

## RAMS 2016 Programme

All lectures take place in Lancaster University Management School Lecture theatre 1.

Lunch, coffee, poster sessions and vendor exhibitions will take place in the hub area outside the lecture theatre.

### Day 1 – Thursday 22<sup>nd</sup> September 2016

Time	Event
08:00-09:00	Breakfast (for those staying on campus) <i>Barker House Farm</i>
09:00-11:00	Registration, coffee and vendor exhibitions
11:00-11:15	Introduction to RAMS 2016
11:15-12:45	<b>Session 1: Functional Materials</b> <i>Chair: Dr Karen Johnston (University of Durham)</i>
11:15-11:30	Dr Emma Pugh (University of Kent) <i>High Pressure Structural Study through Magnetic Quantum Critical Point</i>
11:30-11:45	Dr Oliver Fenwick (Queen Mary University of London) <i>Asymmetrically SAM-functionalised electrodes for organic field-effect transistors</i>
11:45-12:00	Dr Robert Menzel (University of Leeds) <i>Carbon Nanostructure Networks as Functional Support Frameworks in Adsorption and Catalysis</i>
12:00-12:15	Dr Sanjit Nayak (University of Bradford) <i>Mixed-linker approach in designing porous zirconium based MOFs with high stability and hydrogen storage capacity</i>
12:15-12:30	Dr Timothy Easun (Cardiff University) <i>Dynamic Behaviour in Microporous Materials</i>
12:30-12:45	Dr Monika Gamza (University of Central Lancashire) <i>Large positive magnetoresistance in a novel superconductor <math>Ca_{3+x}Co_4Sn_{13-y}</math></i>
12:45-13:15	<b>Plenary lecture 1:</b> Prof. Cinzia Casiraghi (University of Manchester)
13:15-14:10	Lunch, vendor exhibitions and accommodation key collection
14:10-15:10	<b>Session 2: Materials Characterisation</b> <i>Chair: Dr Ben Robinson (Lancaster University)</i>
14:10-14:25	Dr Paramaconi Rodriguez (University of Birmingham) <i>Enhanced electrocatalytic and photocatalytic activity of metal and metal oxides nanoparticles obtained via the Cathodic Corrosion Method</i>
14:25-14:40	Dr Amy Gandy (University of Sheffield) <i>Radiation damage and gas bubble formation in ceramics for advanced nuclear technologies</i>
14:40-14:55	Dr Karen Johnston (University of Durham) <i>The Bigger Picture: Structural Insights into Functional Materials using Diffraction, Solid-State NMR and First-Principles DFT Calculations</i>
14:55-15:10	Dr Sam Jarvis (Lancaster University) <i>Single atom chemistry: Manipulation and characterisation of single atoms and molecules with NC-AFM</i>
15:10-15:40	<b>Plenary lecture 2:</b> Prof. Peter Haynes (Imperial College London)
15:40-16:40	<b>Panel discussion 1: Careers and Research Group Management</b> Prof. Cinzia Casiraghi (University of Manchester), Prof. Peter Haynes (Imperial College London), Prof. Richard Haley (Lancaster University)
16:40-17:00	<b>Poster flash presentations</b> <i>Chair: Dr John Hardy (Lancaster University)</i>
17:00-17:45	Vendor exhibitions and relaxation time
17:45-19:15	Poster session and exhibitions
19:30-23:00	<b>Conference dinner</b> <i>Barker House Farm, Lancaster University</i>

**Day 2 – Friday 23<sup>rd</sup> September 2016**

<b>Time</b>	<b>Event</b>
08:00-09:00	Breakfast (for those staying on campus) <i>Barker House Farm</i>
09:00-10:30	<b>Session 3: Materials Synthesis</b> <i>Chair: Dr Tom Hasell (University of Liverpool)</i>
09:00-09:15	Dr Tom McDonald (University of Liverpool) <i>Dual-stimuli responsive injectable nanogel/solid drug nanoparticle nanocomposites for the long-term sustained release for poorly soluble drugs</i>
09:15-09:30	Dr Christian Nielsen (Queen Mary University of London) <i>New Semiconducting Materials for Organic Bioelectronics</i>
09:30-09:45	Dr Zoe Schnepf (University of Birmingham) <i>In situ synchrotron X-ray diffraction study of the sol-gel synthesis of iron nitrides and carbides</i>
09:45-10:00	Dr George Kostakis (University of Sussex) <i>3d/4f Coordination Clusters in catalysis</i>
10:00-10:15	Dr Jonathan Foster (University of Sheffield) <i>Liquid Exfoliation of Alkyl-Ether Functionalised Layered Metal-Organic Frameworks to Nanosheets</i>
10:15-10:30	Dr Maryam Nikkhou (University of Leeds) <i>Full Control of topological monopoles creation and annihilation in nematic liquid crystal</i>
10:30-11:00	Coffee, vendor exhibitions and accommodation key return
11:00-12:15	<b>Session 4: Materials Design and Simulation</b> <i>Chair: Dr Ben Britton (Imperial College London)</i>
11:00-11:15	Dr Gareth Conduit (University of Cambridge) <i>Materials discovery with artificial intelligence</i>
11:15-11:30	Dr Johannes Lischner (Imperial College London) <i>Ab Initio Photoelectrochemistry</i>
11:30-11:45	Dr Ben Robinson (Lancaster University) <i>Probing surfaces and interfaces of 2D and organic materials: a multi-scale theoretical and experimental study of 2D micelles</i>
11:45-12:00	Dr Edward McCarthy (University of Edinburgh) <i>State of techniques for measurement of interfacial shear strength in fibre-reinforced composites</i>
12:00-12:15	Dr Vihar Georgiev (University of Glasgow) <i>Molecular-based flash cell for low power application: multi-scaled device modelling simulations</i>
12:15-12:45	<b>Plenary lecture 3:</b> Prof. Helen Gleeson (University of Leeds)
12:45-13:30	Lunch and vendor exhibitions
13:30-14:45	<b>Session 5: Materials Engineering and Processing</b> <i>Chair: Dr Zoe Schnepf (University of Birmingham)</i>
13:30-13:45	Dr Josh Treacher (Sharp Laboratories) <i>The development of a new sodium-ion battery chemistry</i>
13:45-14:00	Dr Ana Neves (University of Exeter) <i>Transparent conductive graphene-coated textile fibres: a platform for wearable electronics</i>
14:00-14:15	Dr Nikolaos Kalfagiannis (Nottingham Trent University) <i>Opto-thermal stimulation of plasmonic thin films: new route to design nanoparticle arrangements</i>
14:15-14:30	Dr Esther Garcia-Tunon (Imperial College London) <i>3D printing graphene based devices</i>
14:30-14:45	Dr Svetlana Zolotovskaya (Lancaster University) <i>Plasmon-assisted laser welding</i>
14:45-15:15	<b>Plenary lecture 4:</b> Prof. Ken Lewtas (Lewtas Science & Technologies)
15:15-16:15	<b>Panel Discussion 2: Funding and Impact</b> Dr Anthony Chapman (EPSRC), Prof. Helen Gleeson (University of Leeds), Prof. Ken Lewtas (Lewtas Science & Technologies), Prof. Mark Smith (Lancaster University), Amy Gibbons (Lancaster University) <i>Chair: Prof. Rob Short (Lancaster University)</i>
16:15-16:30	Closing remarks