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## SOLID PHASE BIOCHEMISTRY

### Analytical and Synthetic Aspects

edited by W.H. Scouten, *Bucknell University*

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Each topic is illustrated with examples and sufficient experimental detail to orient beginners. It includes an extensive bibliography.

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## INTERCELLULAR COMMUNICATION IN LEUCOCYTE FUNCTION

edited by J.W. Parker, *University of Southern California, Los Angeles, California* and R.L. O'Brien, *Creighton University, Omaha, Nebraska*

The recent rapid advances in the understanding of the mechanisms of leucocyte activation and function have provided new insights into immunodeficiency, autoimmunity and lymphoproliferative disorders. The study of leucocytes has also contributed significantly to the general understanding of growth factors, the regulation of cell proliferation.

This book brings together the experience and expertise of scientists from many different backgrounds and disciplines who utilize lymphocytes as their experimental model or as the subject of their investigations. It provides an overview of those areas where there have been important new advances in recent years, and presents the findings of some of the foremost investigators in each of the chosen fields.

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International authorities present critical, stimulating accounts that reflect the currently exciting prospects in the rapidly expanding field of biochemical pathology. This does not mean that basic principles have been ignored, and there is a section on Case Studies which provides the biochemical reader with an insight into the broader aspects of the biology of selected systems.

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## ZINC ENZYMES

edited by T.G. Spiro, *Princeton University*

This is an up-to-date study of the structure and function of zinc-containing enzymes. It emphasizes the importance of zinc in the human body, its vital function in the interconversion of carbon dioxide and carbonic acid, and the role of zinc in the enzymes of genetic replication, transcription, and translation.

**Contents:** Zinc in Biology and Biochemistry; Carboxypeptidase; Carbonic Anhydrase; The Role of Zinc in Alcohol Dehydrogenase; Molecular Properties and Mechanism of Alkaline Phosphatase; The Role of Zn (II) in RNA and DNA Polymerases; Roles for the Metal Ion in Reactions of Coordinated Substrates and in Some Metalloenzymes; Index.

*Metal Ions in Biology Series.*

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## CARDIAC METABOLISM

edited by A.J. Drake-Holland, *Department of Medicine, St. George's Hospital Medical School, London* and M.I.M. Noble, *The Midhurst Medical Research Institute*

Containing chapters by new investigators in the field as well as by established authorities, this book provides a thought-provoking as well as comprehensive review of this vast and rapidly advancing subject.

Many aspects of cardiac metabolism are addressed, beginning with the handling of calcium ions, through biochemical reactions, to the metabolic factors concerning blood flow and performance.

New techniques such as NMR are discussed, and the importance of the physiological aspects of cardiac metabolism as opposed to purely biochemical aspects is emphasised.

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edited by J.M. Osepchuk

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# Messenger RNA and Ribosomes in Protein Synthesis

Edited by C. F. PHELPS  
and H. R. V. ARNSTEIN

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