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BOOK REVIEW

Cardarelli, F.: Scientific Unit Conversion. - Springer, London - Berlin - Heidelberg - New York - Barcelona - Budapest - Hong Kong - Milan - Paris - Santa Clara - Singapore - Tokyo 1997. ISBN 3-540-76022-9. 456 pp., DM 49.50.

Nowadays, everything is very international, as one can see even in the long list of towns where this book was presumably published. As a matter of fact, copyright was granted in London, and printing was done in Malta. The author's family name is Italian, but his first name is French, and the book is a translation from French. In the book the author presents a broad choice of systems of old units of area, capacity, length, and mass, from many countries: British, American, Chinese, Indian, Egyptian, Assyrio-Chaldean-Persian, Hebrew, Greek, Roman, Arabic, French, Italian, Spanish, Portuguese, Dutch, German, Russian, Swedish, and Japanese. Always the relationships between individual ancient and obsolete units (with abbreviations) in a system are given, and their relation to the valid SI unit is shown. Thus is can be easy to read historical documents and understand their quantitative meaning.

The book starts with the history of metric system, showing also the predecessors of the present SI system. Its basic units are explained, as well as the derived units, the non-SI units temporarily maintained (I do not understand why many of them have not been banned - there are good equivalents for Å, bar, Ci, etc.), and those which must be discontinued. Useful is also the list of valid prefixes to units.

Conversion tables are the main part of the book (329 pp.). In part 4.1 they are listed alphabetically, in part 4.2 by physical quantities. Definitions of the units and their usage are always given. The book contains also lists of fundamental mathematical and physical constants. In appendices, Greek alphabet, Roman numerals, rules about large numbers (the well-known differences of billions and trillions), numerical representation of date and time, address lists of international and national standard bodies (with phone, fax, Internet, and e-mail connections), equilibrium temperatures in K and °C, old alchymical symbols, etc. are shown. Last part of the book is bibliography.

The book has a pocket book format, nevertheless, I think that it will rarely be carried in pockets. It is fairly heavy, and for daily use few of its mimeographed pages will be enough. But it deserves its place on a bookshelf of every laboratory. One never knows.

Z. ŠESTÁK (Praha)