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**Nano London-2024**

November 06-08, 2024 | London, UK

**TENTATIVE PROGRAM**

# 10<sup>th</sup> Nanotech & Nanomaterials Research Conference



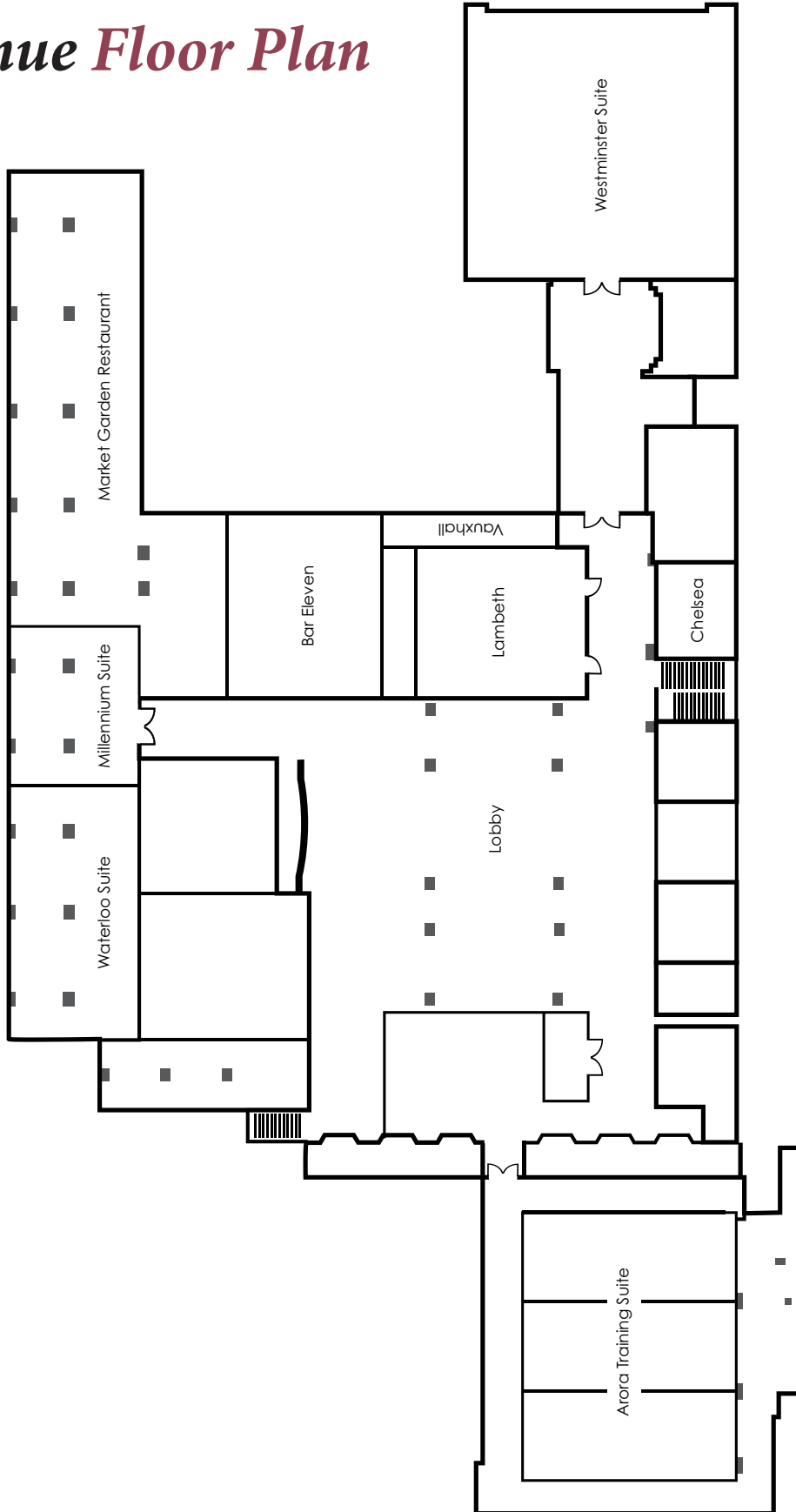
**November 06-08, 2024 | London**



**Renaissance London Heathrow Hotel, Bath Road,  
Hounslow, Middlesex TW6 2AQ, London**



# Venue Floor Plan



# Meeting Agenda Overview

## November 06, 2024

## Day-1

08:00-08:20	Registration and Conference Material Collection
08:20-08:30	Introduction
08:30-10:30	Session: Nano in Life Sciences, Medicine, and Healthcare
<b>10:30-10:50</b>	<b>Coffee Break</b>
10:50-12:40	Session: Nano in Life Sciences, Medicine, and Healthcare
<b>12:40-13:40</b>	<b>Lunch Break</b>
13:40-16:30	Session: Nano in Life Sciences, Medicine, and Healthcare
<b>16:30-16:50</b>	<b>Coffee Break</b>
16:50-18:00	Poster presentations
<b>19:30-21:30</b>	<b>Social &amp; Networking Events</b>

## November 07, 2024

## Day-2

08:30-10:30	Session: Nano in Food & Agriculture
<b>10:30-10:50</b>	<b>Coffee Break</b>
10:50-12:40	Session: Nanomaterials Characterization
<b>12:40-13:40</b>	<b>Lunch Break</b>
13:40-16:10	Session: Nanotechnology in Energy
<b>16:10-16:30</b>	<b>Coffee Break</b>
16:30-18:00	Session: Nanotechnology in Energy

## November 08, 2024

## Day-3

08:30-09:30	Session: Nanotechnology in Manufacturing and Construction
09:30-10:50	Session: Nano Electronics
<b>10:50-11:10</b>	<b>Coffee Break</b>
11:10-12:30	Session: Nanocomposites, Nanostructured and Nanoporous Materials
12:30-13:30	Session: Nanoelectronics: Fabrication, Processing & Characterization Techniques

**13:30 Lunch and Departure**

08:00-08:20 Registration and Conference Material Collection

08:20-08:30 Introduction

