

Vacuum and Plasmas for Industry

essential ingredients for manufacturing success

Wednesday 17th October 2012 at The Ricoh Arena Coventry

Organised by the Vacuum and Ion and Plasma Surface Interactions (IPSI) Groups of the Institute of Physics (IOP), as part of Vacuum Symposium 3 (VS-3).

The theme of the meeting was to highlight areas where vacuum and the use of plasmas are important (and often essential) ingredients in industrial processes.

Plasmas provide a unique environment for industrial processes, provided that they are excited with gases admitted into a quality vacuum. Attention to cleanliness and contamination plays an important part in achieving the optimum vacuum and plasma conditions. The common theme of vacuum and plasmas was emphasised in the presentations to demonstrate the importance to manufacturing success.

The meeting consisted of 9 oral presentations, divided into 4 in the morning and 5 in the afternoon session. Poster papers were presented in the Exhibition Arena together with the posters from the other technical meetings taking place on the following day, amounting to 16 posters in all.

Each of the morning and afternoon sessions opened with talks from the well-known companies, Intel and Seagate.

Niall Macgearailt from Intel, Ireland, started the meeting with "Plasma Process Control in the Semiconductor Industry", which described the challenges of volume production world-wide and keeping control of the plasma processes to keep the yield high and the production line moving.

The lunch break was scheduled to provide enough time to visit the exhibition and the associated meeting posters.

Denis O'Donnell from Seagate opened the afternoon session with "Plasma-based Processes for Volume Manufacture of Magnetic Recording Heads", Other highlights included a comprehensive description of the importance of vacuum and the control of pressure in freeze-drying by Kevin Ward of Biopharma Technology Ltd. and the use of plasmas was emphasised in the treatment of textiles by Delwyn Evans from P2i Ltd.

The meeting drew sizable audiences, in keeping with the quality of the presentations.

It is rare that so many speakers from industry, were assembled within one programme and we, the organisers, are grateful to all speakers and their companies and organisations for their contributions, which made the day so successful.

The meeting was co-ordinated by "Vacuum Symposium UK" : <http://www.vacuum-uk.org>

Technical programme organisers :

Alan Webb and John Colligon