



JOINT EVENT

8th Edition of World Nanotechnology Conference &

**6th Edition of International Conference on Materials Science and Engineering** 





DAY 03 **DAY 01 DAY 02 DAY 03 DAY 02** Monday, March 18 Tuesday, March 19 Tuesday, March 19 Wednesday, March 20 Wednesday, March 20 (In-person) (In-person) (Virtual) (In-person) (Virtual) 08:00-08:50 08:50-09:00 10:00-10:20 08:50-09:00 10:00-10:20 AV check AV check 08:50-09:00 10:20-11:40 09:00-09:40 10:20-16:20 09:00-10:20 Opening Ceremony and Introduction Virtual Oral Presentations Virtual Oral Presentations 11:40-12:20 16:20-19:40 10:50-16:20 09:40-16:20 09:00-11:00 Virtual Poster Presentations Virtual Keynote Presentations 12:20-15:40 11:30-16:00 Virtual Oral Presentations 15:40-18:20 16:30-17:00 Virtual Keynote Presentations 18:20-20:20 Virtual Oral Presentations

**IN-PERSON** 



Day 01

Break Timings

(In-person)

Day 02

Break Timings

(In-person)

Day 03

Break Timings

(In-person)

(In-person)

Day 03

Break Timings

(In-person)

11:00-11:30 Coffee Break 10:20-10:50 Coffee Break 11:00-11:30 Coffee Break 12:50-14:00 Lunch Break 12:50-14:00 Lunch Break 12:50-14:00 Lunch Break 16:00-16:30 Coffee Break 16:20-16:50 Coffee Break 16:20-16:50 Coffee Break

#### Important Note

- · The conference follows Singapore Time (SGT) for In-Person sessions and Greenwich Mean Time Zone (GMT) for 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.
- In-person presentations will take place in the Sphere Meeting Room @Village Hotel Changi and Virtual presentations will take place in Zoom meetings.
- Please remain accessible in the hall or on Zoom throughout the day as there could be minor program adjustments due to technical issues or presenter no-shows.





**Monday** 

# **KEYNOTE PRESENTATIONS**

Singapore Time (SGT) **@SPHERE** 

08:00-08:50 | Registrations

08:50-09:00 | Opening Ceremony and Introduction

**Moderator:** 

Etelka Chung, University of Hertfordshire, United Kingdom

09:00-09:40

**Thierry Mayer** EPFL, Switzerland

Title: Safety management for nanomaterials in research environments

09:40-10:20

**Carmen Socaciu** BIODIATECH- Proplanta SRL,

Romania

Title: Pentacyclic triterpenoid nano formulations as bioavailable drug delivery agents at cellular level

10:20-11:00

Wei Min Huang

Nanyang Technological University, Singapore

Title: Rapid manufacturing anywhere, anytime

**Group Photo** 

11:00-11:30 | Coffee Break @Foyer

# **ORAL PRESENTATIONS**

Chair:

Carmen Socaciu, BIODIATECH- Proplanta SRL, Romania

11:30-11:50

**Etelka Chung** University of Hertfordshire, **United Kingdom** 

Title: Antimicrobial properties of functionalized copper nanoparticles doped with gold nanoclusters

11:50-12:10

**Antonio Pantano** University of Palermo, Italy Title: Non-destructive evaluation technique for assessing nanoparticle dispersion in composite materials

12:10-12:30

**Igor Reshetov** 

Sechenov University, Russian Federation

Title: Functional surface films for individual reconstructive implant in maxillofacial surgery

12:30-12:50 In-Perso

**Igor Reshetov** Sechenov University, Russian Federation

Title: Photodynamic inactivation of antibiotic – resistant microflora using photosensitizer nanoforms

12:50-14:00 | Lunch @Oval Foyer

14:00-14:20

In-Person

Mohammad Al Mamun University of Malaya, Malaysia Title: Differential pulse voltammetric tuning of the screen printed carbon electrode surface to enhance the electrochemical performance and multiplex detection

14:20-14:40

In-Person

Flora Maitim Yrad Silliman University, Philippines Title: Functionalization of dextrin—capped gold nanoparticles with oligodeoxynucleotides