### Plenary Speaker

**The Impact of Nanomedicine: 30,000 Orthopedic Nano Implants with No Failures and Still Counting**  
**Thomas J. Webster**, Mansfield Bioincubator, USA

### Nano in Life Sciences, Medicine, and Healthcare

**Surface Enhanced Raman Scattering (SERS) for Low Concentration Molecular Detection Applications**  
**Arthur McClelland**, Center for Nanoscale Systems Harvard University, United States

**Silicon Nanoneedles for Sustained Treatment of Ocular Angiogenesis**  
**Yannis M. Paulus**, University of Michigan, US

**Targeting Nanomedicine in the Vascular System**  
**Vladimir Muzykantov**, University of Pennsylvania, United States

**Chemically Modified Liposomal siRNA Formulation Targeting SOD1 for Chemosensitization of Platinum-Resistant Ovarian Cancer**  
**Attila Szenasi**, University of North Carolina at Chapel Hill, US

**Liposomal Drug Delivery to Target Hypoxic Tumor Environment**  
**Adam WG Alani**, Oregon State University, United States

**Exploring Hollow Gold Nanoparticles as Multifunctional Therapeutic Platforms for the Treatment of Breast Cancer**  
**Zeljka Krpetic**, University of Salford, UK

**Preserving and Capturing Projectiles Shot at Supersonic Speeds using SynBio Materials**  
**Jennifer Ruth Hiscock**, University of Kent, UK

**Nanobubbles for Enhanced Delivery of Chemotherapeutic and Anti-Microbial Agents**  
**Damien V. B. Batchelor**, University of Leeds, UK

**The Multiscale Architecture of Biomembranes and Vesicles**  
**Reinhard Lipowsky**, Kanazawa University, Germany

**Structural Dynamics Analysis of E3 Ubiquitin Ligase, E6AP HECT Domain, Revealed by High-Speed Atomic Force Microscopy**  
**Hiroki Konno**, Kanazawa University, Japan

**Particle Formation Mechanism of TiCl<sub>4</sub> Hydrolysis to Prepare NanoTiO<sub>2</sub>**  
**Qianjun Le**, Ziyang College of Dental Technology, China

**Predictive Protein Module based on PPI Network and Double Clustering Algorithm**  
**Tao Lu**, Nanning University, China

