Coalesce Research Group

APPROVED PROVIDER #782310

Joint Event

5th International Conference on

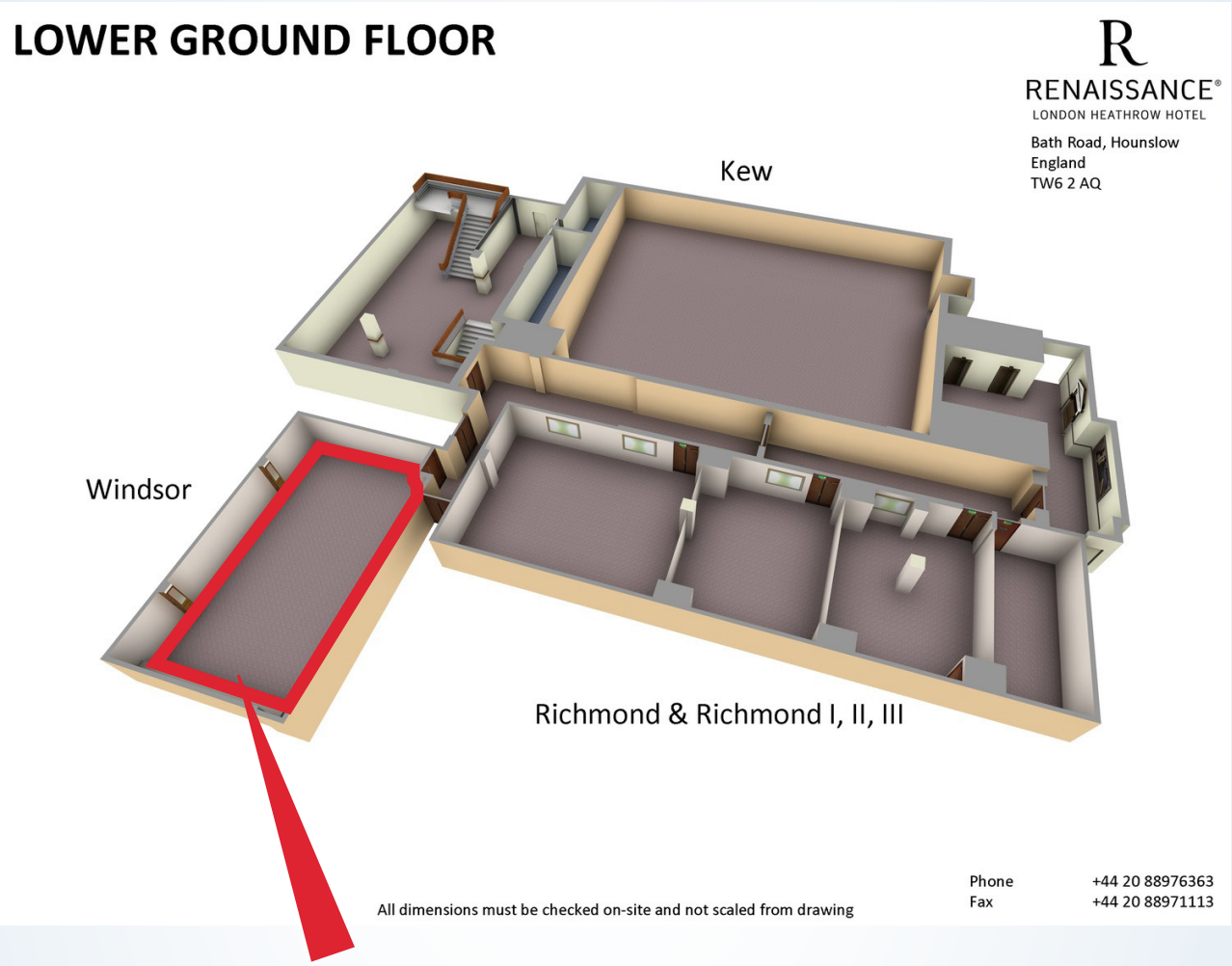
ADVANCED FUNCTIONAL MATERIALS

&

BIOMATERIALS & BIODEVICES

October 14-15, 2024 | London, UK

Floor Map



Conference Hall

Wi-Fi Details:

Username: Marriott Guest

Password not required - Open Wi-Fi

Conference Program

5th International Conference on

Advanced Functional Materials & Biomaterials & Biodevices

Day 1 – October 14th 2024	
Meeting Hall : Windsor Suite	
08:00 -08:45	Registrations
08:45 - 09:00	Introduction
Keynote Presentations	
09:00 - 9:40	Protective Nanocoatings from Polyelectrolytes: Flame Retardancy, Heat Shielding, and Super Gas Barrier
	Jaime C. Grunlan, Texas A&M University, USA
09.40 - 10.20	Fully Bioresorbable Polymeric Scaffolds for Treatment of Peripheral and Coronary Diseases: Current Developments and Future Perspectives
	Kadem Al-Lamee, Arterius Limited, United Kingdom
Networks & Refreshments (10.20 - 10.40) @York Lobby	
10:40 - 11:20	Advanced Carbon Based Materials via Sustainable Synthetic Procedure for Sensing and Environmental Applications
	Claudia Espro, University of Messina,Italy
Oral Presentations	
Session chair	**Jaime C. Grunlan,** Texas A&M University, USA
Session chair	**Kadem Al-Lamee,** Arterius Limited, United Kingdom
Sessions:	Functional Hybrid Materials |Applications of Biomaterials | Carbon Based Materials | Biomimetic Materials | Bio-inspired Intelligent Biomaterials |Biomaterials in Drug Delivery Systems | Functional Materials, Synthesis and Characterizations |Advanced materials and Applications | Biomaterials & Nano technology|Biodevices and Biomedical Optics | Functional Materials|Energy Materials |Micro or Nano Materials |Biomaterials | Hydrogels | Sustainable Materials
11.20 - 11.45	From Biomimicry to Architecture: The Future of Responsive Shading
	Maria João de Oliveira, ISCTE – Instituto Universitário de Lisboa, Portugal
11.45 - 12.10	Synthesis of Functionalized Chitosan Polymeric Nanoparticles and their Properties for Controlled Drug Release
	Nekane Martin, I+Med S.Coop., EHU/UPV, Spain
12.10 - 12.35	Investigation on Corrosive Degradation of the Thermally Sprayed TiNbMoMnFe High Entropy Alloy Coatings in Simulated Body Fluid
	Deepak Kumar, Indian Institute of Technology Delhi (IIT Delhi), India
12.35 - 13.00	The Impact of Metal Dots on Time-Resolved Luminescence of Aero-GaN
	Tudor Braniste, Technical University of Moldova, Moldova
Group Photo (13.00 - 13.15)	
Lunch (13.15 - 14.00) @Market Garden Restaurant	
14.00 - 14.25	Machine Learning-Accelerated Analysis Synthesized the Characteristics of $CaCO_3$ Particles with the Methods of Microwave, Ultrasonic, and Magnetic Steering, as well as their Possible Applications
	Junnan Song, Ghent University, Belgium

5th International Conference on

Advanced Functional Materials & Biomaterials & Biodevices

14.25 - 14.50	Advancing Uniform Stochastic Design in Photomatrix Therapeutic Systems
	Oleg Karaduta, University of Arkansas for Medical Sciences, USA
14.50 - 15.15	Green Carbon-Based Nanomaterials with Advanced Properties for Environmental Applications
	Viviana Bressi, University of Messina,Italy
15.15 - 15.40	SEWAT - Sustainable Energy by Waves Trap
	Giulio Teodoro Maellaro, Geco -Global Engineering Constructions S.R.L. ,Italy
15.40 - 16.05	Dual-Action Coatings for Implant Failure Prevention in Temporary Magnesium-Based Orthopaedic Implants
	Isabel Sousa, DEMaC/CICECO, University of Aveiro, Portugal
Networks & Refreshments (16.05 - 16.30) @York Lobby	
Poster Presentations @ 16:30 - 18:00	
Poster Judge	**Kadem Al-Lamee,** Arterius Limited, United Kingdom
PP-01	Experimental and Computational Studies of Crystal Violet Removal from Aqueous Solution using Sulfonated Graphene Oxide
	Olayinka Oluwaseun Oluwasina, The Federal University of Technology Akure, Nigeria
PP-02	Development of a Critical Time-Temperature Indicators (cTTI) using Thermosensitive Copolymers with Tunable LCST
	Seung Won Jung, Dongguk University, South Korea
PP-03	From Sea Urchins Waste to Tissue Regeneration: Innovative Composite Biomaterials
	Giordana Martinelli, University of Milan, Italy
PP-04	Comparative Evaluation of Sea Urchin Waste as a Sustainable Source of Bioactive Collagen-Based Biomaterials
	Margherita Roncoroni, University of Milan, Italy
PP-05	Flexible Thermoelectrics based on 3D Interconnected Magnetic Nanowire Networks
	Luc Piraux, UCLouvain, Belgium
PP-06	Tuning the Structure-Functional Relationship within Peptide-Mimicking Antimicrobial Hydrogels
	Samuel Attard, University of New South Wales, Australia
PP-07	Categorizing/Testing Biomaterials, A Major Challenge for Valeo Lighting Systems / Light Division
	Laurent Barre, Valeo Lighting Systems, France
PP-08	Food-Based Biomaterials: p^H-Responsive Alginate/Gellan Gum/Cellulose Hydrogel Beads for Lactoferrin Delivery
	Lin Cao, Ghent University, Belgium
PP-09	Study of Ceramic Coatings as a Novel Radiation Receiver on Furnace Building Material using Thermal Spraying Technique
	Wu-Han Liu, Industrial Technology Research Institute, Taiwan
Day 1 Concludes followed by Certificate Felicitation	