14:40-15:00

Naoki Azuma

Nagoya University, Japan

Title: Manipulation and analysis of large DNA molecules using micro/nanogap structures

15:00-15:20

In-Person

**Tshireletso Madumo**University of South Africa, South Africa

Title: Development of nitrogen-doped graphene/MOF nanocomposites towards adsorptive removal of Cr (VI) from the wastewater of the herbert bickley treatment works

15:20-15:40

In-Person

Yasuhiro Kimura Nagoya University, Japan

Title: Atomic migration-driven metal nanowire growth

15:40-16:00

n-Person

**Ashita Anand** 

TERI Deakin Nanobiotechnology Centre, India Title: Development and characterization of controlled release nano-fertilizer

16:00-16:30 | Coffee Break @Foyer

# (16:30-17:00) POSTER PRESENTATIONS @FOYER

# P1 In-Person

#### Vishakha Goswami

Indian Institute of Technology Delhi, India

Title: Nanocarriers for the delivery of quercetin to inhibit the UV-induced aggregation of  $\gamma D$ -crystallin

#### P2 In

Lu Zhou

University of Macau, China

Title: Design of ion current and fluorescence dual-signal nanochannel sensors for effective and reliable detection

#### P3

า–Persor

#### Namhun Kwon

Korea Institute of Industrial Technology, Republic of Korea

#### Myungsuk Kim

Korea Institute of Industrial Technology, Republic of Korea Title: A study on highly efficient nickel-iron alloy sulfuric acid leaching through anodize electrolysis process



# **MARCH 19, 2024**

Tuesday

# **KEYNOTE PRESENTATIONS**

Singapore Time (SGT) @SPHERE

08:50-09:00 | Opening Remarks

Moderator:

Antonio Pantano, University of Palermo, Italy

09:00-09:40

In-Person

**Mark Rainforth** 

The University of Sheffield, United Kingdom

Title: Enhancing strength and ductility in a near medium Mn austenitic steel via multiple deformation mechanisms through nanoprecipitation

09:40-10:20

In-Person

Nasimuddin

Institute for Infocomm Research, A–STAR, Singapore

Title: Revolutionizing antenna technology: A comprehensive overview of electronically tunable material–based beam–steering structures

10:20-10:50 | Coffee Break @Foyer

# **ORAL PRESENTATIONS**

Chair:

Mark Rainforth, The University of Sheffield, United Kingdom

10:50-11:10

In-Person

Milos Janecek

Charles University, Czech Republic

Title: Phase transitions in metastable Ti15Mo alloy

11:10-11:30

In-Person

Vladislav Kozhukhov

Lomonosov Moscow State University, Russian Federation Title: Recent advancements in A. A. Ilyushin's structural modeling method for nonclassical continuum

11:30-11:50

In-Person

Leila Momenzadeh

The University of Newcastle, Australia

Title: Molecular dynamics simulation of Yttria-stabilized Zirconia: Investigating the Influence of Yttria and oxygen vacancies concentration on physical properties

11:50-12:10

In-Person

**Antonio Pantano** 

University of Palermo, Italy

Title: Natural fibers composites: Nanoparticles as reinforcing agent for improving performances

Singapore Time (SGT)

12:10–12:30 In–Person

**Hitoshi Ozaki** Mie University, Japan Title: Dissimilar metal joining of magnesium alloy and aluminium alloy by laser roll welding

12:30-12:50

In-Person

Michal Knapek

Charles University, Czech Republic

Title: In-situ insights into micron-scale plasticity

12:50-14:00 | Lunch @Oval Foyer

14:00-14:20

In-Person

**Pramod Avti** 

Postgraduate Institute of Medical Education and Research (PGIMER), India

Title: Advanced smart nanobiomaterials as emerging versatile platforms for healthcare systems

14:20-14:40

In-Person

**Piyush Verma** 

Institue of Nuclear Medicine and Allied Sciences (INMAS), India

Title: Luminescence insights to binding interactions of graphene oxide with pepsin: A spectroscopic and molecular docking approach

