BOOK REVIEW

Biomedicinal Aspects of Fluorine Chemistry by R.Filler and Y. Kobayashi, Elsevier Biomedical Press, Amsterdam, 1983, Dfl. 175.- (US$ 74.50)

This is a very significant book on an aspect of fluorine chemistry already of great importance, and becoming even more so. The contents list is an impressive one, with the following chapters:

- Fluorine in Biomedicinal Chemistry: An Overview of Recent Advances and Selected Topics (Filler and Naqvi);
- Fluorinated Vitamin D_3 Analogs (Kobayashi and Taguchi);
- The Role of Fluorine in the Development of Central Nervous Systems Agents (Elliott);
- Synthesis and Biological Properties of Ring-Fluorinated Biogenic Amines (Kirk, Cantacuzene and Creveling);
- Fluoroamino Acids and Amines: Suicide Enzyme Inactivators (Kollonitsh);
- 5-Fluorinated Pyrimidines (Santi, Pogolotti, Newman and Wataya);
- Biochemical Applications of Radioactive Fluorine (Ido, Fukushi and Irie);
- Fluorine NMR in Biochemistry (Gerig);
- Perfluorochemical Emulsion as an Artificial Blood Substitute (Kokoyama, Suyama and Naito);
- Oxygen Transport by Highly Fluorinated Organic Compounds (Clark and Moore);
- Expanded Polytetrafluoroethylene as an Artificial Vein (Matsumoto).

There is a variety of subjects covered, each chapter written by experts in the area and each with a good bibliography. The first chapter not only provides an overview, it summarises several important topics not covered elsewhere. As with earlier volumes of this type, this book is based on the proceedings of a Symposium, the contributions having been updated by their authors since. The volume is well edited and presented, and the price is typical of its class.

This book is a must, obviously, for the many Fluorine chemists interested in extending their studies in the field to areas of biological significance. Also, however, those involved primarily with biological systems will appreciate from it the tremendous scope, on the one hand offered by incorporation of strategically-placed fluorine substituents to modify reactivities, and on the other the opportunities to be exploited which arise from the complete inertness of some fluorocarbon materials in biological environments.

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