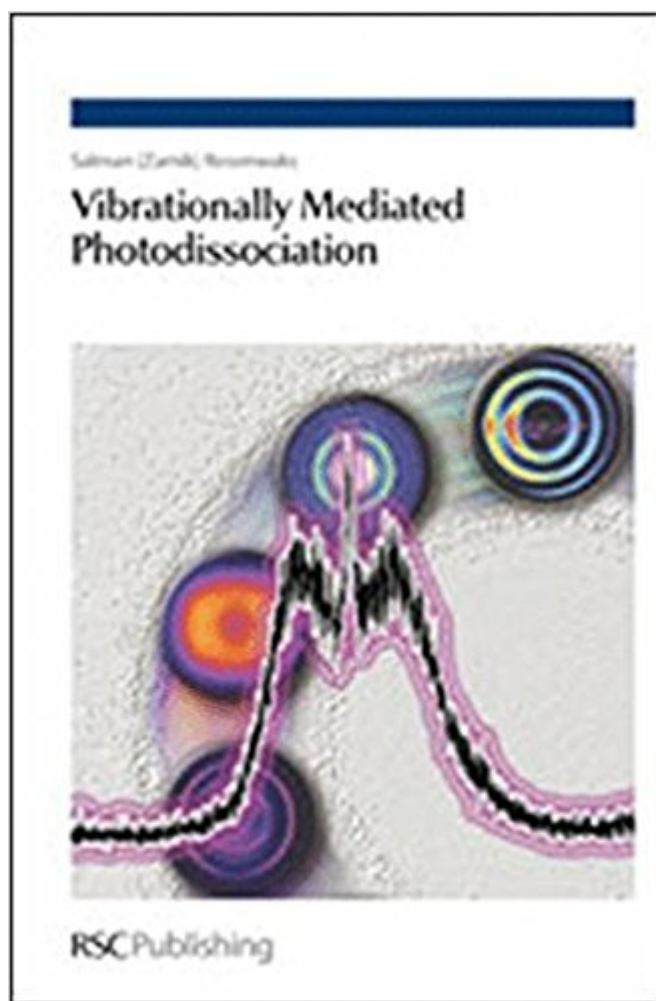




**Ebook Directory**  
the best source of ebook

The book was found

# Vibrationally Mediated Photodissociation: RSC



## Synopsis

Vibrationally Mediated Photodissociation (VMP) deals with the influence of vibrational excitation of the ground electronic state of a molecule on its dissociation following excitation of this state to a higher electronic state. Aimed at students and academics, this is the first book devoted to the effect of vibrational pre-excitation on molecular dynamics in the gas phase. In particular, it deals with the influence of this excitation on the dissociation of molecules (ie: on the branching ratio between the dissociation products and its dependence on the vibrational state being excited). The effect in the gas phase has been extensively studied, both theoretically and experimentally and encompasses diverse areas of chemical physics. This monograph presents the methodology of VMP, using state-of-the-art specific examples. Overviews of earlier works are included as well, to serve as a background for current research. Wherever appropriate, original works are quoted, including the original drawings. The contents include a brief review of theoretical and experimental methods relevant to VMP and specific examples. Also included are a bibliography, author and subject index. From the description of the motivation, the approach, the execution of the experiment and the analysis of the results of the specific examples, the reader will get a comprehensive understanding of the field. The book is aimed at senior undergraduate and graduate students of chemistry and physics. It serves as an introduction to VMP for beginners and as a literature guide to those acquainted with the subject but not necessarily working on VMP.

## Book Information

Hardcover: 220 pages

Publisher: Royal Society of Chemistry; 1 edition (May 15, 2009)

Language: English

ISBN-10: 0854041559

ISBN-13: 978-0854041558

Product Dimensions: 6.1 x 0.7 x 9.2 inches

Shipping Weight: 1.1 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #3,879,277 in Books (See Top 100 in Books) #104 in [Books > Science & Math > Chemistry > Nuclear Chemistry](#) #107 in [Books > Engineering & Transportation > Engineering > Aerospace > Gas Dynamics](#) #1230 in [Books > Science & Math > Chemistry > Analytic](#)

## Customer Reviews

"This book provides a comprehensive review of vibrationally mediated photodissociation studies of neutral molecules in the gas phase." "This is an excellent reference for practitioners in the field. It is also a good supplementary text for graduate or advanced undergraduate classes." (JACS, 2009, 131, 17720 - 17720)

Vibrationally Mediated Photodissociation (VMP) deals with the influence of vibrational excitation of the ground electronic state of a molecule on its dissociation following excitation of this state to a higher electronic state. Aimed at students and academics, this is the first book devoted to the effect of vibrational pre-excitation on molecular dynamics in the gas phase. In particular, it deals with the influence of this excitation on the dissociation of molecules (ie: on the branching ratio between the dissociation products and its dependence on the vibrational state being excited). The book serves as an introduction to VMP for beginners and as a literature guide to those acquainted with the subject but not necessarily working on VMP.

[Download to continue reading...](#)

Vibrationally Mediated Photodissociation: RSC Trace Elements Medicine and Chelation Therapy: RSC (RSC Paperbacks) Introduction to Glass Science and Technology: RSC (RSC Paperbacks) Therapeutic Oligonucleotides: RSC (RSC Biomolecular Sciences) The Chemistry of Fireworks: RSC (RSC Paperbacks) The Maillard Reaction: RSC (RSC Food Analysis Monographs) The Chemistry of Medical and Dental Materials: RSC (RSC Materials Monographs) Antibody-Mediated Delivery Systems (Targeted Diagnosis and Therapy) Ophthalmic Immunology and Immune-Mediated Disease, An Issue of Veterinary Clinics: Small Animal Practice, 1e (The Clinics: Veterinary Medicine) Cell-Mediated Immunity in Ruminants Mass-Mediated Terrorism: Mainstream and Digital Media in Terrorism and Counterterrorism Electrochemotherapy, Electrogenetherapy, and Transdermal Drug Delivery: Electrically Mediated Delivery of Molecules to Cells (Methods in Molecular Medicine) Introduction to Glass Science & Technology (Rsc Paperbacks) Introduction to Glass Science and Technology (RSC Paperbacks) The Chemistry of Fragrances: From Perfumer to Consumer (RSC Paperbacks) Ion Channel Drug Discovery: RSC Orphan Drugs and Rare Diseases: RSC (Drug Discovery) Boronic Acids in Saccharide Recognition: RSC (Monographs in Supramolecular Chemistry) Nucleic Acids in Chemistry and Biology: RSC A First Course in Electrode Processes: RSC

[Contact Us](#)

[DMCA](#)

Privacy

FAQ & Help