Designed to provide a broad, multidisciplinary overview of heme-diatomic interactions, this book draws upon the combined experience of experts in chemistry, biochemistry, molecular biology, microbiology, zoology, physics, medicine and surgery. Chapters present research into NO biology, hemoglobin and heme-based sensors from a variety of perspectives, with the purpose of increasing exchanges of ideas, approaches, and techniques across traditional disciplinary boundaries.

Contributing authors are all leading heme protein scientists, and include John Olson, Tom Spiro, Walter Zumft, F. Ann Walker, Teizo Kitagawa, Peter Ford, W. Robert Scheidt, Pat Farmer, and Marie-Alda Gilles-Gonzalez, among many others.

Advance praise for 'The Smallest Biomolecules'

The coverage is outstanding, including discussions by experts of work on the binding and reactivity of dioxygen, nitric oxide, and carbon monoxide with hemes in synthetic model systems and proteins. I especially applaud the balance achieved by featuring both theoretical and experimental aspects of work in the field. Highly recommended!
Harry B. Gray, Arnold O. Beckman Professor of Chemistry and Founding Director of the Beckman Institute, California Institute of Technology

The scope of heme chemistry in biology is stunningly diverse. Control over this broad range of chemistry is a formidable task that proteins have largely solved. The contributions within this book touch on many of the important features of this control and will be most useful for students as well as experts.
Michael A. Marletta, Aldo DeBenedictis Professor of Chemistry and Professor of Biochemistry and Molecular Biology, University of California, Berkeley

An especially useful and important aspect of the book is its unique multidisciplinary character, emphasizing experimental as well as computational findings, synthetic models as well as biochemical studies, and in-depth discussions of biomedical, microbiological, zoological, and evolutionary perspectives. I urge researchers at all levels, who are interested in the subject of heme-diatomic interactions, to add this excellent book to their personal libraries.
John Dawson, Carolina Distinguished Professor of Chemistry and Biochemistry, University of South Carolina and Editor-in-Chief, Journal of Inorganic Biochemistry

Abhik Ghosh is a professor of inorganic chemistry at the University of Tromsø, Norway. His research interests include syntheses and spectroscopic studies of heme model compounds (particularly metallocorroles) as well as computational studies of metalloprotein active sites. For several years a Senior Fellow at the San Diego Supercomputer Center and a Visiting Research Fellow at The University of Auckland, New Zealand, Ghosh is currently one of the Outstanding Younger Researcher awardees of the Research Council of Norway. He serves (or has served) on the editorial advisory boards of the Journal of Inorganic Biochemistry, the Journal of Biological Inorganic Chemistry, and the Journal of Porphyrins and Phthalocyanines.

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