# MICROSCIENCE SHOW REVIEW







Rob Flavin, Executive Director RMS

MICROSCIENCE 2006 WAS A BRILLIANT SUCCESS STORY FOR THE WHOLE OF THE SCIENTIFIC COMMUNITY.
THE RMS SHOULD BE PROUD THAT IT DELIVERED SUCH A UNIQUE EVENT.

The last week of June marked a fantastic demonstration that microscopy is alive and well - a world-class conference and exhibition delivered with style and panache that posted a 70% increase in visitor numbers. Coming after months of hard work and planning by the show organisers, The Royal Microscopical Society (RMS), the popularity of MICROSCIENCE 2006 provides the RMS with a perfect springboard to launch their bid for the 17th International Microscopy Congress in 2010. Perhaps you were fortunate enough to attend. However, if you did not make it to London this year, this brief review reflects the atmosphere generated by MICROSCIENCE and the thoughtfully conceived and strong product portfolio that MICROSCIENCE delivers. It may explain why, at a time when exhibitions and trade shows around the world appear to be in steep decline, Europe's premier event for microscopists advanced on every front.

#### **EXHIBITION**

Drawing all of the world's leading microscopy companies, MICROSCIENCE is Europe's largest microscopy exhibition. Held at the ExCeL Conference and Exhibition Centre in London, the main hall was occupied by 95 exhibitor stands, together with five Seminar and Workshop presentation areas and the RMS Learning Zone. Together, they gave visitors over 3,000 m² of interactive space where more than 60 new products were announced and on display. Significantly, MICROSCIENCE attracted more than 30 first time exhibitors. The result of this unique blend of established heavyweights and new start-ups was that visitors could browse the latest innovations and the newest companies in their field. Record numbers of visitors on each of the event's three days testify to the success of this formula.



# **WORKSHOPS AND SEMINARS**

Over the course of the three days, a total of 93 separate workshops and seminars were offered in the five presentation areas that were integrated into the main exhibition hall. The subjects ranged through most areas of life and materials science but were generally pitched at the practical aspects. For instance, speakers presented topics as diverse as 'Developments in Confocal Imaging', 'Non contact excision of tissues, cells and organelles', 'Tissue Preparation', 'Choosing a camera for your TEM' and 'Nanorobots for the SEM/FIB'. However, they also covered subjects of interest to the entrepreneurially minded, with a number of sessions on Intellectual Property Protection, including patents, trade marks, registered designs and copyright.



#### THE RMS LEARNING ZONE

The RMS Learning Zone was introduced to MICROSCIENCE in 2004 and proved an immediate success. Designed to provide an introduction to microscopy and the latest technology for the newer user, even more space was devoted to the area in 2006. Once again sharing the main exhibition hall with the trade show, the Learning Zone attracted large numbers of visitors throughout the three days. Equipped with its own lecture theatre, it offered a programme of informal seminars covering Scanning Electron Microscopy, Light Microscopy and Digital Microscopy.

As well as the seminars, a host of equipment loaned by the exhibiting companies allowed the visitor to get hands-on experience, guided by experts drawn from the international ranks of the RMS. With an instrument roster that included an array of over 20 light microscopes and 3 SEMs, The RMS Learning Zone is building a unique reputation in promoting access to advanced microscopy instrumentation.



The main exhibition hall also afforded scientists an opportunity to show off their work in the Poster section. Just inside the entrance, and bordered by seating to make discussion more comfortable, more than 60 were displayed during the three days. Synchronised with the conference sessions, they attracted a lot of attention from the visitors. They also attracted the attention of the judges, with two prizes awarded each day for Best Poster and Best Poster by a New Scientist.

## THE SCIENTIFIC CONFERENCE

If the Learning Zone covered topics for the newer user, the Scientific Conference was the place to hear about the leading edge of microscopy. Naturally, this was the focal point of MICROSCIENCE 2006 for many, attracting more than 550 delegates from over 30 countries. Constructed by the RMS to appeal to both biological and physical scientists, the parallel scientific tracks ran over all three days with sessions covering light and electron microscopy and image processing techniques.

The RMS managed a notable coup on the first day with a special plenary session from Steve McDanels of NASA. With less than 5 days before the launch of the Shuttle Discovery, McDanels electrified a packed auditorium with his account of the Columbia disaster investigations. He went on to explain NASA's continuing return to flight efforts and the work that they are doing to make the Discovery and subsequent Shuttle flights safer, and concluded with a brief overview of the design considerations that will impact the shape of future spacecraft.

The conference itself opened with two world-class sessions: 'Scanning Electron Microscopy for the Life Sciences: where next?', with Debbie Stokes and Jeremy Skepper, and 'Nanomaterials, measurement and markets', led by Alison



Crossley. For the afternoon sessions, Debbie Stokes and Jeremy Skepper led 'Hot topics in SEM of materials' while Chris Hawes, the outgoing President of the RMS led the session on 'Nanotechnology in the biosciences'.

Days two and three of the Conference included fascinating accounts of the work of Hajo Freund (Germany), Geoff Thornton (London) and Phil Woodruff (Warwick) in the 'Catalytically active surfaces' session, chaired by Martin Castell of Oxford University.

Meanwhile, Peter O'Toole of York University, led the session on 'High resolution live-cell imaging' with contributions from Mary Dickinson (USA), Bas Ploem (Abbe Lecture) and Mike White (Liverpool).

Other topics included 'TEM meets confocal: 3D imaging in cell biology', 'Materials science with aberration corrected electron microscopes', '3D imaging in materials', 'Cells in situ', 'Fluorescence lifetime imaging – techniques and applications in cell biology' and 'Latest developments and applications of modern TEM'.

## SATELLITE SCIENTIFIC MEETINGS

This comprehensive agenda was complemented by four satellite scientific meetings that ran alongside the conference programme. Flow Cytometry - The Acute Leukaemias, SPM UK 2006, ESEM VII and FEGTEM-8 proved enormously successful. Designed to extend the range and depth of coverage offered to delegates, the inclusion of flow cytometry in particular expanded MICROSCIENCE 2006 to embrace all aspects of microscopy.

# RMS INTERNATIONAL MICROGRAPH COMPETITION

Finally, it may be hard to believe but the RMS International Micrograph Competition exceeded the exceptional response that it achieved in 2004. With a prize fund totalling well in excess of £10,000, the sponsoring companies donated a laptop, a selection of high quality digital cameras, camera-equipped mobile phones, binoculars and cash alternatives. In all, twelve prizes were awarded to the top three images in each of the four categories, with additional prizes for the overall LM and EM winners.









