Meetings

Pure Chemical Compounds

Augmented sources of certified pure substances, a clearinghouse of information about the availability of such materials, and intensified research on all aspects of the purity problem are urgently needed by science and industry. This situation was revealed at a conference on Chemical Compounds of Certified High Purity, held 22 and 23 June at the National Academy of Sciences in Washington. Approximately 35 prominent scientists participated in the conference, which was sponsored jointly by the National Science Foundation and the National Academy of Sciences–National Research Council. Frederick D. Rossini of the Carnegie Institute of Technology was chairman of the conference and also of the five-man organizing committee appointed by academy president Detlev Bronk.

Highly purified compounds are necessary as standards of measurement, in the calibration of instruments, and in the definitive determination of physical and chemical properties requisite for the compilation of "critical tables" of enduring value. In fact, in any type of physical or chemical research where experimental results are sensitive to small amounts of impurity, the availability of pure compounds is imperative. The preparation of such materials simply has not kept pace with the tremendous strides made in recent years in instrumentation and experimental techniques of measurement.

Many major classes of inorganic, organic, and metallo-organic compounds should be made available, including biologically important classes of compounds. Discussion ranged widely over the diverse types of pure substances required—from monoisotopic elements such as oxygen-17 to complex proteins such as insulin, and from single crystals and semiconductor materials to more prosaic compounds. It was also revealed that new criteria for determining purity are needed by biochemists, chemists, and physicists. The educators present agreed that a great increase in the availability of pure compounds speeds graduate research but also results in a certain loss from the standpoint of teaching, which must be remedied.

At the conclusion of the conference recommendations were made for the establishment of a center of information on existing sources of chemical compounds of certified high purity and for the establishment of a permanent central technical organization with responsibility for the identification, preparation, further purification, and certification of pure chemical compounds. It was also recommended that the National Academy of Sciences–National Research Council, in cooperation with other national and international scientific groups, implement a program for improved communication among laboratories concerned with the pure-compounds problem and encourage research on all aspects of the purity of chemical compounds and on the analytical chemistry pertaining to this work.

A limited number of copies of a report on the conference has been prepared. These are available to persons concerned with the pure-compounds problem and may be requested from the Office of Critical Tables, National Academy of Sciences, 2101 Constitution Avenue, NW, Washington 25, D.C.

GUY WADDINGTON
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Forthcoming Events

February

25–27. Cell Physiology of Neoplasia (14th annual symp. on fundamental cancer research), Houston, Tex. (Editorial Office, Univ. of Texas M. D. Anderson Hospital, Texas Medical Center, Houston 25.)

26. Highway Geology, 11th annual symp., Tallahassee, Fla. (W. F. Tanner, Geology Dept., Florida State Univ., Tallahassee.)

28–5. American College of Allergists, Miami Beach, Fla. (E. Bauers, 2160 Rand Tower, Minneapolis 2, Minn.)

29–3. American College of Surgeons, Boston, Mass. (H. P. Saunders, 40 E. Erie St., Chicago, Ill.)

29–4. Pittsburgh Conf. on Analytical Chemistry and Applied Spectroscopy, Pittsburgh, Pa. (L. P. Melnich, U.S. Steel Corp., Monroeville, Pa.)

March

2–4. Low and Medium Energy Nuclear Physics, colloquium, Grenoble, France. (F. Netter, C.E.N., Saclay, BP. No. 2, Gif-sur-Yvette, Seine et Oise, France.)

3–5. American Acad. of Forensic Sciences, Chicago, Ill. (W. J. R. Camp, AAFS, 1853 W. Polk St., Chicago 12.)

4–6. National Wildlife Federation, Dallas, Tex. (C. H. Callison, 232 Carroll St., NW, Washington 12.)

6–13. American Otorhinologic Soc. for Plastic Surgery, Miami Beach, Fla. (J. G. Gilbert, 75 Barberry Lane, Roslyn Heights. N.Y.)

7–9. Wildlife Management Inst., Dallas, Tex. (C. R. Gutermuth, 709 Wire Bldg., Washington 5.)

7–11. American Soc. of Civil Engineers, New Orleans, La. (E. S. Kirkpatrick, ASCE, 33 W. 39 St., New York 18.)

10. Recent Developments in Poultry Nutrition (Assoc. of Vitamin Chemists), Chicago, Ill. (J. T. Sime, Director of Research, Evaporated Milk Assoc., 228 N. La Salle St., Chicago 1.)

10–11. Institute of the Aeronautical Sci-