

## BOOK REVIEWS

**Environmental Effects on Polymeric Materials.** Volume II: Materials. D. V. Rosato and R. T. Schwartz, Eds., Interscience Publishers, Wiley, New York, 1968. pp. 1002 + xvi. \$42.00.

This second volume summarizes the damaging effects of environmental conditions on the various types of important materials.

A chapter on fibers by J. H. Ross discusses in great detail and with the aid of many illustrations and tables, from simple webbings and knittings to parachutes and heavy nylon ropes, the influence of heat, radiation, and various chemicals on the strength and flex life of the most important fibers. The next chapter by M. B. Hays and C. A. Cassola contains very interesting information on flight clothing and sea survival equipment. Entirely different materials—solid lubricants—are discussed in a chapter by M. J. Devine with emphasis on the problem of high temperature—high pressure lubrication. Coatings are treated in a very carefully planned and excellently written chapter by P. A. DiMattia. It is followed by an equally attractive review of the response of elastomers to various environmental conditions. The two following chapters on *Reinforced Plastics* and on *Other Materials* are, to a certain extent, the core of the book and are a remarkable presentation of these complex subjects written by a group of particularly eminent experts, namely A. G. H. Dietz, H. S. Schwartz, D. V. Rosato, and F. J. Riel. A brief but very informative Summary Review concludes the book which is a most welcome addition to the literature and will be a fountain of information for all experts who are interested in the field.

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**Chemical Engineering Catalog.** 53rd ed., Reinhold, New York, 1969.

The 1969 edition of CEC appears to be a comprehensive guide to most materials needed by the production and/or pilot plant engineer. The basic researcher, however, will probably not use this catalog as extensively because of the large scale of most equipment described herein. The catalog has an excellent index system, keyed on company name, functionality, equipment, services, and trade name, which facilitates finding items or services. Some of the part descriptions are a bit incomplete, but this is to be expected as the catalog is a collection of company advertisements. In general, the CEC catalog would be a logical starting point for obtaining equipment and services desired in the chemical industry.

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