14:40-15:00

n-Person

Mukul Srivastava IIT Kanpur, India Title: Critical assessment of the multi–functionality of CNT reinforced CFRP composites

15:00-15:20

n-Person

**Li Tianyu** Hohai University, China Title: Resource utilization of sea sand – Research and development of ultra–high performance cement–based materials

15:20-15:40

n-Person

Chien Fang Ding National Taiwan University, Taiwan Title: Additive manufacturing of metallic structures by laser-induced forward transfer

15:40-16:00

In-Person

Li Liang

University of Science and Technology of China, China

Title: Achieving superplastic TWIP steel welded joint via vacuum electron beam welding

16:00-16:20

In-Person

Min Hsuan Lee

Yang Ming Chiao Tung University, Taiwan

Title: The role of machine learning in organic solar cell research

16:20-16:50 | Coffee Break @Foyer

### 16:50-17:10

In-Person

Anjan Sil Indian Institute of Technology Roorkee, India

Title: Characterization of honeycomb structured carbonaceous anode material for sodium–ion battery application



# **MARCH 19, 2024**

Tuesday

# **ORAL PRESENTATIONS**

GMT Local Timings

10:00-10:20 GMT | AV check

@ZOOM MEETING

**Moderator:** 

Teresa Ben Fernandez, University of Cadiz, Spain

Chair:

Kyoungtae Kim, Missouri State University, United States

10:20-10:40

18:20-18:40

Yulai Zhao

Fuzhou University, China

Title: Porous carbon based composites for energy storage via high internal phase emulsion template

10:40-11:00 18:40-19:00

**Xuelian Chen** Beijing University of Chemical

Technology, China

Title: Significantly tunable foaming behavior of blowing agent for polyethylene foam resin with a unique designed blowing agent system

11:00-11:20

19:00-19:20

**Charles Ivan Salanga** Saint Louis University, Philippines Title: Chemical engineers in the face of cosmetics, cosmeceuticals and nutraceuticals: An overview

11:20-11:40 11:20-11:40

VasvI G. Kravets

The University of Manchester, United Kingdom

Title: High sensitive biosensor based on topological darkness in hybrid thin filmgraphene nanostructures

# POSTER PRESENTATIONS

11:40-11:50 22:40-22:50

Lipin Ge

The University of Sydney, Australia

Title: Optimisation and artifacts of photothermal excitation of microresonators

11:50-12:00 17:20-17:30

**Anurag Kumar Pandey** IT Kharagpur, India

Title: lodine-doped carbon dots as a nanocatalyst for degradation of cationic dyes

12:00-12:10 17:30-17:40

Ravi Kikar Sinha

A Private Indian Researcher, India

Title: Can we increase cruise and cargo ship's speed to 1000 knots with the use of portable electron positron contact based engines safely?

12:10-12:20 17:40-17:50

**Ravi Kikar Sinha** 

A Private Indian Researcher, India

Title: Use of vast coastal sea surface in harvesting electrical energy through floating large photovoltaic solar panels on them

# **ORAL PRESENTATIONS**

#### 12:20-12:40 15:20-15:40

#### Valyaev Alexander

Nuclear Safety Institute RAS, Russian Federation

Title: Application of nanotechnology for treatment of human bone joints with severe injuries

#### 12:40-13:00

15:40-16:00

#### Aleksandr Ya. Khavkin

Lomonosov Moscow State University, Russian Federation

Title: Prospects of carbon nanoenergy

#### 13:00-13:20 15:00-15:20

#### Laura Elena Muresan

Babes-Bolyai University, Romania

Title: Investigation of MoSe2 utilization for selective gas adsorption

#### 13:20-13:40 14:20-14:40

Teresa Ben Fernandez University of Cadiz, Spain Title: Combining electron channeling contrast and energy selected backscattered electron imaging to identifying defects in complex quantum dots systems

#### 13:40-14:00

19:10-19:30

#### Shaqufta Bi

IFTM University Moradabad, India

Title: Biogenic synthesis of nanoparticles and its antifungal and antibacterial applications

