

storage systems to fulfill the requirements of mother and embryo. The book is a model of clear, well-documented, and provocative writing and constitutes both a limited comparative review of mineral metabolism and a study of reproductive adaptation in amphibia, reptiles, birds, and mammals. It should prove useful to the developmental biologist interested in comparative embryogenesis.

The first section of this monograph summarizes much basic information related to the organ systems involved in calcium dynamics: among the topics treated are bone formation, turnover and kinetics of calcium, distribution and regulation of calcium in plasma and tissue, its distribution in the ovarian yolk, yolk composition and vitellogenesis, and the role of the endolymphatic calcium-storage sacs in amphibia. The major portion of the volume concerns reproductive and developmental processes: calcium balance and its regulation during gestation and lactation and in the neonatal mammal, placental transfer, calcium balance and metabolism in the adult and in the embryonic chick, reptile, and anuran, eggshell formation, and the dynamics and significance to the hen of medullary bone as a mineral storage depot. No ex cathedra presentation, the discussion suggests many unanswered questions for the inquisitive student. The book is well illustrated, referenced, and indexed. More monographs of this caliber may be hoped for from the Modern Biological Studies series.

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Polymerization

Organic Chemistry of Synthetic High Polymers. ROBERT W. LENZ. Interscience (Wiley), New York, 1967. xvi + 837 pp., illus. \$15.

This book by R. W. Lenz, with contributions by D. C. Feay and N. S. Schneider, represents one of the most recent additions to the subject of the organic chemistry of synthetic macromolecules. It is intended to serve as a textbook which will interest and assist both the undergraduate teacher and the graduate student in courses dealing with the organic aspects of polymer chemistry and as a reference book for those interested in the polymer field. We be-

lieve that the authors have been modestly successful.

The organization of the book is based on the reactions involved in the formation of high polymers. After a brief introduction which concentrates on the approach to the subject material and the relationship of structure to properties of polymers, a comprehensive discussion of many types of step-growth polymerization and homogeneous and heterogeneous chain-growth polymerization is presented. The book is concluded with a section concerned with the reactions of polymers.

Although this text is characterized by a different approach to the presentation of the organic chemistry of synthetic macromolecules, this approach requires that the reader refer to various chapters in order to obtain information on a specific monomer. This drawback becomes significant if a certain monomer polymerizes by several

different mechanisms. Moreover, it is to be noted that the broad range of topics covered prevents detailed discussion of each one. This is particularly noticeable in the section entitled Step-Growth Polymerization.

The author is to be commended for his coverage of many different reactions and monomers involved in the syntheses of high polymers and for the inclusion of pertinent illustrations and compilations of kinetic data, which these readers find very useful as reference material. If used in conjunction with texts dealing with the physical aspects of synthetic polymers, this book could provide a comprehensive background to the rapidly growing field of macromolecular science.

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A 17th-Century News-Gatherer

The Correspondence of Henry Oldenburg. Vol. 4, 1667–1668. Edited and translated by A. RUPERT HALL and MARIE BOAS HALL. University of Wisconsin Press, Madison, 1967. xxvi + 601 pp., illus. \$12.50.

As the Halls' meticulous edition of the correspondence of the Royal Society's secretary proceeds through 1667 and 1668, the volume of letters reaching and leaving Oldenburg grows steadily larger. He was now in touch with natural philosophers from Danzig to Portugal and to Bermuda, and he had a regular exchange with France. Unfortunately, Boyle moved to London, and so a major source of news ceased, but we can still follow the major concerns of the period—transfusions, with their dubious results, and the ensuing quarrel over priority; tides; Wallis's dispute with Dulaurens (which descended to the complaint that the latter spelled *Ellypsis* with a *y*); dissections undertaken by the French; and various physical wonders. Monstrous births, witchcraft, stones which attracted poisons, and similar matters were still the subject of earnest discussion, but amid the welter of ideas, both serious and far-fetched, a definite shift in interest toward continental biology can be perceived. Oldenburg first approached Malpighi in December 1667, thus starting a famous relationship; and the French transfusions and dissections of

the eyes of birds occupied much attention.

It could be said that Oldenburg was glad to be able to whip up this new business. Meetings of the Royal Society appear to have been rather poor fare during these months, for their enthusiasm seems to have centered on plans for a new building. The meatiest news was coming from abroad; and, though one can see Oldenburg as the honest pursuer of a wider intercourse among scientists, his requests for word of discoveries—and even descriptions of the terrain of foreign lands—sometimes took on a plaintive note. He needed them, of course, as self-justification, to show cause why his services were needed, to have something to disseminate. Yet he slipped easily into a strident, imperialistic tone in behalf of his adopted country, notwithstanding his wish to extend the range of his correspondence. His worst ingratiating manner is revealed in patronizing attitudes toward foreigners, fierce claims of English priority, and smug comments about the need for careful examination before the Royal Society (still in its first decade!) could give its august approval to some discovery.

Nonetheless, there is no denying that Oldenburg was the great clearinghouse of information of his day, a vital catalyst in the creation of a genuine scientific community—though the obsession