Coffee Break

**ThermomiR-377-3p-Induced Suppression of Cirbp Expression is Required for Effective Elimination of Cancer Cells and Cancer Stem-like Cells by Hyperthermia**

**Yan Sun**, Guangdong Provincial People's Hospital, China

**Cuprous Oxide Nanocomposites with Photothermal (PTT) and Chemical Dynamics (CDT) Effects Induce Cuproptosis in Breast Cancer using the Strategy of Increasing Inflow and Reducing Outflow**

**Wei Li**, The Second Affiliated Hospital, Hengyang Medical School, University of South China, China

**Glycyrrhizic Acid/Carbon Nanozyme Injectable Hydrogel Promotes Wound Healing of Multiple Bacterial Infections**

**Chen Xu**, Jilin Agricultural University, China

**Serum Albumin-templated Nanoparticles with Chondroitin Sulfate and Methotrexate for Synergistic Cancer Therapy and Lungs Metastasis Inhibition via Lymph Node Targeting**

**Haroon Iqbal**, Wenzhou Medical University, China

**Improved CaP Nanoparticles for Nucleic Acid and Protein Delivery to Neural Primary Cultures and Stem Cells**

**Hsu-Wen Chao**, Taipei Medical University, Taiwan

**Au Nanodyes as Enhanced Contrast Agents in Wide Field Near Infrared Fluorescence Lifetime Imaging**

**Neelima Chacko**, Ariel University, Israel

**Altering the Mechanical Properties of Self-Assembled Bacterial Filaments Through Protein Engineering**

**Neta Sal-Man**, Ben-Gurion University of the Negev, Israel

**Biomedical Polymeric Nanoparticles**

**Avi Domb**, The Hebrew University of Jerusalem, Israel

**Quantum Dots-Hydrogel Composite for Drug Delivery and Cell Imaging Approaches**

**Nurten Asina**, Cyprus International University, Cyprus

**Condensation-Assisted Hazardous Vapor Detection on 3D Gold Nanoparticle SERS**

**Pratiksha Prabhakar Mandrekar**, Kongju National University, South Korea

**Hyaluronic Acid: Development and Application in Drug Delivery Systems**

**Carla Serri**, University of Sassari, Italy

**Improved pDNA-Loading in Lipid NPs through Microfluidics: Optimization and in Vitro Trials**

**Jason T. Duskey**, University of Modena and Reggio Emilia, Italy

**Harnessing Protein Corona to Enable MRI-Based Microthrombi Detection in Stroke with Polydopamine Iron Oxide**

**Thomas Bonnard**, Inserm, PHIND Laboratory (U-1237), France

**Phytochemical Constituents of Inula Confertiflora Leaf**

**Minbale Gashu**, Debre Berhan University, Ethiopia

**Enhancing Charge Transfer on Graphene Surface-Enhanced Raman Spectroscopy by Adjusting Graphene's Fermi Energy**

**Samar Ghopry**, Jazan University, Saudi Arabia

**Bioinspired Synthesis of Magnetic Nanoparticles Based on Iron Oxides Using Orange Waste and Their Application as Photo-Activated Antibacterial Agents**

**Maria Paulina Romero**, Escuela Politecnica Nacional, Ecuador

**Lunch**

**Broad-Spectrum Antimicrobial ZnMintPc Encapsulated in Magnetic-Nanocomposites with Graphene Oxide/MWCNTs Based on Bimodal Action of Photodynamic and Photothermal Effects**

**Maria Paulina Romero**, Escuela Politecnica Nacional, Ecuador

**Rosemary Essential Oils Nano Formulation and Its Antimicrobial Activitie**

**Mouzaki Mustapha**, Agadir Faculty of Medicine and Pharmacy, Morocco

**Targeted Cancer Therapy using Hyaluronated Nanoparticles: Modulation of MicroRNA Epigenetics**

**A. Abd-Rabou**, National Research Centre, Egypt

**Heavy Metals and Ecological Alterations Resulting from Wastewater Discharge in Inner Puno Bay, Lake Titicaca**

**Ingrid Maldonado Jimenez**, Universidad Nacional de Moquegua, Peru

**Improving Cancer Diagnosis via Nanofabricated Colorimetric Histology Platforms**

**Brian Abbey**, La Trobe University, Australia

**Innovating Extracellular Vesicles for Cardiac Repair**

**David W. Greening**, Baker Heart and Diabetes Institute, Australia

**From Breast Implants to Space Exploration: Diverse Applications of Carbon Nanomaterials**

**Karthika Prasad**, Australian National University, Australia

**Emerging Nanotechnologies for Targeting Pathogenic Bacterial Biofilms**

**Vesselin Paunov**, Nazarbayev University, Kazakhstan

**Surface Modification of Redox-Active Molecule on Halloysite Nanotube for the Electrochemical Detection of Bioactive Molecules**

