

An international optical microscopy event—“Focus on Microscopy 2010”

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The Focus on Microscopy 2010 (FOM 2010) was held in Shanghai, China from March 28th to March 31st, 2010. It included the 23rd International Conference on 3D Image Processing in Microscopy, and the 22nd International Conference on Confocal Microscopy. Peking University, Shanghai Jiao Tong University, and the University of Amsterdam were the organizing sponsor universities of the conference. The honorary chairs of the conference were Prof. Bingkun Zhou (Tsinghua University) and Prof. Jie Zhang (Shanghai Jiao Tong University). The conference chairs were Prof. Qiushi Ren (Peking University and Shanghai Jiao Tong University) and Prof. G. J. Brakenhoff (University of Amsterdam, The Netherlands). More than 350 people attended the symposium. Over 200 of the participants were international guests, while 150 were from China. In total, 31 companies participated in the exhibition, generously sponsoring various activities. Carl Zeiss MicroImaging was the main sponsor of the conference this year.

There was a strong interdisciplinary character to this year's conference, particularly in the area of microscopy and its applications. Eight leading scientists were invited to give keynote speeches regarding the latest research: (1) “Nonlinear SRS imaging” by Prof. Sunney Xie (Harvard University, USA); (2) “Novel quantum dots for multicolor and super-resolution imaging” by Suming Nie (Georgia Institute of Technology and Emory University, USA); (3) “Enhanced optical sectioning and fast focusing” by Tony Wilson (University of Oxford, UK); (4) “Deep UV plasmonic nano-imaging” by Satoshi Kawata (Osaka University, Japan); (5) “Super-resolution STED microscopy” by Stefan W. Hell (Max-Planck Institute for Biophysical Chemistry, Germany); (6) “Stem cell imaging with quantum dots” by Prof. Yoshinobu Baba (Nagoya University, Japan); (7) “Light sheet microscopy” by Ernst H. K. Stelzer (European Molecular Biology Laboratory, Germany); and (8) “Single molecule imaging” by Prof. Xiaohong Fang (Institute of Chemistry, Chinese Academy of Sciences, China). This year's conference featured three half-day introductory tutorials on (1) “Fundamentals of fluorescence microscopy” given by Prof. Guy Cox (University of Sydney, Australia); (2) “Live cell imaging” given by Prof. Jurek Dobrucki (Jagiellonian University, Poland); and (3) “Quantitative measurement of co-localization in confocal microscopy” given by Prof. Erik M. Manders (University of Amsterdam, The Netherlands).

One of the aims of hosting the conference in China was to promote current research into optical microscopy in China to a new international level. The FOM conference has to date been organized 16 times in Europe; twice in Japan and Taiwan, China respectively; and once in the United States. Paralleling the booming economy, Chinese microscopy research is also growing. The FOM organization was pleased to approve the petition to host the event in Shanghai. Representing the solid work of Chinese scientists in optical microscopy, Sunney Xie, Shuming Nie, and Xiaohong Fang, top researchers in their respective fields, gave keynote speeches during the opening and closing plenary sessions.

Guaranteeing the success of the conference was the very strong member list. As several members also serve as editors of international scientific journals, the domestic participants had a valuable chance to present their work and receive advice. The FOM also functioned as a tie to further the collaboration between Chinese and international research groups.

In summary, the FOM 2010 held in Shanghai was a very successful international conference. It served as a platform for researchers in microscopy related areas to exchange their latest research results and ideas, as well as to discuss future research projects. The conference served as a platform for leading microscopy companies to demonstrate cutting-edge products. It also provided Chinese researchers opportunities to expose their research work to international peers. These positive forces help to promote China's scientific community, and its role in improving the quality of biological microscopic research in China. Furthermore, it also enhances the future collaborations among international researchers.

Further details on the program and abstracts of the papers presented during the FOM 2010 Shanghai conference can be found online at the website: <http://www.focusonmicroscopy.org>. Go to history > FOM 2010 (Shanghai) > program > and click on the “pdf” symbol of the presentation you are interested in. On the website you can also find the announcement for the next FOM 2011 conference in Konstanz, Germany.