

**Thursday 15 September One Day Discussion Programme. Meeting Chair – John Vickerman**

08:40	DIS-I-Th-A01	<b>Molecule Specific Imaging and Analysis in Biology: What are the Challenges and The Important Applications</b>	<b>A Ewing</b>
<b>Session 1 – Towards high sensitivity and high spatial resolution.</b>			
09:40	DIS-O-Th-A02	Why don't biologists use SIMS	<u>R M A Heeren</u> , L A McDonnell, S Luxembourg, A F M. Altelaar, S R Piersma
<b>Chair: Dave Castner</b>	DIS-O-Th-A03	Improvements in SIMS continue. Is the end in sight?	<u>N Winograd</u> , Z Postawa, J Cheng, C Szakal, J Kozole, B Garrison
	DIS-O-Th-A04	ToF-SIMS analysis of bio-systems – Are polyatomic primary ions the solution?	<u>E A Jones</u> , J S Fletcher, C E Thompson, D A Jackson, N P Lockyer, J C Vickerman
11:00		Coffee	
<b>Session 2 – Data handling – from data overload to analytical clarity.</b>			
11:20	DIS-O-Th-A05	Information from Complexity: Challenges of ToF-SIMS Data Interpretation	<u>D Castner</u> , D J Graham, M Wagner
<b>Chair: Ian Gilmore</b>	DIS-O-Th-A06	Rapid discrimination of the casual agents of urinary tract infection using ToF-SIMS with chemometric cluster analysis	J S Fletcher, A Henderson, R M Jarvis, N P Lockyer, J C Vickerman, <u>R Goodacre</u>
	DIS-O-Th-A07	Multivariate Statistical Image Processing for Molecular Specific Imaging in Organic and Bio-systems	B Tyler
	DIS-O-Th-A08	Spatial Statistics and Interpolation Methods for TOF SIMS Imaging	<u>J Gardella</u> , T M Milillo
13:00		Lunch	
<b>Session 3 &amp; 4 Localization and quantification of elements and molecules in cell culture, tissue, biosensors and engineered arrays</b>			
14:00	DIS-O-Th-A09	Quantitative imaging of cells with SIMS- Nanoautography with stable isotope tracers	<u>C Lechene</u> , H Francois-Saint-Cyr, G McMahon
<b>Session 3 Chair: Roy Goodacre</b>	DIS-O-Th-A10	High resolution SIMS imaging of cations in mammalian cell mitosis, and in Drosophila polytene chromosomes	<u>R Levi-Setti</u> , K L Gavrilov, M B Neilly, R Strick, P L Strissel
	DIS-O-Th-A11	Specimen preparation and calibration for NanoSIMS analysis of biological materials	<u>C Grovenor</u> , K Smart, M Kilburn, B Shore, J Dilworth, B Martin, C Hawes, R Rickaby
	DIS-O-Th-A12	Cellular Localization of a 15n Labelled Peptidic Vector using Nanosims Imaging	<u>J-L Guerquin-Kern</u> , W Roemer, L Johannes, P Duchambon, D Carrez, T-D Wu
15:40		Coffee	
16:00	DIS-O-Th-A13	Label- and amplification-free genotyping of genomic DNA	O Brandt, J Fldner, S Hellweg, M Schröder, A Stephan, H F Arlinghaus, <u>J D Hoheisel</u> , A Jacob
<b>Session 4 Chair Nick Winograd</b>	DIS-O-Th-A14	Mass Spectrometric Characterization of Elements and Molecules in Cell Culture and Tissue	<u>H Arlinghaus</u> , C Kriegeskotte, M Fartmann, J Möller, D Lipinsky
	DIS-O-Th-A15	Quantitative analysis of biological membrane composition with high lateral resolution	<u>S Boxer</u> , C G Marxer, M L Kraft, S Fishel, P K Weber , I D Hutcheon
	DIS-O-Th-A16	Imaging lipid distributions in model membranes with selectively deuterated components using Time of Flight Secondary Ion Mass Spectrometry (ToF-SIMS)	<u>M Biesinger</u> , D Miller, R R Harbottle, F Possmayer, N S McIntyre
	DIS-O-Th-A17	Localisation of lipids in freeze-dried mouse brain sections by imaging ToF-SIMS	<u>P Sjövall</u> , B Johansson, J Lausmaa
	DIS-O-Th-A18	Localization of Cholesterol in Rat Cerebellum with Imaging TOF-SIMS. Effect of tissue preparation	<u>H Nygren</u> , K Börner, P Malmberg, B Hagenhoff

