

## MSSI RESEARCH FORUM SEMINARS 2015

SPEAKER	TOPIC	DATE
Professor Mark Jolly Cranfield University, United Kingdom	Sustainable Liquid Metal Processing Using Modelling	15.01.15
Mr Leonard Browne PhD Viva	Quantifying the Hemodynamic Characteristics of Arteriovenous Fistulae	27.01.15
Ms Jennifer Costelloe PhD Viva	Towards the Use of Geometric Parameters and Blood-borne Species Concentration in the Prediction of Cerebral Aneurysm Growth and Rupture	27.01.15
Dr Amir Shirzadi The Open University & University of Cambridge, United Kingdom and Wuhan University of Science and Technology, China	New Methods for Diffusion Bonding Alloys with Stable Surface Oxides; For Example, Aluminium, Stainless Steels and Superalloys	25.02.15
Professor Claudio Ruggieri University of São Paulo, Brazil	Fracture Assessments of Critical Structural Components in Hostile Environments: Key Concerns and Challenges	26.02.15
Professor Javier Ellena University of São Paulo, Brazil	Solid State Technologies in the Development of New Medicines	27.02.15
Dr Peter Schubel Centre for Innovative Manufacturing in Composites (CIMComp), University of Nottingham, United Kingdom	CIMComp and Its Role in the UK Composites Manufacturing Research Landscape	03.03.15
Dr Peter Nirmalraj IBM Research Laboratory, Zurich, Switzerland	Metrology and Control of Molecular Systems at the Liquid-Solid Electrical Interface	23.03.15
Saleh Abdulkarim PhD Confirmation	Structure and Function of <i>Thermus thermophilus</i> Sulfite Oxidase	25.03.15
Dr Matteo Lusi MSSI, University of Limerick	Design and Synthesis of Molecular Materials: Mixing Crystals for Finer Engineering	26.03.15
Dr Drahomír Chovan MSSI, University of Limerick	Multiscale Modelling in Materials Science	02.04.15
Professor Oran Kennedy New York University Medical Centre, USA.	Subchondral Microdamage Following Acute Knee Injury: A Potential Role in Post-Traumatic Osteoarthritis	10.04.15
Dr Bin Zhao MSSI, University of Limerick	Nanomaterial Synthesis and Applications: Systematical Investigations on Phase Transition and Morphological Evolution Behaviors	16.04.15
Professor Geoffrey Gibson Newcastle University, United Kingdom	Key Issues in the Fire Behaviour of Aerospace Composites Under Compressive Load	20.04.15
Mr David Richardson PhD Viva	Nanotubes Prepared by Electroless Deposition: Investigation of the Nanostructure Formation Mechanism and Characterisation of Physical Properties	05.05.15
Dr Naoki Ogawa RIKEN Centre for Emergent Matter Science, Japan	Functional Materials Observed and Controlled with Optics	06.05.15
Ms Deirdre Enright PhD Viva	Development of a Novel Process for the Removal of Selected Organic Compounds from Waste Streams	08.05.15
Professor Delphine Retrait University of Technology of Troyes, France	How to Enhance Mechanical and Wear Properties of Metals by Creating a Superficial Nanocrystalline Layer	08.05.15

Ms Andrea Burke PhD Viva	Electrode Kinetics in All-Vanadium Flow Batteries: Effects of Electrochemical Treatments	11.05.15
Ms Marguerita McCarthy PhD Viva	Integral Voltage-gated Sodium Channels: Production, Characterisation and Investigation into Oligomeric State Detergent Dependence	12.05.15
Professor Robert Hill Barts and The London Medical School, Queen Mary University of London, United Kingdom	Calcium Phosphate Cements Based on Bioactive Glasses	19.05.15
Dr Marie-Noelle Labour MSSI, University of Limerick	A Biological and An Engineering Approach to Bone Regeneration	20.05.15
Professor Richard L. Leask, McGill University, Quebec, Canada	The Impact of Biomechanics on Vascular Pathologies	25.05.15
Mr Tadhg Kennedy PhD Viva	Nano-Structuring of Silicon and Germanium – A Viable Route to High Capacity, Long Cycle Life Lithium-Ion Battery Electrodes	08.06.15
Professor Rainer Fischer Fraunhofer Institute for Molecular Biology, Aachen, Germany	Innovative Product Discovery and Development at Fraunhofer IME	03.09.15
Professor Peter Junk James Cook University, Australia	Lanthanoid Pseudo-Grignard Reagent Chemistry	14.09.15
Dr Adam Orłowski Ernst & Young, Poland	Membrane-associated Proteins Do Care About Lipids – Perspective Based on Atomistic Molecular Dynamics Simulations	28.09.15
Dr Chris Hawes Trinity College Dublin	Strategies for Selective Carbon Dioxide Uptake in Co-Ordination Polymer Materials	01.10.15
Dr Sergiu Albu University of Manchester, United Kingdom	Al-Cu-Li Alloy: Microstructure and Anodising	08.10.15
Dr Jason Perman Palacký University, Czech Republic	What Can be Done with Carbon in Combination with Fluorine or Iron?	30.10.15
Dr Magali Hickey Alkermes Inc., USA	Material Research in Pharmaceutical Development: Bridging Form and Function to Advance Medicinal Products	03.11.15
Naga Kiran Duggirala PhD Viva	Crystal Engineering of Ionic Cocrystals	04.11.15
Shalini Singh PhD Viva	Colloidal Synthesis of Multinary Metal Chalcogenide Nanocrystals with Composition, Shape and Crystal Phase Control	09.11.15
Mehrdad Balandeh PhD Viva	Effects of Electrochemical Pretreatments on the Kinetics of Some Electrode Reactions on Carbon and Palladium	13.11.15
Joseph A. Murphy PhD Viva	Development of Stress During Electrodeposition of Nano-Scale Copper Metallization: An <i>In-Situ</i> Study using Real-Time Wafer-Curvature Measurements, Electrochemical Characterization, and AFM Imaging	20.11.15
Katalin Bodnar PhD Transfer	Preparation of Mefenamic Acid Nanocrystals for Improved Dissolution Performance	26.11.15
Dr Gareth Tribello Queen's University Belfast	Dimensionality Reduction as a Tool for Understanding Complex Free Energy Landscapes of Protein Assembly and Crystal Nucleation	27.11.15
Dr Peter Crowley National University of Ireland, Galway	Protein Self-Assembly	03.12.15