

BOOK REVIEW

Mode Selective Chemistry

Edited by J Jortner, R D Levine and B Pullman, Kluwer Academic Publishers, October 1991, PP580, £98.50.

The twenty fourth Jerusalem Symposium on Quantum Chemistry and Biochemistry was held in May 1991. The present volume comprises a record of the invited lectures presented at the Symposium.

Mode Selective Chemistry, chosen as the topic for this Symposium, is an interdisciplinary subject which draws on many areas of molecular science, such as Chemical Physics, Photobiology and Photochemistry. A major interest considered at the Symposium relates to non-statistical reaction dynamics in molecules, clusters, condensed phases and Van der Waals systems. There are thirty six contributions in this volume dealing with various aspects of this and related topics.

Some of the more important issues considered by the invited lecturers include photoselective and coherent excitation modes, possible significances of the internal structure of many atom systems and of rotation-vibration level structures for intramolecular dynamics, the importance of bottlenecks for intramolecular vibrational energy redistribution, ultrafast chemical clocks for energy disposal, coherent control of photochemical reactions, bond selective photodissociation, and non-statistical unimolecular reaction dynamics.

A useful subject index is to be found in this camera ready copy production, but no author index. The wide variability of typeface and typesize can be a little distracting, however the presentation is acceptable in the main. A feature which could have benefitted from more stringent editorial control is the presentation of references and data. A number of formats are employed whereas greater consistency throughout the volume would have been appreciated by readers.

For those interested in Mode Selective Chemistry and its various ramifications, this is an important publication. Regrettably, the price will probably help to restrict the number of copies sold.

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