

the gyst of the preface to Vol. 1 in 1973 and subsequent years have proven the success of the series.

The current volume assesses the possibility of dealing with the enormous waste products of our society by using biological processes as a means of recycling or destroying chemical waste. General strategies in the biodegradation of pollutants form the subject of the first chapter (Egli), while subsequent chapters deal with the oxidation of aromatic pollutants by Lignin degrading fungi (Hammel); biodegradation of tannins (Field and Lettinga), of aromatic hydrocarbons by bacteria (Harayama and Timmis); of halogenated aromatics by actinomycetes (Winter and Zimmerman), enzyme catalyzing oxidative coupling reactions of pollutants (Bollag); mechanism of action of peroxidases (Anni and Yonetani); mechanistic aspects of dihydroxybenzoate dioxygenases (Lipskin and Orville), aerobic and anaerobic degradation of halogenated aliphatics (Janssen and Witholt); mechanisms of reductive dehalogenation by transition metal cofactors found in anaerobic bacteria (Wackett and Schanke); bacterial degradation of hemicelluloses (Zimmerman); degradation of cellulose (Goyal and Eveleigh); metalloproteases and their role in biotechnology (Grandi and Galli); and, finally, metal dependent conversion of inorganic nitrogen and sulphur compounds (Kroneck, Beuerle and Schumacher). The book manages to cover a very wide area of the application of biological processes to the destruction or processing of the pollutants. The book will undoubtedly play a major role in the development of this subject.

The editors are to be commended for bringing together such an important and useful collection of chapters. There are author and subject indexes.

The Editor's Desk

Transuranium Elements: A Half Century, edited by L.R. Morss and J. Fuger, American Chemical Society, Washington, DC, 1992, 562 pp., US \$99.95. ISBN 0-8412-2219-3.

This book might reasonably be subtitled "Everything You Wanted To Know About Transuranium Elements But Were Afraid To Ask". The first 137 pages comprise three articles describing the history of the development of transuranic elements written by individuals closely associated with their development. These 13 chapters alone would make this book worth buying. In particular, the contribution of Seaborg, arguably the father of transuranic chemistry, is a fascinating description of the chronology of their development including many photographs taken at the time each new element was an-

nounced. The chapter by Joseph Katz on early days in the "MET" lab is also particularly noteworthy in its historical perspective. The book conveys the excitement of the times as these new elements were being discovered and the excitement of the future given the likelihood that there might be an island of stability where a whole new series of stable post-transuranic elements might be discovered. The book details how this search is certainly still very active. Following the initial 13 chapters of historical perspectives, there are a further 38 chapters dealing with spectroscopy, photophysics and photochemistry, chemistry, separation and thermodynamic, materials physics, materials chemistry, and analytical chemistry. Most of these later chapters, not surprisingly, relate to those transuranic elements which have been produced in larger quantities, particularly neptunium and plutonium.

This book is a very valuable resource for anyone involved in teaching aspects of the history of chemistry or physical chemistry of the transuranic elements. It is a fascinating book in its own right and should be on the shelves of every chemist.

The Editor's Desk

Supramolecular Architecture, Synthetic Control in Thin Films and Solids, ACS Symposium Series No. 499, edited by Thomas Bein, American Chemical Society, Washington, DC, 1992, US \$97.95, 441 pp. ISBN 0-8412-2460-9.

This book is developed from a symposium sponsored by the Division of Inorganic Chemistry at the 21st National Meeting of the American Chemical Society in Atlanta, Georgia in 1991.

The symposium was dedicated to the discussion of the design of supramolecular assemblies in two and three dimensions for applications in many areas of technology, especially micro-electronics and chemical sensors. There are 28 contributions in this volume. Some are relatively short articles, i.e. dedicated to a specific narrow topic. Others were more review-like in character, covering an area in more depth.

The book is introduced by an overview chapter of the area by the editor Thomas Bein and is then divided into three main sections. These are Two-Dimensional Assemblies: Thin Films, which includes in particular inorganic/organic polymers, Langmuir-Blodgett films and biomimetic thin film synthesis; a section dedicated to Layered and Low-Dimensional Structures, particularly pillared materials, clays, polymers; and a section dedicated to