

MSSI RESEARCH FORUM SEMINARS 2016

SPEAKER	TOPIC	DATE
Professor Declan Bates University of Warwick, United Kingdom	Synthetic Biology and Systems Medicine: Engineering Life in the 21 st Century	15.01.16
Dr David Cheung National University of Ireland, Galway	Proteins and Peptides at Soft Interfaces: Insight from Molecular Simulation	21.01.16
Dr Mateusz Sikora Institute of Science and Technology (IST) Austria	Cell-Cell Contact Formation on the Molecular Scale: The Role of Glycosylation	28.01.16
Professor Mark Mascal University of California, Davis USA	5-(Chloromethyl)furfural (CMF) is the New HMF: Functionally Equivalent but More Practical in Terms of Its Production from Biomass	18.02.16
Professor Andrea Salis University of Cagliari, Italy	The Hofmeister Series: A Chemical History 130 Years Long	22.02.16
Marcela Salazar Alvarez PhD Viva	Targeted Protein Adsorption on the Surface of Biomaterials	23.02.16
Professor Gérard Férey University of Versailles, France	A Personal View of the Past, Present and Future of MOFs, PCPs and Related Solids	26.02.16
Professor Edward Bayer The Weizmann Institute of Science, Israel	Cellulose, Cellulosomes and Designer Cellulosomes: Playing with Nature!	22.03.16
Dr Manik Ghosh MSSI	Quantum Mechanical/Effective Fragment Potential-Molecular Dynamics (QM/EFP-MD) Simulation: A Smart Sampling Technique in Condensed Phase	14.05.16
Professor Carlos Santiuste University Carlos III of Madrid, Spain	Development of Simplified Predictive Models of Bolted Composite Joints	04.05.16
Professor Damien Clancy RUSAL Aughinish	Energy Management at RUSAL Aughinish	05.05.16
Dr Johannes Buyel Fraunhofer Institute for Molecular Biology and Applied Ecology IME, Germany	Plant-derived Biopharmaceutical Proteins – An Alternative to Conventional Cell-culture Based Approaches	12.05.16
Noreldeen Abdallah PhD Viva	Immobilisation of Catalysts for Application in Organic Reactions	13.05.16
Dr Mathieu Etienne Laboratory of Physical Chemistry and Microbiology for the Environment, University of Lorraine, France	Immobilization of Redox Proteins and Bacteria in Sol-gel Materials by Electrochemistry and for Electrochemistry	13.05.16
Dr Saurav Goel Queen's University Belfast	Contact Loading Studies Using Molecular Dynamics Simulation: A Tested Bed for Ultra-precision Manufacturing	13.05.16
Daniel Mortell PhD Viva	Multiscale Characterisation of Damage in Laminated Composite Materials under Bending Loads	19.05.16
Dr Ulrich Hassiepen Novartis Institutes for BioMedical Research, Switzerland	Facing the Challenges of Drug Discovery	07.06.16
Cristina Carucci PhD Transfer	Screening of Supports for Immobilisation of Enzymes	17.06.16
Vivek Verma PhD Transfer	Crystallisation and Dissolution of Carbamazepine in the Presence of Excipients	17.06.16

