

Scientific Program



World Congress on

***MATERIAL SCIENCE
AND
NANOTECHNOLOGY***

**JULY 10-11, 2023
ONLINE**

<https://materialssciencemeet.com/>

ABOUT MATSCIENCE 2023

THEME: "Novel Advancements in Material Science, Engineering and Nanotechnology Research"

Dear Colleagues, Partners, Scientists, Clinicians, and Friends,

On behalf of the Organizing committee, I cordially invite you to present and contribute your invaluable experience at "**World Congress on Material Science and Nanotechnology**", which will be held **Virtually** during **July 10-11, 2023**.

Building on the success of preceding meetings of the same generation, the Conference will feature a highly interactive, stimulating and multidisciplinary program including workshops, plenary sessions and panel discussions. The Conference will provide the ideal forum to stimulate ideas and establish collaborations as well as to initiate intense discussions about key issues in nursing.

The Conference is unique, the Program will cover cutting edge topics in daily practice, the most recent development and management of the rapidly evolving requirements, as well as the crucial challenges concerning nanotechnology in present & future. The lectures and sessions will be provided by world- wide recognized experts in the field mentioned, representatives of universities, private practice and institutions from around the Globe.

Personally I am convinced that the international partnership and collaboration would play a crucial promoting role for the jointly set projects from any points of view. I do hope that you will enjoy the Conference and that your interaction with your colleagues from many different countries will stimulate a creative exchange of ideas and will be personally rewarding.

<https://materialssciencemeet.com/>

TENTATIVE AGENDA

THEME: "Novel Advancements in Material Science, Engineering and Nanotechnology Research"

Day 1 | July 10, 2023 | Monday

08:00 - 09:00 | REGISTRATIONS

09:00 - 09:30 | INAUGURATION CEREMONY

09:30 - 10:45 | KEYNOTE PRESENTATIONS

10:45 - 11:05 | GROUP PHOTO, REFRESHMENTS BREAK

11:05 - 12:00 | KEYNOTE PRESENTATIONS

12:00 - 13:00 | SCIENTIFIC SESSIONS

13:00 - 13:40 | LUNCH BREAK

13:40 - 15:40 | SCIENTIFIC SESSIONS

15:40 - 16:00 | EVENING BREAK AND NETWORKING

16:00 - 18:00 | SCIENTIFIC SESSIONS

Day Concludes

Day 2 | July 11, 2023 | Tuesday

09:00 - 09:30 | INAUGURATION CEREMONY

09:30 - 10:45 | KEYNOTE PRESENTATIONS

10:45 - 11:05 | GROUP PHOTO, REFRESHMENTS BREAK

11:05 - 12:00 | KEYNOTE PRESENTATIONS

12:00 - 13:00 | SCIENTIFIC SESSIONS

13:00 - 13:40 | LUNCH BREAK

13:40 - 15:40 | SCIENTIFIC SESSIONS

15:40 - 16:00 | EVENING BREAK AND NETWORKING

16:00 - 18:00 | SCIENTIFIC SESSIONS

Day Concludes

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Day 01 | July 10, 2023 | Virtual | GMT

08:30-09:00 Registrations

09:00-09:15 Opening Ceremony

KEYNOTE FORUM



09:15-09:45

Title: Environment-assisted Cracking: A Challenge in the use of Magnesium Alloys as Biodegradable Implants

Raman Singh, Monash University, Australia



09:45-10:15

Title: Industrial applications of nanotechnology

Yarub Al-Douri, American University of Iraq, Iraq

Networking and Refreshments Break @ 10:50-11:10

SPEAKERS SESSION



10:15-10:40

Title: State-Of-The-Art Ensemble Learning and Unsupervised Learning in Fatigue Crack Recognition of Glass Fiber Reinforced Polyester Composite (GFRP) Using Acoustics

