

**Analytical Research Forum
26 – 28 July 2010
Loughborough University, UK**

Provisional Programme

Monday 26 July 2010

11:00	Registration
Session 1	
14:00	Welcome and Introductions
14:10	KEYNOTE The reaction chemistry and mobility of gas phase ions in air at ambient pressure for chemical measurements and characterization of ion-molecule associations Gary Eiceman* <i>New Mexico State University, USA</i>
14:50	A combined miniaturised field asymmetric ion mobility spectrometry-mass spectrometry approach to peptide analysis for proteomics Lauren J Brown*, Danielle Toutoungi, Billy Boyle and Colin S Creaser <i>Loughborough University, UK</i>
15:10	Cage flight! Ion mobility-mass spectrometry of 3-D supramolecular architectures Martin De Cecco*, Chris Moffat, Nick Tomczyk, Sarah Pike, Paul Lusby and Perdita Barran <i>University of Edinburgh, UK</i>
15:30	Afternoon Tea
Session 2	
16:00	Analysis of latent fingerprints by spectroscopic imaging techniques Leesa Ferguson*, Robert Bradshaw, Rosalind Wolstenholme and Simona Francese <i>Sheffield Hallam University, UK</i>
16:20	Development of sample preparation protocols for the analysis of glycerophospholipids by MALDI-MSI Claire Carter* and Josephine Bunch <i>University of Birmingham, UK</i>
16:40	Forensic fingerprint analysis using ion beams N J Bright*, B N Jones, S Hinder, J F Watts, R P Webb, S Bleay, N I Ward, K J Kirkby and M J Bailey <i>University of Surrey, UK</i>

17:00	Poster session (ODD Numbers) and wine reception
18:30	Close of session
19:00 - 20:00	Dinner
20:30	Social event: Quiz

Tuesday 27 July 2010

Session 3	
09:00	KEYNOTE The influence of metals on the structures of peptides, proteins, and cages – A view from the gas phase Perdita Barran* (Joseph Black Award Winner 2009) <i>University of Edinburgh, UK</i>
09:40	The development of a screening method for anabolic steroid esters in equine plasma B Gray*, C Pearce and P Teale <i>HFL Sport Science, UK</i>
10:00	Prospecting for volatile organic compounds in respiratory diseases Cristina Guallar-Hoyas*, Ian Wilson and C L Paul Thomas <i>Loughborough University, UK</i>
10:20	Ionisation-dissociation characteristics of biomolecules in intense laser fields A Longobardo*, A Macpherson, D Willingham, N Winograd, J C Vickerman and N P Lockyer <i>University of Manchester, UK</i>
10:40	Morning Coffee
Session 4	
11:10	Feasibility study into the absolute quantification of lysozyme in wine Adam Cryar*, William Burkitt, Frank Torma, Milena Quaglia and Gavin O'Connor <i>LGC, UK</i>
11:30	Development of bioanalytical methods for analysis of inhalation compounds in biological matrices M Ngeny*, V Holmes and A Wilson <i>Astrazeneca, UK</i>

11:50	¹H J-Resolved NMR spectroscopy for improved biomarker recovery J M Fonville*, A D Maher, M Coen, E Holmes, J C Lindon and J K Nicholson <i>Imperial College London, UK</i>
12:10	Spatially standardized cell biology Jean-Philippe Frimat, Heike Menne, Ya-Yu Chiang and Jonathan West* <i>Leibniz – Institute für Analytische Wissenschaften, Germany</i>
12:30	Lunch
Session 5	
13:30	KEYNOTE Detection of Forensic Evidence using Antibody-Magnetic Particle Conjugates David Russell* <i>University of East Anglia, UK</i>
14:10	A novel self-cleaning piezoelectric based radio-cation sensor Philip Foran* and Colin Boxall <i>Lancaster University, UK</i>
14:30	New nanoparticle based methods for protein sensing Jane Gallagher*, Karen Faulds and Duncan Graham <i>University of Strathclyde, UK</i>
14:50	Design of novel passive sampling devices for the monitoring of pesticides R NicArdgháil* and F Regan <i>Dublin City University, Republic of Ireland</i>
15:10	Afternoon Tea
Session 6	
15:40	ICP-MS based assays for determination of Pt adducts in DNA and major sub-cellular compartments. Aref Zayed*, George D Jones, Anne L Thomas, Joanna P Wood, Tamer Shoeib, Helen J Reid and Barry L Sharp <i>Loughborough University, UK</i>
16:00	Application of X-Ray microanalysis to investigate stage-related changes in electrolyte and haemoglobin concentration in plasmodium falciparum-infected red blood cells Jakob M A Mauritz*, Jeremy Skepper, Alice Warley, Clemens F Kaminski, Virgilio L Lew and Teresa Tiffert <i>Cambridge University, UK</i>
16:20	Poster Session (EVEN numbers)

17:50	Close of session
19:00	Pre-dinner Drinks
19:30	Conference Dinner

Wednesday 28 July 2010

Session 7	
09:00	Characterising early oligomers formed in the fibrillation process by mass spectrometry Harriet L Cole*, Jason M Kalapothakis, Perdita E Barran and Cait E MacPhee <i>University of Edinburgh, UK</i>
09:20	On-chip continuous flow processing utilising multilaminar flow streams and magnetic microparticles Mark D Tarn*, Sally A Peyman, Alexander Iles and Nicole Pamme <i>University of Hull, UK</i>
09:40	A quantitative measurement of the α and β anomers in amorphous and crystalline lactose Rim Jawad*, Carole Elleman, Louic Vermeer and Paul Royall <i>Kings College London, UK</i>
10:00	Powder drying: particle size and solvent effects in NIR and Raman spectroscopy Peter Hamilton*, Elana Duff Jan Sefcik, Alison Nordon, David Littlejohn, Paul Slavin, Paul Dallin and John Andrews <i>University of Strathclyde, UK</i>
10:20	Morning Coffee
Session 8	
10:50	Development of a capillary chelation ion chromatography system for application to environmental monitoring/transition metal analysis Áine Moyna*, Damian Connolly, Sinéad Currihan, Mirek Macka and Brett Paull <i>Dublin City University, Republic of Ireland</i>
11:10	Flow injection with chemiluminescence detection for the determination of total dissolved cobalt in open ocean waters Rachel Shelley*, Bernhard Zachhuber, Maeve Lohan and Paul J Worsfold <i>University of Plymouth, UK</i>

11:30	KEYNOTE Monolithic Materials for Separation Science: Is There a Future Here? Brett Paull* <i>Dublin City University, Republic of Ireland</i>
12:10	Acknowledgements
12:20	Close of Meeting