# 14:00-14:20 19:30-19:50

#### **Arvind K Gathania**

National Institute of Technology Hamirpur, India

Title: Synthesis, characterization, and applications of carbon quantum dots

#### 14:20-14:40 17:20-17:40

#### A B M Sharif Hossain

Imam Mohammad Ibn Saud Islamic University, Saudi Arabia

Title: Production and application of nanocellulose based nano-biopolymer derived from plant lignocellulose as tissue engineering biomaterials and drug delivery

#### 14:40-15:00 17:40-18:00

**Avad Al Thuwavnee** Babylon University, Iraq

Title: Outstanding flame approach for production ferric oxide (Fe2O3) nanoparticles

#### 15:00-15:20 17:00-17:20

Katekani Shingange Mintek, South Africa

Title: Experimental and DFT calculations of ethylene detection performance of Co3O4

#### 15:20-15:40 23:20-23:40

Vladimir Chigrinov, University of Science and Technology, Hong Kong

Title: Azodye photoaligned nanolayers for liquid crystals devices

# **KFYNOTF PRESENTATIONS**

15:40-16:20 12:40-13:20

**Paulo Cesar De Morais** 

Catholic University of Brasilia, Brazil

Title: The Influence of nanomorphology in biological assays

16:20-17:00 11:20-12:00

**Kyoungtae Kim** 

Missouri State University, United

States

Title: Interaction between actin and quantum dots

17:00-17:40 12:00-12:40

Thomas J Webster

Hebei University of Technology, China

Title: Introducing nanoporous metallic capsules for improved stem cell delivery and

function

17:40-18:20

18:40-19:20

**Eric Buhler** 

The University of Paris, France

Title: Supramolecular materials integrating molecular machines and motors: Structure probed using scattering techniques (small-angle neutron and X-ray)

#### ORAL PRESENTATIONS

18:20-18:40 19:20-19:40

Elaheh Mohebbi

Marche Polytechnic University, Italy

Title: Copper-based hot electrons and high-efficiency I(V) characteristics generated

by VSe2 nanodiode

18:40-19:00 14:40-15:00

Raymond C Jagessar University of Guyana, Guyana

Title: Porphyrin based nanomaterials

19:00-19:20 15:00-15:20

**Raymond C Jagessar** University of Guyana, Guyana

Title: Nanotechnology: advancing material science and medicine

19:20-19:40 20:20-20:40

Jerzy Kisilowski

Retired, Poland

Rafał Kowalik

Military University of Aviation, Deblin,

Poland

Title: Wear and tear of turnout components and wheels of a rail vehicle moving at

high speed (V>200 km/h)

19:40-20:00 15:40-16:00

Frederick H. Silver

Rutgers University, United States

Title: Viscoelasticity of synthetic polymers and soft tissues using VOCT

20:00-20:20 16:00-16:20

William Skene

Universite de Montreal, Canada

Title: Reversibly modifying the properties of sustainable devices through reversible

covalent bonds



# **MARCH 20, 2024**

Wednesday

# **KEYNOTE PRESENTATIONS**

Singapore Time (SGT)

**@SPHERE** 

08:50-09:00 | Opening Remarks

Moderator:

Lajpreet Kaur, Institute of nuclear medicine and allied science, India

09:00-09:40

า–Person

Ramdas Sawleram Damse Retired scientist from High Energy Materials Research Laboratory

(HEMRL), India

Title: Waterproofing materials for ammonium nitrate

# **ORAL PRESENTATIONS**

Chair:

Ramdas Sawleram Damse, Retired scientist from High Energy Materials Research Laboratory (HEMRL), India

09:40-10:00

In-Person

**Ge Wang** 

University of Science and Technology Beijing, China

Title: Calculation and data-driven strategies for accelerated MOFs design and synthesis

10:00-10:20

In-Person

B K Behera

Indian Institute of Technology, India

Title: Advanced multifunctional textile structural polymeric composites and applications

10:20-10:40

**Brahma Raiu Golla** 

National Institute of Technology

Warangal, India

Title: A very low temperature green processing for developing high dielectric Al2O3, SrTiO3 ceramic composites