**Kannaiyan pandian**, University of Madras, India

**Theranostic Application and DNA Binding Property of a Semiconductor Nanoparticle, CuTe**

**Kamalika Sen**, University of Calcutta, India

**Nano Sensors in Healthcare: Revolutionizing Diagnostics and Monitoring**

**Jay Kumar Pandey**, Shri Ramswaroop Memorial University, India

**Nanozymes for Wound Healing**

**Dimple Sethi Chopra**, Punjabi University, India

**Synergistic Effect of Copper Nanoparticles with other Nanoparticles in the Management of Disease of Pomegranate**

**Kavyashri B. Joshi**, PVP College, India

**Oleic and Palmitic Acids with Bioderivatives Essential Oils Synthesized of Spherical Gold Nanoparticles and Its Anti-Human Breast Carcinoma MCF 7 In Vitro Examination**

**Ali Kadhum Bidan**, University of Basrah, Iraq

**Coffee Break**

**Poster Presentation**

**P01 Early Detection of Lung Cancer via miR-155 and Surface Enhanced Raman Spectroscopy (SERS)**

**Christina Quin**, Lincon-Sudbury Regional High School, US

**P02 Seasonal and Daily Variations in Lung-Deposited Surface Area of Ambient Fine PM in Los Angeles**

**Constantinos Sioutas**, University of Southern California, USA

**P03 Mechanical Properties of Bone: Age and Disease Perspectives at the Nanostructural Level**

**Farah Hamandi**, Wright State University, United States

- P04** Metal Bionanoparticles: Optimization of Mycosynthesis, Characteristics and Antimicrobial Activities Against Crop Pathogens  
**Patrycja Golinska**, Nicolaus Copernicus University in Torun, Poland
- P05** Biosynthesized Metal Nanoparticles with Antimicrobial Activity for Stimulation of Plant Growth  
**Joanna Trzcińska-Wencel**, Nicolaus Copernicus University in Toruń, Poland
- P06** Cellular uptake of Spherical Gold Nanoparticles in PC-3 Cells: Dual-phase Kinetic uptake and Modelling  
**Gabriela Traplin**, Toronto Metropolitan University, Canada
- P07** Oral Administration of pH-Responsive Polymeric Nanoparticles based on Zein and their Therapeutic Potential on Cancer  
**Bruno Alejandro Valades-Aguilar**, Autonomous University of Nuevo León, Mexico
- P08** Phage-Loaded Nanofibers: A Promising Nanobiopesticide Coating for Packaging Against Food Pathogens  
**Fernanda Coelho**, University of São Paulo, Brazil
- P09** Development of Biomimetic Doxorubicin-Loaded Magnetic Nanoparticles for Targeted Breast Cancer Therapy  
**Maria Julia Bistaffa**, Nanomedicine and Nanotoxicology Group (GNano), Brazil
- P10** Synthesis of NanoSAP for Harvesting Atmospheric Water for Human Consumption  
**Valquiria de Campos**, UNESP, Brazil
- P11** Self-Powered Dual-Mode Wireless System for Real-Time Monitoring of Marine Structures  
**Zhiguo He**, Zhejiang University, China
- P12** Preparation, Structural Characterization, Optical, Photoluminescence, AC Electrical Conductivity and Broadband Dielectric Properties of WO<sub>3</sub> Reinforced PEG/CS Blend for Futuristic Optoelectronic and Energy Storage Devices  
**Maha A. Alqarni**, University Of Jeddah, Saudi Arabia
- P13** Growth of Variable Aspect Ratio ZnO Nanorods by Hydrothermal Technique  
**Asmaa Omair Al-Rasheedi**, Jeddah University, Saudi Arabia
- P14** Polymer-Stabilized Ag, Ni, and Co Nanoparticles Obtained in Situ in a Polymer-Inorganic Matrix for Anti-Cancer Treatment  
**Olga Akopova**, AA Bogomoletz Institute of Physiology NAS of Ukraine, Ukraine
- P15** Metal Organic Batteries as a Scalable and Environment-Friendly Solution for Large-Scale Energy Storage  
**Saira Sarwar**, Adam Mickiewicz University, Poland
- P16** Adsorptive and Photocatalytic Degradation Potential of Porous Polymeric Materials for Removal of Pesticides, Pharmaceuticals, and Dyes-Based Emerging Contaminants from water  
**Muhammad Irfan**, Adam Mickiewicz University, Poland
- P17** Metal-Coated Magnetic Iron Oxide Nanoparticles for Antimycobacterial Applications  
**Motunrayo Victoria Badejo**, Stellenbosch University, South Africa
- P18** Nanostructured SiO<sub>2</sub> Material: Synthesis Advances and Applications in Rubber Reinforcement  
**Agraw Mulat**, Assosa University, Ethiopia
- P19** DFT Calculations of Thermodynamic Properties of CsSnI<sub>3</sub>  
**Dilshod Nematov**, S.U. Umarov Physical-Technical Institute of the National Academy of Sciences, Tajikistan

