

It fulfills this purpose admirably, reads like an interesting novel and provides for its readers technical education of a surprisingly high level.

An introductory presentation of the principles of high polymers enumerates the most important types and lays a ground work of classification and nomenclature. The second chapter is of essentially organic chemical character and describes the most important methods for the synthesis of macromolecules; it is followed by four chapters on the behavior of high polymers in solution and in the bulk state, which emphasize particularly the relationship between molecular structure and physical behavior.

A short bibliography at the end of the book informs the reader where he can find more detailed and quantitative information on the subject which has just been presented to him, in such an attractive and plausible manner that even experts in the field will be grateful to the author for the effort which he has expended to put so many things with so much clarity in such a small frame.

POLYMER RESEARCH INSTITUTE
POLYTECHNIC INSTITUTE OF BROOKLYN
BROOKLYN, NEW YORK

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Abstracts of Reports of the Fourth Soviet Conference on Electrochemistry. Academy of Sciences USSR, Division of Chemical Sciences. Academy of Sciences USSR Press, Moscow, 1956. In English Translation. Consultants Bureau, Inc., 227 West 17th Street, New York 11, N. Y. 1958. 82 pp. 21 × 26.5 cm. Price, \$12.00.

As would be the case with any collection of abstracts issued in preparation of an important scientific meeting, this series of Reports of the Fourth Soviet Conference on Electrochemistry (Moscow, October 1-6, 1956) awakens a deep curiosity for the details of the complete papers. Claims, announcements of discoveries, of disproofs of previous work and ideas, etc., have a way of sounding very categorical in such abstracts, but the finished papers, if and when they are published, do not always fulfill these promises in a completely convincing manner. At any rate, we are provided, in the present case, with an impressive testimony to the aliveness and to the amplitude of electrochemical preoccupations in the USSR along theoretical, experimental and industrial lines. The introductory paper by Frumkin ("Some Results of the Developments in the Study of Electrochemical Reaction Mechanisms in the Last Five Years") and the few others by some of the better known veterans of Russian electrochemistry will no doubt be invaluable when made available in full. If the many unknown or less known names are those of students of these masters (institutional connections are not given, except occasionally within the body of an abstract) we may be assured of the high quality of the whole collection.

The 121 abstracts are grouped under 9 headings as follows: 22 on "General Questions on Electrochemical Kinetics and the Reaction Mechanism of Electrochemical Reduction"; 11 on "The Mechanism of Electrode Processes in Melts"; 8 on "Diffusion Kinetics"; 8 on "The Mechanism of Oxidation Reactions"; 10 on "The Passivity of Metals and Chemisorbed Layers"; 30 on "The Electrodeposition of Metals"; 14 on "Chemical Sources of Current"; 9 on "Electrolysis in the Chemical Industry"; 9 on "The Electrochemical Processes of Nonferrous Metallurgy."

The amount of information directly available from these abstracts is extremely variable, some of them consisting only of headings of chapters or paragraphs, others containing vigorous challenging or controversial statements, others still offering clear summaries of factual observations.

It will be interesting to watch for the possible publication of abstracts of the finished papers in *Chemical Abstracts* and perhaps will the Consultants Bureau find it possible to offer complete translations of at least some of these 121 papers. This reviewer would specially welcome those of the papers on hydrogen overvoltage and on passivity.

In any case, the Consultants Bureau, in making the present collection available and in spite of the delay and of the high cost, has rendered a valuable service to the electrochemical profession.

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BOOKS RECEIVED

February 10, 1959—March 10, 1959

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CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE. "Calcul des Fonctions D'Onde Moléculaire." Centre National de la Recherche Scientifique, 13, Quai Anatole France, Paris 7, France. 1958. 415 pp. 3.400 Fr.

BRUCE CHALMERS AND R. KING, Editors. "Progress in Metal Physics." Volume 7. Pergamon Press, Inc., 122 East 55th Street, New York 22, N. Y. 1958. 408 pp. \$16.00.

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NORMAN EVERS AND DENNIS CALDWELL. "The Chemistry of Drugs." Third Edition, Entirely Revised and Enlarged. Interscience Publishers, Inc., 250 Fifth Avenue, New York 1, N. Y. 1959. 415 pp. \$12.25.

R. C. EXTERMANN, Edited by. "Radioisotopes in Scientific Research." Proceedings of the International Conference held in Paris in September 1957 under the auspices of the United Nations Educational Scientific and Cultural Organization. Volume II. "Research with Radioisotopes in Chemistry and Geology." Pergamon Press, Inc., 122 East 55th Street, New York 22, N. Y. 1958. 741 pp. \$22.50. Complete set of four volumes, \$80.00.

A. I. M. KEULEMANS. "Gas-Chromatographie." Englische Originalausgabe unter Mitarbeit, C. G. VERVER. Deutsche Ausgabe, mitbearbeitet und übersetzt, E. CREMER. Verlag Chemie G.m.b.H., Weinheim/Bergstr. Germany. 1959. 208 pp. DM 24.—.

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E. B. SANDELL. "Colorimetric Determination of Traces of Metals." Third Edition, Revised and Enlarged. Interscience Publishers, Inc., 250 Fifth Avenue, New York 1, N. Y. 1959. 1032 pp. \$24.00.

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