10:40-11:00

In-Person

Nayaka Narasaiah

National Institute of Technology Warangal, India Title: Creep fatigue cack growth (CFCG) studies on P91 steel

11:00-11:30 | Coffee Break @Foyer

11:30-11:50

In-Person

Li Wenting

Singapore Institute of Manufacturing Technology, Singapore

Title: Development of advanced robotic incremental sheet metal forming processes

11:50-12:10

Laipreet Kaur

Institute of nuclear medicine and allied science. India

Title: Synthesis and physicochemical characterization of tannic acid encapsulated BSA nanoparticles: From structural analysis to bioactivity assessment for enhanced drug delivery

12:10-12:30

Uma Maheswara Rao Seelam National Institute of Technology Warangal, India

Title: Machine learning assisted prediction of solid solubility limits in binary metallic alloys through Hume-Rothery approach

12:30-12:50

**Ajoy Kumar Pandev** 

National Institute of Technology, India

Title: Zirconia based bio-ceramics - new additives

12:50-14:00 | Lunch @Oval Fover

14:00-14:20

Wagas UI Arifeen

Of

Yeungnam University, Korea, Republic Title: Novel method for fabrication of separator/electrolyte for lithium metal batteries

14:20-14:40

Lianjie Zhu

Tianjin University of Technology, China

Title: Designable synthesis of TiO2 nanostructures/composites and photocatalytic applications

14:40-15:00

Shinyoung Lee

Chungnam National University, Korea, Republic Of

Title: Advanced non-woven separator membrane by syringeless electrospinning for high-performance Lithium-ion Energy device

15:00-15:20

Yurim Lee

Chungnam National University, Korea. Republic Of

Title: Development of boron nitride nanotube-based additives to improve ionic conductivity and thermal stability for High-Performance Li-Ion batteries

15:20-15:40

Jiang Xu Virogin Biotech, China Title: Capsule coffee-inspired customizable mRNA vaccine production using a rapid on-site microfluidic assembly (ROMA) technology

15:40-16:00

Jinshun Bi

Chinese Academy of Sciences, China

Title: Nanoscale Air Channel Devices for Emerging IC Applications

16:00-16:20

Likhi Dhru

Indian Institute of Technology Indore, India

Title: Sodium Alginate-CuS Nanostructures Synthesized at the Gel-Liquid Interface: An Efficient Photocatalyst for Redox Reaction and Water Remediation

16:20-16:50 | Coffee Break @Foyer

**END NOTE** 



# **MARCH 20, 2024**

Wednesday

# **ORAL PRESENTATIONS**

10:00-10:20 GMT | AV check

**@ZOOM MEETING** 

Moderator:

Chiara Marchionni, University of L'Aquila, Italy

Chair:

Thomas J Webster, Hebei University of Technology, China

10:20-10:40

18:20-18:40

Hui Li

Northeastern University, China

Title: Analytic modeling and analysis of impact characteristics of composite cylindrical shells with an auxetic honeycomb core subjected to high velocity internal projectile impact

10:40-11:00

18:40-19:00

**Yuting Liu** 

Harbin Institute of Technology Shenzhen, China

Title: Cryogenic in-memory computing using giant and tunable anomalous Hall effect in magnetic topological insulators

11:00-11:20

19:00-19:20

Tzu-Hou Hsu

Cheng Yieu Development Machinery Co., Ltd., Taiwan

Title: Investigation of the composition and morphology of hardfacing welding powder

11:20-11:40 19:20-19:40

Li Ma

The Hong Kong Polytechnic University, Hong Kong

Title: Personalized nanofiber-based strategy for smart regulation of diabetic wounds

11:40-12:00 12:40-13:00

**Chiara Marchionni** University of L'Aquila, Italy

Title: Green and sustainable materials in the built environment reuse

12:00-12:20 15:00-15:20

Michael I Tribelsky

Moscow State University, Russian Federation

Title: Peculiarities of subwavelength field pattern at resonant light scattering by nanoparticles

Vladyslav Cheranovskii V.N. Karazin Kharkiv National University, Ukraine

Title: The decorated spin ladder systems: Peculiarities of the energy spectrum and magnetization profile.

