

Porteous, A.: **Dictionary of Environmental Science and Technology**. 3rd Ed. – John Wiley & Sons, Chichester – New York – Weinheim 2000. ISBN 0-471-63376-3. 707 pp., GBP 15.99.

Urgency of environmental issues caused by ambitious civilisation persists, and parallel response of technology and environmental policy brings about new data, concepts, and methods. In the last decades numerous textbooks, handbooks, and even concise dictionaries, in many languages, tried to cover this field of theoretical and practical activities. Most of these publications faced the difficulty of a multi-disciplinary essence generally contained in environmental matters, which included biological objects, physico-chemical procedures, and organisational measures adopted in different countries. Various authors and editors, understandably, emphasise different details of this diversified world, and offer only a selection of respective items.

The third edition of Andrew Porteous's dictionary is obviously a great success of its author and publisher. A success which can be explained both due to the book's substantial innovation, extension, and new data overtaking the first edition, and due to the book's persistent status of an unimitated event combining physics and ecology. Indeed, Porteous' dictionary is faithful to its title and provides, with regard to physics, technology, and environmental quality standards, more detailed information than any comparable dictionary. Because of this basic design it will be very useful in a variety of libraries. Besides briefly worded entries it contains also comprehensive presentations of important topics, often covered at a length comparable to that of textbook chapters. This design is particularly useful to biologically oriented readers who may utilise the dictionary as a handy introduction into a variety of technical fields. Moreover, the third innovated edition will satisfy readers' requirements to get up-to-date information and references to literature covering the progress in theory and practical applications. For example, the dictionary contains an entry referring to forest certification, a very recent tool in environmental activities.

The design of Porteous' dictionary—a hybrid between a glossary and instructive "textbook" chapters—is a welcome solution for many professionals who practise the difficult job of an environmentalist. The ultimate decision making is often in hands of biologically oriented experts who are responsible for the survival of particular biota or conservation of particular landscape ecosystems. Experts trained in biology or ecology are usually confronted with a diversified set of physico-chemical data, formulas, acronyms, salvation techniques, etc. In the absence of an easily available library, the entries in Porteous' book can offer satisfactory explanation of the most frequent issues. A number of examples, derives namely from UK, USA, and Germany.

The other remarkable feature of the dictionary under review is a sensitive selection of topical concepts, clear wording of the text, instructive drawings, tables, com-

partmental models, flow sheets, and numerous quotations of literature. As indicated already in the preface to the first, Andrew Porteous, himself a good teacher, was assisted in the selection of entries by numerous colleagues. In the third edition, about 700 pages contain more than 4 000 entries. In spite of this size, this dictionary maintains the feature of a handy publication suitable for any bookshelf.

Various items of the dictionary refer to procedures of environmental assessments, calculation of efficiencies, chemical formulas and analyses, examples of pollution, biological interactions, and relevant institutional and sociological structures. Many entries are straightforwardly described with reference to British experience. Many terms discussed in the book derive from directives of European Union and broader geographical regions affected by pollution and other environmental events. As mentioned above, some concepts are presented in form matching a textbook chapter, namely, entries called climate, carbon dioxide, combined heat and power, dioxins, greenhouse gases, composting, recycling, contaminated land, energy demand, cost-benefit analysis, landfill, nuclear power, sewage treatment, sustainability, toxicity, waste, vehicle emissions, packing, landfill, etc.

The amount of innovations contained in the third edition is readily recognised by the frequency and dates of "sources" quoted under more complicate concepts. These inserted references allow the reader to reach easily a still more detailed information in the ever expanding environmental theory. Physical and technological language of Andrew Porteous, himself an active Professor in Environmental Engineering, is particularly clear in explanation of physical laws and technological tools. Biologically oriented environmentalists should not be disappointed by lesser frequency of terms related to particular plant and animal interactions in polluted environment. Understandably, unlike physical laws, the biota are very specific with regard to particular regions and countries; the reader should refer more to local reference books. Health effects of air pollution, physiology and genetics of organisms are only shortly commented, and must be searched out from other books. However, generally important biological concepts, such as biodiversity, photosynthesis, carbon cycle, oxygen cycle, nitrogen cycle, ecosystem, food chain, epidemiology, carcinogen, or mutagen, are adequately explained.

Porteous' book will contribute to better understanding and protection of world's environment. Logically, it contains also an entry called "Kyoto Agreement: Framework Convention on Climate Change". Hopefully, this important convention will be signed and implemented by all emission-rich countries prior to the expected fourth edition of the dictionary. Good luck!

J. JENÍK (Praha)