

## Introduction: Modern Developments and Applications in Microbeam Analysis\*

This issue of *Microscopy and Microanalysis* presents nine of the articles from the 9th Workshop of the European Microbeam Analysis Society (EMAS) on “Modern Developments and Applications in Microbeam Analysis” held in conjunction with the 3rd Meeting of the International Union of Microbeam Analysis Societies (IUMAS) in Florence, Italy, on May 22–26, 2005.

Most of the articles presented at the Workshop (54 of them) are being published in a special issue of *Microchimica Acta*, as it has traditionally been done for the past several editions of the Workshop. On this occasion, owing to both the large number of papers presented at the meeting and the special emphasis on materials science for many of them, we were very pleased to find hospitality in *Microscopy and Microanalysis* for some of the papers dealing with this subject.

The primary aim of the meeting was to assess the state of the art and the reliability of microbeam analysis techniques. The workshop was organized within the usual EMAS format consisting of invited tutorials and roundtable discussions led by experts in the field. All other contributions were hosted in the form of poster presentations to which ample time was given in the scientific program. A number of poster presenters were also given the opportunity to provide a brief oral presentation based on a selection when the authors were notified of the acceptance of their poster contributions. Brief presentations and contributions to the roundtable discussions were also based on the results of a questionnaire circulated well in advance of the meeting among all prospective participants. Participation of young scientists (under 30 years of age) received special attention with one dedicated oral session and several forms of economic support.

The Florence EMAS-IUMAS meeting saw the largest attendance on record with 230 participants from all over Europe and from eight overseas countries, including 164 scientific contributions with 18 invited tutorials, 6 young scientists' presentations, 8 presentations from manufacturers, and 132 poster presentations. Eighteen instrument manufacturers and commercial firms involved in microbeam analysis took part in the commercial exhibition.

The members of the editorial team for the Proceedings of the EMAS-IUMAS Florence Meeting were Romano Rinaldi (coordinator), Aldo Armigliato, Alba P. Santo, Gloria Vaggelli, Clive T. Walker, Guillaume F. Bastin, and Raynald Gauvin. All of us wish to express our gratitude to the editor of *Microscopy and Microanalysis*, Prof. Charles Lyman, for his hospitality regarding this special issue.

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