Samira Gholizadeh, University of Cape Town, South Africa



10:40-11:05

Title: Chitosan Aerogels as an Alternative to Desalination

Roy Kim, The Knowledge Society, United States



11:05-11:30

Title: Stereolithographic Additive Manufacturing Using Nanoparticles Pastes

Soshu Kiriwara, Osaka University, Japan

Networking and Refreshments Break @ 11:30-11:40



11:40-12:05

Title: Innovative advances of zinc oxide-coated carbon nanoparticles from pineapple leaves using sol gel method for optimal adsorption of Cu²⁺ and reuse in latent fingerprint application

Z Tywabi-Ngeva, Nelson Mandela University, Gqeberha, South Africa

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12:05-12:30

Title: Green Synthesis of Nanoparticles: From Preparation to Applications
Azeez Barzinjy, Soran University, Iran



12:30-12:55

Title: Nanomaterial-Based Electrochemical DNA Biosensor for the Detection of the Sus scrofa
Abu Hashem, Nanotechnology and Catalysis Research Centre, Malaysia



12:55-13:20

Title: Improving the Fatigue Design of Mechanical Systems such as Refrigerator
Seongwoo Woo, Ethiopian Technical University, Ethiopia

Break: 13:20-13:35



13:35-14:00

Title: An optical platform of material engineering for design of camouflage product against multidimensional combat backgrounds from 400 nm to 2500 nm
Md. Anowar Hossain, RMIT University, Australia



14:00-14:25

Title: An Analytical Study of the Effect of Gravity on Electronic Wavefunctions in Oxygen
Rushil Saraswat, Cambridge Court World School, India



14:25-14:50

Title: Heat transfer analysis of fractional model of couple stress Casson tri-hybrid nanofluid using dissimilar shape nanoparticles in blood with biomedical applications
Poom Kumam, King Mongkut's University of Technology Thonburi (KMUTT), Thailand

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KEYNOTE FORUM



15:00-16:00

Title: Wave scattering by many small particles, creating materials with a desired refraction coefficient and other applications

Alexander G Ramm, Kansas State University, USA



16:00-16:30

Title: Resonantly-scattering nanoparticles as tools for subwavelength tailoring of electromagnetic fields

Michael I. Tribelsky, Lomonosov Moscow State University, Russia

SPEAKERS SESSION



16:30-16:55

Title: Removal of anionic dye from wastewater using a hydroxyapatite/chitosan composite

Ayoub GROULI, University Hassan II of Casablanca, Morocco



16:55-17:20

Title: Environmentally Benign Alginate Extraction And Fibres Spinning From Different European Brown Algae Species

Ishrat Jahan Badruddin, Cranfield University, UK



17:20-17:45

Title: A New Double Cross-Linked Amidated Pectin-Gelatin Hydrogel films Developed With Oxidized Tannic Acid And In Situ Reduced Silver Nanoparticles

Benkhira Ilyas, Universite Saad Dahlab Blida, Algeria

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17:45-18:10

Title: The importance of synovial cytokine assessment in the course of corrective osteotomy associated with PRP and SVF post-treatments for tissue regeneration forecast

Elena Tchetina, Nasonova Research Institute of Rheumatology, Russia



18:10-18:35

Title: Applications of Nanofluids in Machining Operations: A Comprehensive Review

Aoha Roohi Amin, Pak-Austria Fachhochschule: Institute of Applied Sciences and Technology, Pakistan

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Day 02 | July 11, 2023 | Virtual | GMT

KEYNOTE FORUM



09:00-09:30

Title: Peter Chew Formula for calculate Covid-19 Vaccine efficiency
Peter Chew, National University of Malaysia, Malaysia



09:30-10:00

Title: Oral Thin Film - An Alternative to IM & IV Drug & Vaccine Delivery
Radwan Almofti, TADA Consulting Solutions, Canada



10:00-10:30

Title: Therapeutic Neural Stem Cell-derived Exosomes Loaded Adhesive Hydrogel Promotes Cerebral Angiogenesis and Neural Regeneration in Ischemic Stroke Mice
Lukui Chen, Southern Medical University, China

