## **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.

Time	Event
08:00-09:00	Breakfast (for those staying on campus)
	Barker House Farm
09:00-11:00	Registration, coffee and vendor exhibitions
11:00-11:15	Introduction to RAMS 2016
11:15-12:45	Session 1: Functional Materials
	Chair: Dr Karen Johnston (University of Durham)
11:15-11:30	Dr Emma Pugh (University of Kent)
	High Pressure Structural Study through Magnetic Quantum Critical Point
11:30-11:45	Dr Oliver Fenwick (Queen Mary University of London)
	Asymmetrically SAM-functionalised electrodes for organic field-effect transistors
11:45-12:00	Dr Robert Menzel (University of Leeds)
	Carbon Nanostructure Networks as Functional Support Frameworks in Adsorption and
10.00.10.15	
12:00-12:15	Dr Sanjit Nayak (University of Bradford)
	Mixed-linker approach in designing porous zirconium based MOFs with high stability and
10:15 10:00	nydrogen storage capacity
12.15-12.30	Dr Timotry Easuri (Cardin Oniversity)
10.20 10.45	Dynamic Benaviour in Microporous Materials
12.30-12.45	Large positive magneteresistance in a novel superconductor Cas. Co. Sp.
12:45-12:15	<b>Diagary lecture 1</b> : Prof. Cipzia Casiraghi (University of Manchester)
12:45-13:15	Lunch vendor exhibitions and accommodation key collection
14:10-15:10	Session 2: Materials Characterisation
14.10 10.10	Chair: Dr Ben Robinson (Lancaster University)
14.10-14.25	Dr Paramaconi Bodriguez (University of Birmingham)
1110 1120	Enhanced electrocatalytic and photocatalytic activity of metal and metal oxides nanoparticles
	obtained via the Cathodic Corrosion Method
14:25-14:40	Dr Amy Gandy (University of Sheffield)
	Radiation damage and gas bubble formation in ceramics for advanced nuclear technologies
14:40-14:55	Dr Karen Johnston (University of Durham)
	The Bigger Picture: Structural Insights into Functional Materials using Diffraction, Solid-State
	NMR and First-Principles DFT Calculations
14:55-15:10	Dr Sam Jarvis (Lancaster University)
	Single atom chemistry: Manipulation and characterisation of single atoms and molecules with
	NC-AFM
15:10-15:40	Plenary lecture 2: Prof. Peter Haynes (Imperial College London)
15:40-16:40	Panel discussion 1: Careers and Research Group Management
	Prof. Cinzia Casiraghi (University of Manchester), Prof. Peter Haynes (Imperial College
	London), Prof. Richard Haley (Lancaster University)
16:40-17:00	Poster flash presentations
17:00 17 15	Chair: Dr John Hardy (Lancaster University)
17:00-17:45	Vendor exhibitions and relaxation time
1/:45-19:15	Poster session and exhibitions
19:30-23:00	Conterence dinner
	Barker House Farm, Lancaster University

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

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

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