

## Introduction

This special issue of the *Journal of Fluorescence* contains peer-reviewed contributions from the Luminescence Symposium held at the 24th Annual Conference of the Federation of Analytical Chemistry and Spectroscopy Societies (FACSS), on October 29 and October 30, 1997, in Providence, Rhode Island.

At the FACSS Luminescence Symposium, papers were presented by participants from the United States and Overseas, from the academic world, and from industry. The work was presented in three half-day sessions, focusing on Luminescence Spectroscopy of Inorganic Materials, on Luminescence Spectroscopy in Environmental Science, and on Luminescence Spectroscopy in Polymer Science. The papers in this special issue of the *Journal of Fluorescence* present a cross section of the work presented at the meeting.

With reference to the contents of the presented work, some general remarks may be made. The session on inorganic materials was devoted mainly to luminescent lanthanide complexes and luminescent nanocrystalline materials, two areas which draw a lot of attention, both for diagnostic and for "photonic" applications. The environmental session focused on natural organic matter and humic substances, characterization of polynuclear aromatic hydrocarbons, ubiquitous and notorious contaminants, and miniaturization: the "lab-on-a-chip" approach, which is strongly dependent on sensitive detection methodology. Finally, at the session on luminescence in polymer science, attention was paid to various studies in which fluorescent probes were used to characterize polymers (e.g., thermal and mechanical

properties) and polymerization reactions. Also, the application of new "SMART" polymers with sensing applications was discussed. Of all topics covered, at least one paper is present in this issue.

We would like to thank all contributors to the meeting for participating in the stimulating discussions during the sessions and at the reception in between. We hope the discussions have led to new interactions and collaborations. We would like to thank the sponsors of the symposium, Akzo Nobel, Edinburgh Instruments, and Photon Technology International, as well. Furthermore, we are grateful to the members of the FACSS committee, John Olesik (Ohio State University) and Richard Palmer (Duke University), for encouraging us to participate and, particularly, the ASTM E13 (American Society for Testing and Materials—Molecular Spectroscopy) committee, chaired by Connie Paralusz, for initially encouraging us to arrange the Luminescence Symposium at FACSS. Finally, we would like to express our special gratitude to the participants who contributed to this issue of the *Journal of Fluorescence* and to Dr. Joseph R. Lakowicz, Editor-in-Chief, for permitting us to publish the papers in his journal.

The organizers:

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