# COMMITTEE ON SCIENCE AND THE ARTS

(Abstract of Proceedings of Stated Meeting held Wednesday, May 14, 1958.)

HALL OF THE COMMITTEE, PHILADELPHIA, MAY 14, 1958.

MR. JOSEPH GRAY JACKSON in the Chair.

The following reports were presented for final action:

No. 3189: Work of J. C. Patrick on Thiokol.

This report recommended the award of an Elliott Cresson Medal to Joseph C. Patrick, of Yardley, Pennsylvania, "In consideration of his discoveries in the field of polysulfide polymers, and of the new processes devised by him involving the combination of chemical compounds for the manufacture of a synthetic rubber having special properties adapted to critical uses and to the manufacture of a solid rocket fuel."

No. 3341: Clark Medal.

This report recommended the award of the Walton Clark Medal to Frederic O. Hess, of Philadelphia, Pennsylvania, "In consideration of his many contributions to the gas industry, in the improvements and developments of new processes for the use of gas industrially."

No. 3342: Ballantine Medal.

This report recommended the award of the Stuart Ballantine Medal to Harald Trap Friis, of Rumson, New Jersey, "In consideration of his many important contributions to the science of radio-communications during a lifetime of consistently productive research in this field, through which this science has been so notably advanced."

D. S. FAHRNEY, Secretary to Committee

## LIBRARY

The Committee on Library desires to add to the collections any technical works that members may wish to contribute. Contributions will be gratefully acknowledged and placed in the Library. Duplicates received will be transferred to other libraries as gifts of the donor. 438 items have been added the past month.

Photostat service. Photostat prints of any material in the collections can be supplied on request.

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## RECENT ADDITIONS

### AGRICULTURE

Advances in Pest Control Research. Vol. 1. 1957.

Jackson, Marion Lerov. Soil Chemistry Analysis. 1958.

## ARCHITECTURE AND BUILDING

Architects' Yearbook. Vol. 8. 1957.

#### ASTRONOMY

HOYLE, FRED. Frontiers of Astronomy. 1955. SCHATZMAN, EVRY. White Dwarfs. 1958.

#### ATOMIC ENERGY

FERMI, LAURA. Atoms for the World. 1957.

#### AUTOMATION

Considine, Douglas Maxwell. Process Instruments and Controls Handbook. 1957.

LEONHARD, ADOLF. Die Selbstätige Regelung; Theoretische Grundlagen mit Praktischen Beispirlen. Ed. 2. 1957.

SHAUMIAN, G. A. Automaten. Ed. 2. 1956.

### BACTERIOLOGY

Bergey's Manual of Determinative Bacteriology. Ed. 7. 1957.

#### BIOLOGY

KAMEN, MARTIN DAVID. Isotopic Tracers in Biology. Ed. 3. 1957.

## CHEMISTRY AND CHEMICAL TECHNOLOGY

ALIMARIN, I. P. AND ARCHANGELSKAJA, W. N. Qualitative Halbmikroanalyse. 1956.

ALLEN, MILTON J. Organic Electrode Processes. 1958.

BECHER, PAUL. Emulsions. 1957.

Březina, Miroslav and Zuman, P. Die Polarographie in der Medizin, Biochemie und Pharmazie. 1956.

CONWAY, EDWARD JOSEPH. Microdiffusion Analysis and Volumetric Error. Ed. 4. 1958.

International Union of Pure and Applied Chemistry. Committee on Physico-. Chemical Data and Standards. Purity Control by Thermal Analysis. 1957.

JIRGENSONS, BRUNO. Organic Colloids. 1958.

KITCHENER, J. A. Ion-Exchange Resins. 1957.

OKÁČ, ARNOŠT. Analitycká Chemie Kvalitativní. 1956.

Welcher, Frank Johnson. The Analytical Uses of Ethylenediaminetetraacetic Acid. 1958 Willard, Hobart Hurd; Merritt, Lynne L., Jr. and Dean, John A. Instrumental Methods of Analysis. Ed. 3. 1958.

Young, Leona Esther and Porter, Charles Walter. General Chemistry, a First Course. Ed. 4. 1958.

## DICTIONARIES

Elsevier's Dictionary of Electronics and Waveguides, in Six Languages. 1957.

## ELECTRICITY AND ELECTRICAL ENGINEERING

ADKINS, BERNARD. The General Theory of Electrical Machines. 1957.

BURSTYN, WALTHER. Elektrische Kontakte und Schaltvorgänge. Ed. 4. 1956.

COLLINS, ARCHIE FREDERICK. The Radio Amateur's Handbook. Ed. 10. 1957.

LEWIS, WALTER WALLACE. Basic Electric Circuit Theory. 1958.

MÜLLER, KURT EMIL. Der Kathodenverstärker in der Elektronischen Messtechnik. 1956.