12:40-13:00 15:40-16:00

**Osman Adiguzel** Firat University, Turkey

Title: Shape reversibility and fundamental characterization of shape memory alloys

#### 13:00-13:20 18:30-18:50

Ram Sambhar Shukla CSIR, India Title: MCM-41 as a potential mesoporous reference material for characterizing multi textural properties

#### 13:20-13:40 18:50-19:10

**Sivasubramanian Palanisamy** PTR College of Engineering and Technology, India

Title: Influence of fiber content and length on the mechanical characteristics of biocomposites comprising natural rubber reinforced with sansevieria cylindrica fibers

#### 13:40-14:00 19:10-19:30

**Sivasubramanian Palanisamy** P T R College of Engineering and Technology, India

Title: Evaluate the mechanical characteristics of hybrid natural fiber composites comprising ramie and flax under various conditions

#### 14:00-14:20 18:00-18:20

Yarub Al-Douri

University of Sharjah, United Arab Emirates

Title: How to solve the energy crisis by nanotechnology?

#### 14:20-14:40 15:20-15:40

Zakia Guezzen

University of Science and Technology of Oran, Algeria

Title: Effect of natural fibers on the natural frequencies of cylindrical biosourced shells

#### 14:40-15:00 20:10-20:30

Suresh C. Ameta PAHER University, India

Title: Photocatalysis: A promising technology

#### 15:00-15:20 12:00-12:20

**Asif Zaidi** 

University of Waterloo, Canada

Title: Hydrogen molecule: Estimation of ground and excited electronic states

#### 15:20-15:40 12:20-12:40

**Carlos Camurri** 

University of Concepcion, Chile

Title: Sperficial grain refinement of 316L stainless steel through rolling with rough rolls

#### 15:40-16:00 10:40-11:00

A K Fazlur Rahman

Oklahoma School of Science and Mathematics, United States

Title: Nucleophilic addition reactions to d9 Metal (Co, Rh, Ir) stabilized carbocations: Reactions of [M(?5–C5R5) (?2vinyl –?3cyclopentenyl)] + with Nu– (OH–, CN–, OMe–, CH3–)

#### 16:00-16:20 17:00-17:20

Zakaria Boumerzoug University of Biskra, Algeria

Title: Friction welding of dissimilar metallic materials

# **KEYNOTE PRESENTATIONS**

16:20-17:00 13:20-14:00

Paulo Cesar De Morais

Catholic University of Brasilia, Brazil

Title: Antibacterial activity of copper-doped metal oxide nanoparticles

17:00-17:40 12:00-12:40

Vistasp M Karbhari University of Texas Arlington, USA

Title: Combined moisture and stress effects on durability of composites

17:40-18:20 10:40-11:20

**Ephraim Suhir** 

Portland State University. United States

Title: Analytical modeling occupies a special place in reliability physics predictive

modeling in materials science and engineering

18:20-19:00

13:20-14:00

Thomas J Webster

Hebei University of Technology, China

Title: The merging of artificial Intelligence and biomaterials: The future of

personalized health solutions

19:00-19:40 20:00-20:40

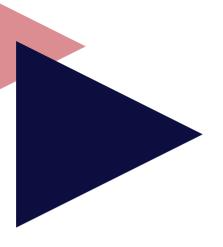
Antonio Vassallo

University of Basilicata, Italy

Title: Nanotransporters for the release of bioactive molecules

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# We wish to meet you again at our upcoming events

7<sup>th</sup> Edition of the International Conference on

# **Materials Science and Engineering**

October 28-30, 2024 | Baltimore, MD, USA | HYBRID EVENT https://materials.magnusconferences.com/

9th Edition of

# **World Nanotechnology Conference**

October 28-30, 2024 | Baltimore, MD, USA | HYBRID EVENT https://nanotechnology.magnusconferences.com/

# **Questions? Contact**

Phone: 1 (702) 988 2320 | Whatsapp: + 1 640 666 9566 e-mail: secretary@magnusconference.com