LETTERS
Manpower in Biomedical Science: R. H. Alden; Research and Purpose: S. R. Hoover, M. D. Reagan, D. G. Barry; Productivity Measure Disputed: H. Wooster

EDITORIAL
Air Pollution

ARTICLES
Application makes possible important advances in physics, chemistry, and engineering.

Self-Regulating Systems in Populations of Animals: V. C. Wynne-Edwards
A new hypothesis illuminates aspects of animal behavior that have hitherto seemed unexplainable.


NEWS AND COMMENT
NIH: Wooldridge Study Calls for Administrative Changes—Solar Boat: A Favorable Report

BOOK REVIEWS
A New “Genera Plantarum”: A. C. Smith


REPORTS
Indium Telluride (II'): Transitory Intermediate Phase in the Transformation InTe(II) to InTe(I): C. B. Solar, L. C. Carrison, C. M. Schwartz

Electron Yield in the γ-Radiolysis of Water Vapor: J. H. Baxendale and G. P. Gilbert

Iron Accumulation in Cockerel Plasma after Estrogen: Relation to Induced Phosphoprotein Synthesis: O. Greengard, N. Mendelsohn, M. Gordon

Peptide Synthesis from Amino Acids in Aqueous Solution: C. Ponnamperuna and E. Peterson
Dicarboximide: Possible Role in Peptide Synthesis during Chemical Evolution: G. Steinman, R. M. Lemmon, M. Calvin

Protein Synthesis and the Mitotic Apparatus: J. Mangan, T. Miki-Noumura, P. R. Gross

Agrobacterium tumefaciens: Thermal Inactivation of Tumor-Inducing Ability J. A. Lippincott and B. B. Lippincott

Ciguatera Fish Poison: A Cholinesterase Inhibitor: K.-M. Li

Glycerinated Skeletal and Smooth Muscle: Calcium and Magnesium Dependence: R. S. Filo, D. F. Bohr, J. C. Ruegg


Inheritance of Linoleic and Oleic Acids in Maize: C. G. Poneleit and D. E. Alexander

Disappearance of a Genetic Marker from a Cytoplasmic Hybrid Plasmodium of the True Slime Mold: N. S. Kerr

Erythropoiesis in the Chick Embryo: The Role of Endoderm: F. H. Wilt

Tricarboxylic Acid Cycle Mutants in Saccharomyces: Comparison of Independently Derived Mutants: M. Ogur, A. Roshanmanesh, S. Ogur

Involvement of Thymus in Immune Response of Rabbits to Somatic Polysaccharides of Gram-Negative Bacteria: M. Landy et al.

Primate Retina: Duplex Function of Dark-Adapted Ganglion Cells: P. Gouras

Underwater Visual Discrimination by the California Sea Lion: R. J. Schusterman, W. N. Kellogg, C. E. Rice

Prenatal Auditory Sensitivity in Chickens and Ducks: G. Gottlieb

Comments on Reports: Cesium-137 in Alaskans: S. Novick

MEETINGS


COVER

Components of a laboratory ultra-high vacuum system used to study chemical reactions between simple gases and atomically clean metal or semiconductor surfaces. (Left to right) Reaction bulb for preparing these surfaces, a bakeable thermistor pressure gage, and a glass valve. See page 1529. [Walter B. Halstead, General Electric Research Laboratory]