- P20** The Efficiency of Silver Iodide Nanoparticle as a Novel Suppression Agent for Grown, Migrated, and Invasive Papillary Thyroid Cancer Cells  
**Saeed M. Fayadh**, Mustansiriyah University, Baghdad
- P21** Green Synthesis of Lignin-based Nanoparticles as a Bio-Carrier for Targeted Delivery in Cancer Therapy  
**Khushboo Pathania**, Panjab University, India
- P22** Nanoparticles for Cancer Treatment: Present Developments and Obstacles  
**Mamta Kumari**, Maharana Pratap college of Pharmacy, India
- P23** Comparison of Induction of Fibrosis on 2D Cell Culture and 3D Bioprinted Scaffolds using Methotrexate  
**Mrunmayi Ashish Gadre**, Manipal Centre for Biotherapeutics research, India
- P24** Rejuvenation of Heavy Polluted Environment using Sustainable Biotechnological Techniques  
**Nirmala GN**, Vels Institute of Science, Technology & Advanced Studies (VISTAS), India
- P25** Magnetically Recoverable Molybdate Silica Decorated Ferrite Nanocat (Fe-Si-Mo) and their Utilization for Reductive Amination of Carbonyl Compound under Benign Condition  
**Shripad Mukundrao Patil**, Dada Patil Mahavidyalaya, India
- P26** Prediction of a New Nanostructure called Porphyrin-Like Buckyball, using Density Functional Theory and Investigating Electro Catalytic Reduction of CO<sub>2</sub> to CO by Cobalt-porphyrin-Like Buckyball  
**Mohammad Asadpour**, Khaje Nasir Toosi University of Technology, Iran



## Nano in Food & Agriculture

**Transcriptomics of Temperature-Sensitive R Gene-Mediated Resistance Identifies a WAKL10 Protein Interaction Network**

**Henrik Stotz**, University of Hertfordshire, United Kingdom

**Biochemical Responses of Coffea Arabica Var. Borbon to Foliar Exposure of Copper Doped Silica Chitosan Oligosaccharides Nanoparticles**

**Alexis Salazar**, Autonomous University of Baja California, México

**Seed Priming with Zinc Oxide Nanoparticles: An Innovative Approach to Alleviate Cobalt-Induced Stress and Enhance Maize Growth**

