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Michael T. Postek Dale E. Newbury S. Frank Platek David C. Joy Editors

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Introduction

Welcome to Scanning Microscopy 2010.

The organizers of this meeting and SPIE are pleased to have you attend the second of the SPIE Scanning Microscopy symposia series held in Monterey, California. We are extremely pleased with the technical content of the meeting with over 75 papers submitted this year.

Many of you are aware that spring conferences on scanning microscopy have a history going back over 40 years to 1967 with the "Scanning Electron Microscopy" series started by Dr. Om Johari. Following Dr Johari's retirement, the SCANNING series of conferences, organized by Tony Bourgholtzer of the Foundation for Advances in Medicine and Science (FAMS), continued this tradition. Early in 2007, FAMS decided not to sponsor future SCANNING meetings. Following that announcement, a substantial amount of work was done in the background to find a solution to keep the meeting alive. SPIE agreed to manage the meeting and hence, Scanning Microscopy 2009 and 2010 emerged.

The organizers and SPIE anticipated that the Scanning Microscopy 2010 meeting would bring microscopists from all phases of scanning microscopies (from scanned optics to scanned particle beams) together in a single forum to discuss current research and new advancements in the field. We believe that there are several unique strengths to this meeting such as:

- Forensic applications of SEM
- Scanning ion microscopy (FIB and HIM)
- Quality assurance in SEM and microcharacterization
- Biological environmental/variable pressure SEM: successes and limitations
- Modeling for critical SEM and microanalysis applications
- Scanned probe microscopies
- Scanned optical microscopies

We hope to grow these areas over the next few years. We are excited that the meeting will merge with one of the larger SPIE Symposia in 2011 in Orlando, Florida and following that transition to a more permanent home at the Baltimore Inner Harbor in Maryland.

We invite your ideas for topics, session organizers, speakers for specific presentations, and we welcome your active participation.

Mike T. Postek Dale E. Newbury S. Frank Platek David C. Jov