SPEAKERS SESSSION



10:30-10:55

Title: Rutin-Loaded Hybrid Nanoparticles for Nasal Administration the To Protect From Anthracycline-Induced Endothelial Brain Damages
Carla Serri, University of Sassari, Italy



10:55-11:20

Title: Synergistic in vitro antifungal efficacy of naringenin-capped silver nanoparticles against candida species
Chanti Babu Katta, NIPER, India

KEYNOTE FORUM

Refreshments Break @ 11:20-11:45



11:45-12:10

Title: Enhanced antitumor efficacy and attenuated cardiotoxicity of doxorubicin in combination with lycopene liposomes
Jinfang Zhu, Xinjiang Agricultural University, China

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12:10-12:35

Title: Nelumbo nucifera: A Propitious Biopolymer for Novel Drug Delivery
Vishakha Jaiswal, Amity University, India



12:35-13:00

Title: Synthesis Of Pnp Ligand/Cr Complexes For The Selective Oligomerization Of Ethylene To 1-Hexene
Ahmed Al-Hulili, SAECO, Saudi Arabia



13:00-13:25

Title: Rapid ultrasound-assisted emulsification micro-solid phase extraction based on molecularly imprinted polymer for HPLC-DAD determination of bisphenol A in aqueous matrices
Noorfatimah Yahaya, University Sains Malaysia, Malaysia

Break @ 13:25-13:40



13:40-14:10

Title: Synthesis, theoretical and biological studies of cyclometalated Iridium (III) Phenyl pyridine type complexes
Kahnu Charan Pradhan, Utkal University, India

KEYNOTE FORUM



14:10-14:40

Title: Designing All-Optical Logic Half Adder with Photonic Crystal Multi-Ring Resonators
Dror Malka, Holon Institute of Technology, Israel

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14:40-15:05

Title: Unwanted degradation in pseudocapacitors: Challenges and opportunities
Siddharth Mahala, University of Manchester, UK



14:20-14:40

Title: Green composites prepared from sheep wool reinforced vulcanised rubber with enhanced physical and mechanical properties
Seiko Jose, Mahatma Gandhi University, India



15:30-15:55

Title: Reduced Graphene Oxide-Zinc Sulfide Nanocomposite Decorated with Silver Nanoparticles for Wastewater Treatment by Adsorption, Photocatalysis and Antimicrobial Action
Hafiz Muhammad Tofil, Quaid-i-Azam University, Pakistan



15:55-16:20

Title: Performance of green membranes in harsh conditions
Atefeh Roozitalab, Amirkabir university, Iran

E-POSTER



16:20-16:45

Title: Study of Self-assembly behaviour of β -Cyclodextrin & its functionalized derivatives
Siddanth Saxena, Polytechnic University of Catalonia, Spain



16:45-17:10

Title: PLGA-based biomaterials as drug delivery devices: Research progress
Maria Ciocîlteu, University of Medicine and Pharmacy of Craiova, Romania

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17:10-17:35

Title: Zn-B-PLGA nanocomposite material for biomedical applications: challenges and future perspectives

Andrei Bită, BioBoron Research Institute, Romania



17:35-18:00

Title: Medical grade Biopolymer production, characterization, and synthesis of NDDS (Nanoparticle drug delivery system) from an application perspective

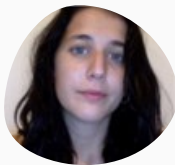
Navodit Kumar Singh, Indian Institute of Technology Delhi, India



18:00-18:25

Title: 3D Nanofibers Scaffolds for Boosting the Repurposed Dermatological Effect of spironolactone

Nahla Elhesaisy, The British University, Egypt



18:25-18:50

Title: Development of Cross-linked Protein-based Materials from vegetable sources

Sara Aquilia, University of Florence, Italy