**Yinbo Gan**, Zhejiang University, China

**PANI Modified Ag NPs Fluorescence Sensor for Detection of Nitrate Ion**

**Abdu Hussen Ali**, Mekdela Amba University, Ethiopia

**Controlled Adiabatic Quantum Evolution In Low-Dimensional Nanoscale Systems**

**Jasurbek Matrasulov**, National University of Uzbekistan, Uzbekistan

Coffee Break

## Nanomaterials Characterization

**Ultra-Long Afterglow of 2D Transition Metal Dichalcogenides**

**Assaf Yaakobovitz**, Ben-Gurion University of the Negev, Israel

**Large-Size 2D Bi<sub>2</sub>Te<sub>3</sub> Single Crystal Materials and Its Growth Behavior**

**Jinzhong Wang**, Harbin Institute of Technology, China

**Mechanical Properties of 3D Boron Nitride Foam**

**Yarden Mazal Jahn**, Ben-Gurion University of the Negev, Israel

**Improved Photovoltaic Performance of GaAs/Carbon Nanotube Heterojunction Solar Cells with a Multifunctional Nafion/PEDOT: PSS Layer**

**Wenliang Wang**, South China University of Technology, China

**Visible-Light-Driven Photo-Fenton Oxidation Enhanced by Fe/Bi-Nanocrystal Phase Transformation as a Universal Way for Various Organic Pollutants Mineralization**

**Tulai Sun**, Zhejiang University of Technology, China

**Synthesis and Functionalization of Silica Nanoparticles with Silver Ions as a Hydrophobic and Antibacterial Fabric Coating**

**Alexis Salazar**, Autonomous University of Baja California, Mexico

**Graphene Synthesis in Inductively Coupled Thermal Plasma Reactor Using Methane Precursor**

**Reem Mahmoud**, University of Sherbrooke, Canada

**Magnetic Aerogels from FePt and CoPt<sub>3</sub> Synthesized in Organic Media**

**Larissa Schoske**, University Hamburg, Germany

**Nanocellulose Synthesized by Acid Hydrolysis of Cellulose Separated from Coconut Shell Powder and Used as a Filler in Natural Rubber for Mechanical and Thermal Property**

**Isha Meshram**, University of Naples, Italy

**Biomacromolecules/Halloysite Hybrids for Biomedical Applications**

**Giuseppe Cavallaro**, University of Palermo, Italy

**Effect of Hydrothermal Reaction Temperature on Fluorescent Properties of Carbon Quantum Dots Synthesized from Lemon Juice for Adsorption Applications**

**Gadisa Deme**, Adama Science and Technology University, Ethiopia

**Muti-stimuli Controlled Properties of Shape Memory Polymer Composites from Biobased Benzoxazine-Epoxy Copolymers Filled with Magnetic Nanoparticles**

**Sarawut Rimdusit**, Chulalongkorn University, Thailand

**Impact of Temperature and External Field Driving Rate on Disordered Antiferromagnetic-Ferromagnetic Bilayers**

**Svetislav Mijatovic**, University of Belgrade, Serbia

**Multi-Functional Green Copper Mesh for Sustainable Membrane-Based Water Treatment Technology**

**Hala Al-Jawhari**, King Abdulaziz University, Saudi Arabia

**Fabrication and Characterization of Co<sub>3</sub>O<sub>4</sub>/NiO Nanospherical Composites for Enhanced Supercapacitor Electrode Performance**

**Osama Madkhali**, Jazan University, Saudi Arabia

**Fast Responsive Mesoporous Silver Supported Silica Nanocomposite for pH Sensing**

**Nisrin Alnaim**, King Faisal University, Saudi Arabia

**Exploring the Potential of rGO for Advanced Data Storage: Synthesis and Characterization**

**Salah Oudjertli**, Research Center Industrial Technologies, Algeria

**Study the Effect of Ga Doping on Structural, Optical and Electrical Properties of Ni<sub>1-x</sub>Ga<sub>x</sub>O Thin Films Deposited by Spray Pyrolysis Technique.**

**Zaouche Chouaieb**, Higher School of Saharan Agriculture, Algeria

**Extraction, Modification and Characterization of Cellulose Nanocrystals from Biomass, Their Adsorption of Heavy Metal Pollutants from Water: A Review**

**Maxwell Thatyana**, University of South Africa, South Africa

**Electrochemical Determination of Capsaicin at Platinum Electrode Modified by CuO Nanoparticle Functionalized with Multiwalled Carbon Nanotubes**

**Omolola Esther Fayemi**, North-West University, South Africa

**Synthesis and Characterization of Mono (Ag and Ni) and Bi Metallic (Ag-Ni) Nano Particles from the Neem Azadirachta indica Stem Bark Extract for Corrosion Inhibition Test**

