

Report on the BMSS Conference 2005.  
[York, 04<sup>th</sup>-07<sup>th</sup> September]

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I attended the 28<sup>th</sup> annual British Mass Spectrometry Society conference held in York and presented a talk on Monday, 5<sup>th</sup> of September as part of the 'Next Generation' session. My talk, titled 'The Development of an analytical technique for the characterisation of nanomaterials' allowed for further development of transferable skills such as presentation and networking skills. I highlighted during my talk our successful efforts to construct a home-built time-of-flight mass spectrometer, and described the molecules we have investigated. I also detailed what we will be investigating, from functionalised carbon nanotubes to meso- and-micro-structured materials and even specific halogenated polymers. The future aim of constructing a home-built reflectron was also discussed. The aim of the research, comparing and contrasting investigations into various compounds in both linear time-of-flight mode and reflectron mode, was emphasised and it was a pleasure to have the opportunity to discuss my research in front of such a well-known audience.

The questions that were raised during the 'Question & Answer' session after the talk had a positive impact upon me, allowing me to later ponder on issues relating to my research which led to very fruitful discussions with my supervisor Professor A J Stace. The poster sessions on both Monday [05/09/05] and on Tuesday [06/09/05] were of a very high quality and thoroughly enjoyable. It was fascinating to meet other research students, and to discuss with other research students their work as well as my own. The major theme of this conference reflected the current interest in the understanding and analysis of proteins and it was interesting to read about new developments and improvements to established developments for the analysis of such.

It was a real pleasure and privilege to be in the company of so many recognizable figures in the field of mass spectrometry, and to be a part of their wonderful presentations. The plenary lectures were very good; especially the excellent talk presented by Professor R G Cooks on the final morning of the conference. His talk, 'Soft Landing and DESI: Preparative and Ambient Mass Spectrometry', was highly informative and

entertaining. His talk covered two developments in the field of mass spectrometry; electrosonic spray ionization [ESSI] and desorption electrospray ionization [DESI]. The section on DESI was particularly interesting as it demonstrated that organic molecules and biomolecules could be analysed outside a vacuum system.

It was an experience to mix with representatives from the science industry and to hear about the differences between industry and academia. In addition, my presentation has led to interaction with a representative from industry with a view of establishing a collaborative agreement between our research group and the company.

I am very grateful to the British Mass Spectrometry Society for the travel award, allowing me to attend this conference and to truly enjoy and appreciate all facets of the doctoral process. It has been a truly enriching experience. I am also very grateful to the University of Nottingham and to the Engineering and Physical Sciences Research Council [EPSRC] for their financial assistance.