Intramolecular Charge Transfer: Theory and Applications
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**DESCRIPTION**

Bridging the gap between the multitude of advanced research articles and the knowledge newcomers to the field are looking for, this is a timely and comprehensive monograph covering the interdisciplinary topic of intramolecular charge transfer (ICT).

The book not only covers the fundamentals and physico-chemical background of the ICT process, but also places a special emphasis on the latest experimental and theoretical studies that have been undertaken to understand this process and discusses key technological applications. After outlining the discovery of ICT molecules, the authors go on to discuss several important substance classes. They present the latest techniques for studying the underlying processes and show the interplay between charge transfer and the surrounding medium. Examples taken from nonlinear optics, viscosity and polarity sensors, and organic electronics testify to the vast range of applications.

The result is a unique information source for experimentalists as well as theoreticians, from postgraduate students to researchers.

**ABOUT THE AUTHOR**

Ramprasad Misra did his doctoral studies in the Department of Physical Chemistry, Indian Association for the Cultivation of Science (IACS) in Kolkata, India. His research interests encompass physical organic chemistry and molecular spectroscopy. He was an integrated PhD fellow of IACS, visiting postgraduate research student at the University of Warwick, UK, and postdoctoral
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S. P. Bhattacharyya, a fellow of the Indian Academy of Sciences, joined the Department of Physical Chemistry, Indian Association for the Cultivation of Science (IACS), Kolkata, India in 1979 as a lecturer after receiving his PhD degree from the University of Kolkata. He has been professor of physical chemistry at the IACS from 1991 until his retirement in 2012. He was in the Department of Chemistry, Indian Institute of Technology Bombay on Raja Ramanna Fellowship awarded by the Department of Atomic Energy, Government of India, between 2012-15. His research interests are in quantum chemistry, soft-computation and chemical dynamics. He has served as the Editor-in-Chief of the Indian Journal of Physics. Till date, he has mentored 21 doctoral students and has more than 200 research publications to his credit.

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