**Nasiru Pindiga Yahaya**, Gombe State University, Nigeria

**Novel Photothermal Magnetic Membranes for Solar-Driven Desalination**

**Norhan Nady**, City of Scientific Research and Technological Applications (SRTA-city), Egypt

**Innovative Utilization of Agricultural Waste: Towards Sustainable Activated Carbon Production for Environmental Remediation**

**Mahmoud fathy Mubarak**, Egyptian petroleum research institute, Egypt

**Preparation of Nano-Adsorbents Derivative from Fruits Seeds for Heavy Metals Removal from Aqueous Solution**

**Jasim Salman**, Iraq University College, Iraq

**Structural and Optical Properties of Copper Ions Beam Irradiated Titanium Dioxide (TiO<sub>2</sub>) Nanoparticles**  
**Shehla Honey**, University of Okara, Pakistan

Lunch

## Nanotechnology in Energy

**The Use of Nanomaterials in Batteries**

**Valencia de la Vega**, Nestpoint Group, United States

**Interfacial Engineering to Enhance Electrochemical Windows**

**Ming Chen**, Huazhong University of Science and Technology, China

**Piezo-Phototronic Effect in Multi-Layer Structured Optoelectronic: Bilateral Piezoelectric Charge Modulation**

**Wenbo Peng**, Wenbo PengXi'an Jiaotong University, China

**Recent Advances in Superhydrophobic Anti-Icing Surfaces Inspired by Cold-Tolerant Plants**

**Xiaoming Feng**, Jiangsu University of Science and Technology, China

**Microfluidic Sensing Textile for Continuous Monitoring of Sweat Glucose at Rest**

**He Zhao**, East China University of Science and Technology, China

**A Miniaturized Statically Balanced Compliant Mechanism for Ultra-low Wide Bandwidth Vibrational Energy Harvesting on Chip**

**Haitong Liang**, Beijing Forestry University, China

**Advanced Nanomaterial-Based Technology for Antibiotic-Polluted Water Remediation**

**Hamid Rajabi**, The University of Liverpool, UK

**Grouping Principles and Applications**

**David Katoshvski**, Ben-Gurion University of the Negev, Israel

**The Failure of Both Einstein's Space-Time Theory and his Equivalence Principle and Their Resolution by the Uniform Scaling Method**

**Robert Buenker**, Bergische University, Germany

**Numerical Analysis of a Ruffled Fin type Automotive Car Radiator Operating with Different Particle-Shaped Optimized Ternary Nanofluid**

**Doga Kavaz**, Cyprus International University, Turkey

**Impregnation of Fly Ash Sorbent for Decontamination of Toxic Organic and Inorganic Pollutants in Wastewater**

**Shorouq Ahmed**, kuwait institute for scientific research, kuwait

**Bioinspired Nanocomposite for Passive Cooling**

**Li Hong**, Nanyang Technological University, Singapore

**Geometrical Stabilities and Electronic Structures of Rh<sub>5</sub> Nanoclusters on Rutile TiO<sub>2</sub> (110) for Green Hydrogen Production**

**Moteb Qahess M Alotaibi**, Prince Sattam Bin Abdulaziz University, Saudi Arabia

**FEM Simulations for Nanofluidic Transport of Ternary Nanofluid in a Concentric Semi-Circular enclosure: An application of Latent Energy Storage**

**Sardar Muhammad Bilal**, Prince Mohammad Bin Fahd University, Saudi Arabia

**Enhancing Optical Properties of Ba-Ni<sub>1-x</sub>Zn<sub>x</sub>Fe<sub>2</sub>O<sub>4</sub> Ferrite for High-Efficiency Solar Cells and Optoelectronic Applications through Nonmagnetic Ion**

**Sadiq Hassan Khoreem**, AL-Razi University, Yemen

**Enhancing the Properties of ZnO through Carbon Nanotube Doping: A Co-Precipitation Approach**  
**Salah Oudjertli**, Research Center Industrial Technologies, Algeria

**Multiferroic Bismuth Ferrite based materials**

**Amira Amouri**, Laboratory of Nanomaterials and Systems for Renewable Energy of Research and Technology Center of Energy, Tunisia

