ACTH secretion, and there may be competition for release of these two hormones by the pituitary. Thus, in rats, when the pituitary is stimulated to secrete more TSH by administration of TSH-releasing factor, less ACTH is released in response to stress; when the secretion of ACTH is inhibited by dexamethasone and Nembutal, more TSH is secreted in response to TRF.

The clinical reports consider mainly the application of various tests for pituitary ACTH and adrenal cortical function in human patients. These include the use of synthetic ACTH, vasopressin, metyrapone, and pyrogens. The investigations of synthetic corticotrophins are of particular interest, and several derivatives are found to be more potent than the natural product by several criteria of adrenal cortical function. This is probably the first time an anterior pituitary hormone has been structurally altered in the laboratory to increase its biological potency. On the whole, this volume has much to offer to clinical endocrinologists, physicians, and drug houses interested in pituitaryadrenal function.

JOSEPH MEITES

College of Human Medicine, Michigan State University, East Lansing

Organolead Chemistry

The Organic Compounds of Lead. HYMIN SHAPIRO and F. W. FREY. Interscience (Wiley), New York, 1969. xiv + 498 pp., illus. \$18. The Chemistry of Organometal-lic Compounds.

This monograph is the second in the series The Chemistry of Organometallic Compounds, edited by Dietmar Seyferth. It is the announced purpose of the authors to provide a comprehensive and critical review of organolead chemistry since 1954. They have succeeded admirably. The literature through 1966 is reviewed thoroughly and in a readable fashion; many 1967 references are also included. More important, however, is the fact that the authors have evaluated the literature and made judgments where required. An example of this is their discussion of the various electronegativity values that have been proposed for lead and their judgment that Pritchard and Skinner's value of 1.8 is the preferable number.

The contents of the monograph are organized in a manner reminiscent of L. C. Willemsen's *Organolead Chem*-

istry, which appeared in 1964, but coverage and discussion are much more extensive. Dominating the book is the chapter on tetraalkyl- and tetraaryllead compounds, which accounts for approximately 20 percent of the written text and which contains over 800 references. Contained in this chapter are exhaustive descriptions of methods of preparation and of the physical properties of tetraorganolead compounds; electrolytic syntheses are particularly well described. The chapter also contains a detailed discussion of the pyrolysis reaction of tetraalkyllead compounds, of interest because of their use as motor fuel additives.

The chapter on the physiological and toxicological properties of organolead compounds should be of particular interest, as should the chapter on the analysis of these compounds. The latter chapter contains descriptions of analytical methods for commercial antiknock fluids and gasolines. The first few chapters are a general discussion of valence and bonding, synthesis methods, and common physical and chemical properties. Other chapters describe unsaturated. heterocyclic, optically active, and cyclopentadienyl-type lead compounds and organolead salts, hexaorganodilead compounds, and organolead-organometal compounds. A thorough description of the potential applications for organolead compounds developed through the efforts of the International Lead Zinc Research Organization is included in the last chapter. Several of the chapters contain extensive lists of compounds with references for each compound and some physical properties. Finally, the monograph is well indexed, containing both author and subject indexes.

The Organic Compounds of Lead should now become the standard reference volume in organolead chemistry, and it certainly belongs in the library of every worker in organometallic chemistry.

H. V. CORTEZ

PPG Industries, Chemical Division, Corpus Christi Laboratories, Corpus Christi, Texas

New Journals

The Journal of Chemical Thermodynamics. Vol. 1, No. 1, January 1969. Bimonthly. Editors: M. L. McGlashan, Exeter, England; H. A. Skinner, Manchester, England; Edgar F. Westrum, Jr., Department of Chemistry, University of Michigan, Ann Arbor. Academic Press, 111

Fifth Ave., New York, N.Y. \$19.50 a volume (6 issues).

Forma et Functio. An International Journal of Functional Biology. Vol. 1, No. 1, April 1969. Four times a year. Editors: R. Altevogt, Munster; H. Hediger, Zurich; J. A. King, East Lansing, Mich.; G. Tembrock, Berlin; K. S. Thomson, New Haven, Conn. Pergamon Press, Maxwell House, Fairview Park, Elmsford, N.Y. \$9 a year; to libraries and institutions, \$25.

International Journal of Man-Machine Studies. Vol. 1, No. 1, January 1969. Four times a year. Editor: G. B. B. Chaplin, Department of Electrical Engineering Science, University of Essex, Wivenhoe Park, Colchester, Essex, England. Academic Press, 111 Fifth Ave., New York, N.Y. \$16.50 a volume (4 issues).

Journal of Fish Biology. Vol. 1, No. 1, January 1969. Quarterly. Editor: J. C. Chubb, Department of Zoology, University of Liverpool, P.O. Box 147, Liverpool, England. Published for the Fisheries Society of the British Isles. Academic Press, 111 Fifth Ave., New York, N.Y. \$14.50 a volume (4 issues).

Organic Magnetic Resonance. Vol. 1, No. 1, with Spectral Supplement, February 1969. Bimonthly. Editor-in-chief: Eric F. Mooney, Birmingham, England. Regional editor for North America: S. L. Manatt, Jet Propulsion Laboratory, California Institute of Technology, Pasadena. Spectrum House, Alderton Crescent, London, N.W.4. \$15 a year; to libraries and institutions, \$40.

Remote Sensing of Environment. Vol. 1, No. 1, March 1969. Quarterly. Editorin-chief: David S. Simonett, Department of Geography and Center for Research in Engineering Science, University of Kansas, Lawrence. American Elsevier, 52 Vanderbilt Ave., New York, N.Y. \$28 plus \$2 postage a volume (4 issues).

Schizophrenia. Journal of the American Schizophrenia Foundation. Vol. 1, No. 1, first quarter 1969. Quarterly. Coeditors: Abram Hoffer, Saskatoon, Sask.; J. Ross MacLean, New Westminster, B.C.; Humphry Osmond, Bureau of Research in Neurology and Psychiatry, Princeton, N.J. Lowrie Associates, 6950 France Ave., Minneapolis, Minn. \$15 a year.

Information Sciences. Vol. 1, No. 1, December 1968. Quarterly. Editor: John M. Richardson, North American Rockwell Corporation, Science Center, Aerospace and Systems Group, 1049 Camino Dos Rios, Thousand Oaks, Calif. American Elsevier, 52 Vanderbilt Ave., New York, N.Y. \$24 plus \$1 postage a volume (4 issues).

International Journal of Chemical Kinetics. Vol. 1, No. 1, January 1969. Bimonthly. Editor-in-chief: Sidney W. Benson, Stanford Research Institute, Menlo Park, Calif. Interscience (Wiley), 605 Third Ave., New York, N.Y. \$20 a volume (6 issues).

Journal of Biosocial Science. Vol. 1, No. 1, January 1969. Quarterly. Executive Editor: A. S. Parkes, 69 Eccleston Square, London, S.W.1, England. Published for the Galton Foundation. Blackwell Scientific Publications, 5 Alfred St., Oxford OX1 4HB, England. \$20 a year.