RUMPF, KARL HEINZ. Elektronik in der Fernsprech-Vermittlungstechnik. 1957.

Schendell, Gerhard. Praktische Durchführung von Kurzschlussstromberechnungen für Hochspannungsnetze. 1953.

WALKER, JAMES R. AND FRANK, MAX. Design Methods for Magnetic Amplifiers and Saturable Reactors. 1956.

WATSON, G. O. Marine Electrical Practice. 1957.

### ENGINEERING

AMERICAN SOCIETY FOR METALS. Creep and Recovery. 1957.

MACDUFF, JOHN N. AND CURRERI, JOHN R. Vibration Control. 1958.

MANTELL, CHARLES LETNAM, ED. Engineering Materials Handbook. 1958.

MIDWESTERN CONFERENCE ON SOLID MECHANICS. 3RD, UNIVERSITY OF MICHIGAN, 1957. Proceedings. 1957.

Siebel, Erich, Ed. Handbuch der Werkstoffprüfung. Ed. 2. 1955-1957.

#### FOOD

CLARKE, RONALD JAMES. Process Engineering in the Food Industries. 1957.

## GENERAL

KOROL, ALEXANDER G. Soviet Education for Science and Technology. 1957.

Sin, Ralph Gun Hov. The Tao of Science; an Essay on Western Knowledge and Eastern Wisdom. 1957.

#### GRAPHIC ARTS

LETOUZEY, VICTOR. Colour and Colour Measurement in the Graphic Industries. 1957.

#### MATHEMATICS

ALGER, PHILIP LANGDON. Mathematics for Science and Engineering. 1957.

HALMOS, PAUL RICHARD. Finite-Dimensional Vector Spaces. Ed. 2. 1958.

Hood, George Jüssen and Palmerlee, Albert S. Geometry of Engineering Drawing. Ed. 4. 1958.

TRICOMI, FRANCESCO GIACOMO. Integral Equations. 1957.

ZARISKI, OSCAR AND SAMUEL, PIERRE. Commutative Algebra. Vol. 1. 1958.

#### MECHANICAL ENGINEERING

HAM, CLARENCE WALTER; CRANE, E. J. AND ROGERS, WILLARD LEWIS. Mechanics of Machinery. Ed. 4. 1958.

#### METEOROLOGY

U. S. AIR FORCE. CAMBRIDGE RESEARCH CENTER. GEOPHYSICS RESEARCH DIRECTORATES. Exploring the Atmosphere's First Mile. 1957.

#### NUCLEAR ENGINEERING

CROWTHER, JAMES GERALD. Nuclear Energy in Industry. 1956.

## OPTICS

LONGHURST, RICHARD SAMUEL. Geometrical and Physical Optics. 1957. TRILLAT, JEAN JACQUES. Découverte de la Matière. 1956.

# PETROLEUM TECHNOLOGY

Pirson, Sylvain J. Oil Reservoir Engineering. Ed. 2. 1958.

#### **PHOTOGRAPHY**

BOMBACK, EDWARD S. Retina Handbook. 1957.

#### PHYSICS

ATKIN, RONALD HARRY. Mathematics and Wave Mechanics. 1956.

Brown, Aubrey Ingerson and Marco, Salvatore Michael. Introduction to Heat Transfer. Ed. 3. 1958.

CULLWICK, ERNEST GEOFFREY. Electromagnetism and Relativity. 1957.

GUGGENHEIM, EDWARD ARMAND. Thermodynamics; an Advanced Treatment for Chemists and Physicists. Ed. 3. 1957.

LACEY, WILLIAM NOBLE AND SAGE, BRUCE HORNBROOK. Thermodynamics of One-Component Systems. 1957.

LEGRAND, YVES. Light, Colour and Vision. 1957.

LLEWELLYN-JONES, FRANK. Ionization and Breakdown in Gases. 1957.

TAYLOR, GEOFFREY INGRAM. Scientific Papers. Vol. 1. 1958.

Young, M. E. J. Radiological Physics. 1957.

## SATELLITES

BERGAUST, ERIK AND BELLER, WILLIAM. Satellite! 1956.

Burgess, Eric. Satellites and Spaceflight. 1957.

CLARKE, ARTHUR CHARLES. The Making of a Moon, the Story of the Earth Satellite Program. 1958.

## **STATISTICS**

DAVENPORT, WILBER B. AND ROOT, WILLIAM L. An Introduction to the Theory of Random Signals and Noise. 1958.

WAERDEN, B. L. VAN DER. Mathematische Statistik. 1957.

### **TEXTILES**

Speel, Henry C. and Schwarz, Eugene W. K. Textile Chemicals and Auxiliaries. Ed. 2. 1957.

# **MEMBERSHIP**

The following elections were approved on May 1, 1958 by the Membership Committee by authority given to it by the Board of Managers.

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