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### Coffee Break

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**MoS<sub>2</sub>-ZnIn<sub>2</sub>S<sub>4</sub>/Single Layer Graphene Oxide (SLGO): A Noble Metal Free Photocatalyst for Enhanced Photocatalytic Hydrogen Evolution**

**Fizza Siddique**, Minzu University of China, China

**The use of Graphene for Asymmetric Diodes and the Role of Defectiveness Degree for Energy Harvesting Applications**

**Emiliano Laudadio**, Polytechnic University of Marche, Italy

**Polypyrrole Modified Granular Activated Carbon Nanocomposite: Synthesis and Application for Wastewater Treatment Laden with Toxic Cr(VI)**

**Katlego Setshedi**, CSIR, South Africa

**Development of Novel Mesoporous Magnetic Adsorbents Derived from Industrial Waste and their Application for Environmental Application in Adsorptive Removal of Lead and Efavirenz**

**Masixole Sihlahla**, University of South Africa, South Africa

**Construction of Crystalline Graphitic Carbon Nitride based composites: Photocatalytic Energy Conversion**

**Xiao Zhang**, Cracow University of Technology, Poland

**Narrowing of Band gap and decrease in the Dielectric loss in La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> for x = 0.0, 0.1, and 0.2 manganite nanoparticles**

**Rauf Abid**, International Islamic University, Islamabad

**Green Loading of Pdo Nanoparticles onto Activated Carbon and its Antibacterial Activities against Staphylococcus aureus and Escherichia coli**

**Aisha Mohammed Al Musharrafi**, Sultan Qaboos University, Oman

**Narrowing of Band Gap and Decrease in Dielectric Loss in La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> for x = 0.0, 0.1, and 0.2 Manganite Nanoparticles**

**Shaheryar Malik**, International Islamic University, Islamabad

**Bi<sub>2</sub>Te<sub>3</sub>/MoS<sub>2</sub> Nanohybrid Material Deposited on a Flexible Substrate for Self-Powered Photodetection**

**Bal Chandra Yadav**, Babasaheb Bhimrao Ambedkar University, India

**Analyzing the Oscillatory Magneto-Hydrodynamic Nanofluid Flow through the Lens of the First and Second Laws of Thermodynamics, Utilizing Computational Fluid Dynamics and a Machine Learning Methodology**

**Najmeh Hajjaligol**, Hamedan University of Technology, Iran

**Mesoporous Co<sub>3</sub>O<sub>4</sub>@CdS Nanorods as Anode for High-Performance Lithium-ion Batteries with Improved Lithium Storage Capacity and Cycle Life**

**Hamza Waleed**, Pakistan Institute of Nuclear Science and Technology, Pakistan

### Nanotechnology in Manufacturing and Construction

**Enhancing Structural Integrity: Functionalized Hybrid Carbon Nanotubes in Cement-based Composites**  
**Robabeh Jazaei**, Slippery Rock University of Pennsylvania, United States

### Nano Electronics

**Patterning Optimization for Device Realization of Patterned GaAsSbN Nanowire Photodetectors**  
**Sean Johnson**, High Point University, US

**Control of Dynamic Percolation Kinetics in Electrically Conductive Pastes Containing Multi-Walled Carbon Nanotubes Using Chemical Factors**  
**Masahiro Inoue**, Gunma University, Japan

**Interfacial Engineering Enables Polyaniline Decorated Bismuth Sulfide Nanorods Towards UV Vis Broad Spectra Photodetector**  
**Anshika Singh**, University of Genova, Italy

### Nanocomposites, Nanostructured and Nanoporous Materials

**Biosynthesis, Characterization and Potential Antimicrobial Studies of Ag-MgO Nanocomposite Mediated from Talinum Fruticosum Leaf Extract**  
**Gildas Fonye**, University of Yaounde I, Cameroon

### Nanoelectronics: Fabrication, Processing & Characterization Techniques

**Single-Step Inkjet-Printed Dielectric Template for Large Area Flexible Signage and Low-Information Displays**  
**Chandra Kant**, Indian Institute of technology, Kanpur

### Lunch and Departure

**\*This is a tentative program for the Conference and is subjected to change without any prior notice**

We wish to see you@

# Nano London 2024

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