Barry Murphy PhD Transfer	Dissolution Properties and Characterization of Carbamazepine- Excipient Mixtures Prepared by Evaporative Crystallization	20.06.16
Professor Damien Arrigan Curtin University, Australia	Exploring Electroanalytical Opportunities at Liquid-liquid Interfaces	20.06.16
Pauric Bannigan PhD Transfer	Solid and Solution Properties of Clofazimine Solid Forms	22.06.16
Dr Liguao Zhao Loughborough University, United Kingdom	Computational Analysis of Mechanical Stress-strain Interaction of a Bioresorbable Scaffold with Blood Vessel	07.07.16
Professor Conor Hogan La Trobe University, Australia.	Understanding, Designing and Controlling the Electrochemiluminescence of Cyclometallated Iridium Complexes for Sensing Applications	08.07.16
Micheal Howard PhD Transfer	Atom Efficient Catalytic Transformations for the Conversion of Biomass to Oxygenated Fuel Components	26.07.16
Venkata Jagadeesh Rachuri, Raman Research Institute, India.	Adsorption Kinetics of Phosphonic Acids and Proteins on Functionalized Indium Tin Oxide Surfaces using Electrochemical Impedance Spectroscopy	30.08.16
Professor Margaret Murnane University of Colorado, USA.	Science at the Timescale of the Electron: Coherent X-ray Beams from Tabletop Femtosecond Lasers	05.09.16
Dr Wataru Shinoda Nagoya University, Japan	Coarse-Grained Molecular Dynamics of Macromolecular Self-Assembly	28.09.16
Sarah Mallen PhD Transfer	Bio-availing of Antimicrobial Peptides	30.09.16
Dr Fujio Abe National Institute for Materials Science, Japan.	Alloy Design of Creep Resistant 9Cr-Boron Steel – Beyond Grades 91, 92 and 122	14.10.16
Dr Micheál D. Scanlon University College Cork.	Soft-Photoconversion: Pushing the Boundaries of Photoconversion Efficiencies at Self-healing Photosensitiser Functionalised Soft Interfaces	27.10.16
Teresa Tierney PhD Viva	Preparation and Isolation of Drug Nanoparticles with Improved Therapeutic Response	02.11.16
Mahendar Kumbham PhD Viva	Far-field Mid-infrared Microscopy with Solid Immersion Lens: Polarization, Spatial Pattern Diversities and Subsequent Image Processing	04.11.16
Professor Keefe Manning The Pennsylvania State University, USA.	Developing a Continuum-based Thrombosis Model for Cardiovascular Devices	04.11.16
Áine O'Driscoll PhD Viva	The Catalytic Hydrogenation of Furfural to Furfuryl Alcohol	08.11.16
Shane O'Mahony PhD Viva	Understanding the Immobilisation of Proteins on Surfaces Using Molecular Dynamics Computer Simulations	09.11.16
Professor Javier Aizpurua Center for Materials Physics, Spain.	Driving Nanophotonics to the Atomic Scale	10.11.16
Professor Ken Sakai Kyushu University, Japan.	Molecular Catalysts and Photocatalysts for Solar Water Splitting Reactions	17.11.16
Professor Quentin Ramasse SuperSTEM Laboratory, United Kingdom	A New Era in High Spatial and Energy Resolution Electron Microscopy: From Fingerprinting Single Atom Bonding to Vibrational Spectroscopy	17.11.16
Dr Hugh Geaney MSSI	Towards an Improved Li-O ₂ Battery: Key Scientific Challenges in Current Rechargeable Non-Aqueous Li-O ₂ Batteries	24.11.16

Aishling Flaherty EPI-STEM National Centre for STEM Education, University of Limerick.	Towards the Establishment of a Meaningful Laboratory Learning Environment through the Psychological Empowerment of Laboratory Demonstrators as Graduate Teaching Assistants	24.11.16
Professor Vladimir Ya. Shur Ural Federal University, Russia.	Ural Centre for Shared Use 'Modern Nanotechnologies' – Achievements and Horizons	29.11.16
Dr Francis Cambier Belgian Ceramics Research Centre, Belgium.	Can Laser be a Tool for Manufacture of Complex Shaped Ceramics? Examples of Additive and Subtractive Methods	02.12.16
Professor Anne Leriche University of Valenciennes et du Hainaut-Cambresis, France.	Processing of Macro- and Micro- Porous Ceramics for Bone Substitute Applications	02.12.16
Dr John Mulvihill School of Engineering, University of Limerick.	The Role of Biomechanics and Mechanobiology in Diseases of the Posterior Eye	09.12.16