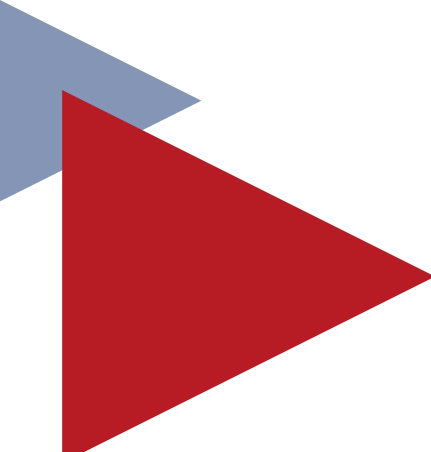
Title: Current and future of red and black phosphorus nanomaterials

13:40–14:20

13:40–14:20

**Thomas J Webster,**Interstellar Therapeutics, United  
States

Title: Introducing picotechnology: An exciting extension of nanotechnology

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*We wish to meet you again at our  
upcoming events*

8th Edition of International Conference on  
**Materials Science and Engineering**  
March 10-12, 2025 | Rome, Italy | Hybrid Event  
<https://magnusconferences.com/materials-science/>

10th Edition of  
**World Nanotechnology Conference**  
March 10-12, 2025 | Rome, Italy | Hybrid Event  
<https://worldnanotechnologyconference.com/>

### **Questions? Contact**

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