

M. Tsionsky, J. V. Macpherson, and P. R. Unwin. Next G. Denault, G. Nagy, and K. Tóth describe the principles, preparation, and uses of potentiometric probes. Other very impressive chapters are provided by B. R. Horrocks, G. Wittstock, B. D. Bath, H. S. White, and E. R. Scott, who describe applications of SECM to the imaging of biological systems and to studies of transport processes in membranes. D. Mandler describes the use of SECM to create microstructures on surfaces. The book ends with a further chapter by A. J. Bard, in which he discusses many ideas for further developments of this very versatile technique. Each chapter begins with an introduction to the topic that is understandable by nonspecialists, and therefore those who are not familiar with all the details of the method will nevertheless benefit from reading the book. Through their careful choice of authors and clear arrangement of the different topics, Bard and Mirkin have succeeded in producing the first standard work on this rapidly developing technique. Although some of the figures are badly reproduced, that does not detract significantly from the good overall impression.

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Fluorine Chemistry at the Millennium. Edited by R. Eric Banks. Elsevier Science, Amsterdam 2000. 656 pp., hardcover \$ 259.00.—ISBN 0-08-043405-3

This highly interesting, fascinating, and entertaining book is a monograph of a historical kind, which comprises personalized accounts of the progress and events in both organic and inorganic fluorine chemistry which have happened over the last 50 years. Superbly edited by Eric Banks, *Fluorine Chemistry at the Millennium* is a unique book in which a group of excellent fluorine chemists describe many of the most fascinating and exciting areas of fluorine chemistry in 32 chapters (plus appendices) covering both academic interest and techno-

logical aspects. The editor, Emeritus Professor Ronald Eric Banks, himself a prominent fluorine chemist at UMIST, Manchester, began his career in pure academic research, and has since become the world leader in electrophilic fluorination (associated with the product Selectfluor, made and distributed by Air Products). Amongst many other distinctions, he is on the editorial board of the *Journal of Fluorine Chemistry*.

Since all essential areas, ranging from biological aspects to hard-core organic and inorganic noble gas fluorides and metal fluorides are covered (e.g., by N. Bartlett and R. J. Lagow), the book is a must for all dedicated fluorine chemists. With many chapters containing information relating to modern organic, inorganic, organometallic, and industrial fluorine chemistry, with a wealth of literature references, this book is also of great value to anyone interested in historical aspects of this field.

The list of contents is clear and precise, and the name index, subject index, and establishment index help to make this book not only an essential historical monograph, but also a useful and valuable work of reference. Some of the topics covered in *Fluorine Chemistry at the Millennium* are more geographically oriented, such as "Fluorine Chemistry in Russia and Ukraine" (M. J. Atherton), at Novosibirsk (G. M. Brooke), at Durham (R. D. Chambers), in Poland (W. Dmowski), in Italy (G. P. Gambaretto), at Leicester (J. H. Holloway and E. Hope), in Japan (Y. Kobayashi, T. Taguchi, and T. Abe), at Göttingen (H. W. Roesky), at Salford (H. Suschitzky and B. J. Wakefield), at Birmingham (J. C. Tatlow), at Glasgow (J. M. Winfield), and in Slovenia (B. Zemva). There are more thematic chapters, such as those on fluoropolymers (K. C. Eapen), fluorocarbons (D. M. Lemal), and highly toxic fluorine compounds (C. M. Timperley), others on industrial aspects such as "Nuclear Fuel at BNFL" (M. J. Atherton), "Adventures of a Fluorine Chemist at duPont" (W. J. Middleton), and "The ICI Legacy" (R. L. Powell), and snappily titled ones such as "Fluorine Chemistry—A Chemical Gardener's Paradise" (D. D. DesMarteau), "Never Say No to a Challenge" (K. O. Christe), and—last but not least—the editor's contribution on "Going with the Fluo".

One can only congratulate the editor, whose idea of encouraging the authors to combine as much information as possible about the area and themselves with a light, yet authoritative, style has worked out in such a beautiful way. Naturally, the chapters differ in style, depth, and emphasis, but this is exactly what the editor intended: "personalized accounts ... written almost without exception by fluorine chemists I [i.e., Eric Banks] have interacted with during my research lifetime". This may also explain why the names of a few of the most prominent fluorine chemists are missing: G. Schrobilgen, K. Seppelt, J. Shreeve ... to mention just three of them. The fact that the centennial issue of the *Journal of Fluorine Chemistry* (Vol. 100) already had six chapters of the book included, is hardly relevant, since very few libraries subscribe to this very useful, but expensive, journal.

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Electrochimie physique et analytique. Edited by Hubert H. Girault. Presses polytechniques et universitaires romandes, Lausanne 2001. 464 pp., softcover € 59.70.—ISBN 2-88074-429-6

Electrochemistry has proven since its earliest days that its concepts and methods are essential in many other important scientific fields. Recent developments have reinforced this evidence, in particular in biology, environmental sciences, molecular chemistry, etc. However, most of these developments, even when applied by non-electrochemists (as is increasingly often the case), are all rooted in specific electrochemical concepts and considerations that are very often known only to electrochemists. Although many other important physical methods are taught in great detail to nonspecialists, for historical and cultural reasons electrochemistry is generally taught only to electrochemists. This specialization of the teaching means that even physical electrochemistry is often dissociated from analytical electrochemistry.