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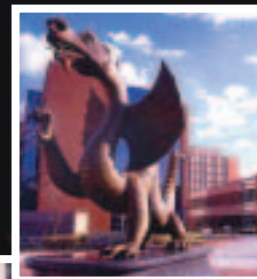
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Focus On Microscopy 2004

Philadelphia, PA, USA, April 4–7, 2004

FOM
2004

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FOM 2004



The FocusOnMicroscopy 2004 international conference and exhibition will take place in Philadelphia, PA, USA, April 4 to April 7, as the next in a series of unique interdisciplinary meetings on advanced multidimensional light microscopy and image processing. FOM2004 is organized as a joint international meeting consisting of the 17th International Conference on 3D Image Processing in Microscopy and the 16th International Conference on Confocal Microscopy.

FOM2004 is hosted by Drexel University, School of Biomedical Engineering, Science and Health Systems. Drexel is a private university founded in 1891 by Philadelphia financier and philanthropist Anthony J. Drexel. Philadelphia is one of the major biotech areas at the east coast and home of many pharma and biotech companies.

Excellent international connections are available through the international airport. Drexel University itself is close to the well known 30th street station, with railroad connections both to New York City and Washington DC. The conference location at Sheraton University City Hotel is central on the Philadelphia campus, minutes from downtown. The organizers have arranged for a discount room block available for participants of FOM2004 from April 2–9.

Confocal microscopy has become a preferred method of choice to gain three-dimensional and functional information in many biological research areas. New developments such as multi-photon excitation, time resolved micro-spectroscopy, FRET and coherent anti-Stokes Raman generation make it possible to obtain information far beyond the classical resolving power of the light microscope and find their applications in biology where information at the molecular level is needed. Image analysis,

visualization and data management systems provide the necessary components to process the vast amount of information generated.

Completion of genome deciphering projects has poised investigative biology with another challenge. Methods will become of importance that deliver structural and functional information about proteins, organelles, cells and tissues by systematic, large-scale approaches. Fluorescence imaging techniques will play a key role in this endeavor, including those that use nanomaterials such as quantum dots for multiplexed applications. Concomitantly, bioinformation engineering is required to establish linkages between bioinformatics and bioimaging.

In view of these advances, FOM2004 will pay special attention to the conjunction of multidimensional microscopies with the areas of bioinformatics, bio-nanotechnology and bioengineering.

Conference topics will include:

- 3D/4D imaging of cells, proteins, chromosomes, genes and molecules
- Optical theory, PSF engineering, optical nano-imaging
- FRET, FLIM, FRAP, FCS
- CARS, Raman, Second Harmonic Generation imaging
- High-throughput fluorescence imaging for proteomics/cellomics
- Optical cell manipulation and particle tracking techniques, bioengineering applications
- 3D/4D image analysis, deconvolution, visualization and bioinformatics data integration

FOM2004 offers an effective meeting point for developers and users working in these rapidly evolving fields.

Further information on location, registration, and abstract submission will be made available under the appropriate headings on our webpage at www.focuson-microscopy.org. The organizers are actively seeking contributed papers relevant to the themes of the conference. Contributions can be either oral or poster-based. Deadline for the electronic submission of abstracts is **January 30, 2004**. This allows participants to discuss their most recent developments and research findings.

To stay informed, please add your name to our E-mail address list by clicking on our 'inform me' button on our web page. We invite you to participate in this conference on behalf the FOM 2004 organizing committee:

A. Kriete, Pittsburgh; F. Brakenhoff, Amsterdam; P.C. Cheng, Buffalo; Banu Onaral, Philadelphia.