5th International Conference on

Advanced Functional Materials & Biomaterials & Biodevices

Day 2 - October 15, 2024	
Meeting Hall : Windsor Suite	
Keynote Presentations	
9.30 - 10.10	Nickel-Zinc Ferrite and Graphene Nanoplatelet-Enhanced Epoxy Hybrid Nanocomposites
	Sahrim Ahmad, Universiti Kebangsaan Malaysia, Malaysia
10.10 - 10.50	An Environment-Friendly $Na_{0.4}K_{0.1}Bi_{0.5}TiO_3$ Ceramic for Direct Replacement of PZT-Based Ceramics in Multiple Applications
	Ajit R. Kulkarni, Indian Institute of Technology-Bombay (IIT Bombay), India
Networks & Refreshments (10.50 - 11.15) @York Lobby	
Oral Presentations	
Session chair	**Ajit R. Kulkarni,** Indian Institute of Technology-Bombay (IIT Bombay), India
Session chair	**Kadem Al-Lamee,** Arterius Limited, United Kingdom
Sessions:	Advanced Functional Materials | Functional Materials | Hydrogels |Biodegradable Biomaterials |Thin Films | 3D Bio Printing Technology | Biosensors & Biorobotics
11.15 - 11.40	Chemically Identical Hydrogels with Distinct Mechanical Properties
	Xingjian Sun, Shenzhen Institute of Advanced Technology & Chinese Academy of Sciences, China
11.40 - 12.05	Exploring the Potential of $CsPbBr_3$ Perovskite Solar Cells: Experimental and Theoretical Investigations
	Amina Laouid, Nicolaus Copernicus University in Torun,Poland
12.05 - 12.30	4D Printed Piezoelectric Bilayer Wound Dressing Mesh to Accelerate Skin Wound Healing
	Gholamreza Mohammadi Khounsaraki, Institute of Materials Research, Slovakia
12.30 - 12.55	Advancements in Fiber Optic Biosensors for Real-Time Glucose Monitoring
	Pallavi Dhillon, Shen Clinical Services LLP, India
12.55 - 13.20	Membrane Separation Technology in Direct Air Capture
	Naiying Du, National Research Council of Canada (NRC), Canada
Lunch (13.20 - 14.30) @Market Garden Restaurant	
14.30 - 14.55	Preparation, Function, and Safety Evaluation of a Novel Degradable Dermal Filler, The Cross-Linked Poly-Γ-Glutamic Acid Hydrogel Particles
	Mian Chen, Shandong Academy of Pharmaceutical Sciences, China
14.55 - 15.20	Microwave-Synthetized Lanthanide Upconversion Nanoparticles: Light Nanotransducers for Biomedical Applications.
	Gloria Lesly Jimenez Miranda, AGH University of Krakow, Poland

5th International Conference on

Advanced Functional Materials & Biomaterials & Biodevices

15.20 - 15.45	Biopolymer Based in Situ Injectable Hydrogels Loaded with Curcumin Nanocrystals for Bone Tissue Engineering, (HydroBoneReg)
	Syed Ahmed Shah, Institute of Fundame, Poland
15.45 - 16.10	To be announced..
	Ketevan Tavamaishvili, Georgian American University, Georgia

Networks & Refreshments (16:10- 16:30) @York Lobby

Day 2 Concludes followed by Vote of thanks and Certificate Felicitaions

Coalesce Research Group

Bookmark The Dates

6th International Conference on

Biomaterials & Biodevices

September 22-23, 2025 | Vienna, Austria

Coalesce Research Group
33 Market Point Dr,
Greenville, SC 29607, USA

Contact Us:
Phone: +1-718-543-9362
Whatsapp: +1-864-386-8485
E-Mail: biomaterials@crgmeetings.com