

Foreword

The dynamics of organized molecular assemblies such as micelles and membranes plays an important role in maintaining their structure and function. The dynamics of biological membranes, for example, is vital in cellular physiology and processes related to health and disease. However, the dynamical aspects of these assemblies have received attention and appreciation only in the last two decades, largely because of vast improvements in instrumentation which allow novel and powerful ways to monitor such dynamics. Fluorescence has played a major role in monitoring organization and dynamics of molecular assemblies. For biomembranes, in particular, the renewed interest in domains in the last few years has given rise to significant questions on the involvement of these domains in processes of signal transduction in cells. Advances in fluorescence microscopy and imaging have been instrumental in recent developments in this rapidly emerging area.

It is against this backdrop that this Special Issue of *Journal of Fluorescence*, titled *Dynamics of Organized Molecular Assemblies: From Micelles to Cells*, has been organized. The articles in this special issue cover various aspects of organization and dynamics in molecular assemblies of all levels of complexity, from model systems such as micelles to bilayers to complex living cells, using

approaches based on fluorescence spectroscopy and microscopy. The reason for selecting articles on such diverse systems stems from the sometimes forgotten fact that studies on simple systems often give rise to fundamentally important concepts which are applicable even to complex systems but which are difficult to derive from studies of complex systems. It is expected that the synthesis of information and knowledge gained by study of multiple systems of varying degrees of complexity would result in a comprehensive understanding of the underlying complex phenomena.

A few articles from this Special Issue will appear in the next issue of the journal. I would like to make use of this opportunity to thank all the contributors, who are leaders in their respective areas of research. Special thanks are due to Joseph Lakowicz and Mary Rosenfeld for their continued cooperation and support in organizing this issue and to Rajeshwari Srinivasan for her invaluable secretarial help.

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