

### **Aid to Education: House Group Cites Need for More Technicians, Research on Learning Process**

The House Education and Labor Committee is expected to hold public hearings this session on proposals for two new undertakings in federal aid to education: expansion of technical training facilities and basic research into the learning process.

The proposals are among several produced by the committee's specially appointed Advisory Group on Higher Education, which formulated them after a series of private meetings with educators and scientists. In developing the proposals emphasis was placed on harmonizing the needs of higher education with the political realities of the House's conservative leanings. The advisory group, composed of three Democrats and two Republicans, has laid stress in its public announcements on its bipartisan makeup and the unanimity of its findings. The prospects for the proposals are deemed to be fairly bright.

The advisory group's recommendations on technical training facilities come at a time when manpower specialists have noted that the nation's science and engineering manpower could in many instances be employed far more productively if it were supported by properly trained technicians. According to committee members, there are fewer than 40 institutions in this country that provide high-level technical training. The best way to stretch the nation's science and engineering manpower, it suggests, would be through federal grants to assist the states in establishing and expanding 2-year technical institutes above the high-school level. No price tag was attached to the recommendation, but it is understood that the advisory group believes that at least \$25 million is needed for a minimum program.

The proposal on research into the learning process was accompanied by the observation that "at least until very recently, basic research in the learning process has apparently not attracted the attention of the most able behavioral scientists." The recommendation called for the stimulation of "high quality" research; several persons associated with the advisory group's report say that this is a polite way of indicating that it would be well to have the research conducted outside schools of education.—D.S.G.

## **Announcements**

Documentary material on the **formulation of quantum physics** and related scientific developments (1898–1938) is being solicited for use in a joint project of the American Physical Society and the American Philosophical Society. Of particular interest is information about letters, manuscripts, meeting records, photographs, and films on the history of quantum physics; and recollections of seminars where critical steps were discussed, of moments at which an important concept emerged, and of occasions when the outlook of one investigator was dramatically changed by another. The project, supported by a National Science Foundation grant, aims to preserve all such materials and to record commentary of the surviving participants in the development of quantum physics. [Thomas S. Kuhn, 224 Stephens Memorial Hall, University of California, Berkeley 4 (prior to Sept.); Universitetets Institut for Teoretisk Fysik, Blegdamsvej 17, Copenhagen, Denmark (thereafter)]

A revised edition of a Soviet study of **ferroalloy thermodynamics**, used in the U.S.S.R. as a university textbook, is available in English through the U.S. Department of Commerce. The book, revised "in the light of new physical and chemical data . . . [and] Soviet and foreign achievements in the field . . .," includes separate chapters on silicon alloys, manganese alloys, ferrochromium, and ferrotungsten. (USDC, Office of Technical Services, Washington 25, D.C. Order No. 61-11429 \$4.50)

The government of Madras (India) has established an **Institute of Mathematical Sciences** to promote advanced study and research in all branches of mathematics and theoretical physics. The institute, under the direction of Alladi Ramakrishnan, former professor of theoretical physics at the University of Madras, will invite visiting scientists to participate as professors or members, working in collaboration with permanent staff members. (Alladi Ramakrishnan, IMS, Madras 4, India)

Material on the **procurement and maintenance of monkeys** is being solicited for inclusion in a bimonthly publication, *Laboratory Primate Newsletter*, to be offered free of charge to interested researchers. Useful informa-

tion includes new drugs and drug dosages, treatment and handling techniques, diets, novel aspects of cage design, product evaluations and new products, summaries of articles, and experiences with the procurement of monkeys. Also acceptable will be short descriptions (not published previously) of current psychological, psychophysiological, or physiological research in the field. (Allan M. Schrier, Psychology Department, Brown University, Providence 12, R.I.)

### **Meeting Notes**

The 3rd international symposium on **rarefied gas dynamics** will be held from 26 to 29 June in Paris. Registration deadline: *1 April*. [E. A. Brun, Laboratoire d'Aerothermique, 4 ter, route des Gardes, Meudon (S & O), France]

Deadline for receipt of 1000- to 2000-word abstracts (in English or French): *1 March*. (J. A. Laurmann, Dept. 53-22, Bldg 202, Lockheed Missiles and Space Co., Palo Alto, Calif.)

A symposium on **inborn errors of metabolism** will be held from 12 to 14 February in Oakland, Calif. The symposium, sponsored by the National Vitamin Foundation, will cover fundamental aspects of medical genetics; carbohydrate, lipid, and amino acid abnormalities; and thyroid disorders. (Laurance W. Kinsell, Institute for Metabolic Research, Highland-Alameda County Hospital, 2701 14 Ave., Oakland 6)

An international conference on **image formation and vision** will be held in Munich, Germany, from 19 to 26 August. The conference, sponsored by the International Commission for Optics, will emphasize image structure and receivers, and the behavior of the visual organ in relation to perception. (W. Lewis Hyde, U.S. National Committee for the ICO, 4709 Baum Blvd., Pittsburgh 13, Pa.)

### **Courses**

A 6-week advanced course in the modern aspects of **vertebrate morphology**, with emphasis on paleontology, functional anatomy, and neurology, will be offered at Harvard from 2 July to 10 August. Participants, limited to 40 college and university teachers of