

## Book Review

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### *Supramolecular Photochemistry*

By Vincenzo Balzani and Franco Scandola, Ellis Horwood Series in Physical Chemistry, 1991, ISBN 0-13-877531-1.

This timely publication treats the wide and interdisciplinary field of supramolecular photochemistry in a comprehensive manner. After a quite condensed, but nevertheless clear introduction to the general principles of molecular photochemistry, the basis of supramolecular chemistry is discussed. The authors adopt a rather unrestrictive definition of the concept 'supramolecule', which is very useful for the later discussions, since it opens the view to a large class of chemical species. Later on this large class of systems is subdivided into covalently linked systems (Chapters 5 and 6), ion pairs (Chapter 8), electron donor-acceptor complexes and exciplexes (Chapter 9), host guest systems (Chapter 10) and other systems (Chapter 11). The authors have *not* divided the subject into the 'traditional' fields of supramolecular species containing transition metal complexes and 'purely' organic compounds. This is a very fortunate choice, since it brings together fields which are too often considered separately, due to a purely traditional, but scientifically not justified barrier between coordination chemists and organic chemists,

in general. The chapters reporting the state-of-the-art in supramolecular photochemistry treat the subject thoroughly and in depth. Many different facts from various fields are brought together and described from a unifying point of view. The book is topped by a chapter on photochemical molecular devices (PMDs). The material developed in Chapters 1 to 11 is projected here into a space of possibly very exciting developments in the future. A nomenclature for the machinery of photochemical molecular devices is developed, which undoubtedly will be used by the authors of the book and by many members of the scientific community active in this field, when some of the envisaged structures will be realized in future. The enthusiasm and the optimism of the authors concerning these perspectives manifests itself clearly in the last sentence of this last chapter: "These and other recent advances in chemical synthesis make possible the design of a variety of PMDs. Outstanding developments in this field are therefore expected for the near future".

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