initiated by the elected representatives of the people in fifty states."

Perhaps the major point in Conant's argument is that laymen be brought actively into the planning process. What Conant is saying, to paraphrase Clemenceau on war and the generals, is that education is too important to be left to the educators.

A precedent for what Conant recommends can be found in the participation of university scientists, mathematicians, and other scholars in the curriculum reform movement after many years of noninvolvement.

But Conant is calling for changes which are no less than revolutionary, and, while change is continuous in American education, revolution is very rare. Chief obstacles to his program are these: first, he advocates the breakup of the alliances between legislatures and education establishments which both sides in many states find convenient and comfortable; second, this new brand of policy making is like'iest to offend the people who will have to carry out the new policies.

Whatever the long-range effect of Conant's book as a revolutionary manifesto (and his influence is considerable), *Shaping Educational Policy* is, in the short run, an excellent handbook for interested citizens to use for background on the problems which will face the new Congress and the many state legislatures which meet after the first of the year.—JOHN WALSH

Johnson Cabinet: Drug Executive, Former Counsel to OSRD and ONR, Will Be Secretary of Commerce

On 15 December, President Johnson announced the appointment of John T. Connor, president of Merck & Co., Inc., a major U.S. ethical drug firm, to succeed Luther Hodges as Secretary of Commerce.

Connor, who describes himself as a "liberal businessman," attracted attention late last year when he played a leading role in the formation of the National Independent Committee for Johnson-Humphrey, a bipartisan association of top business executives who supported the Democratic ticket. The largely Republican drug industry, haunted by the ghost of Democratic Kefauver, was amazed by this action, particularly because Merck was one of the companies used as an example by the Kefauver investigators in 1959–60. But though Connor suffered several unpleasant moments as Kefauver probed into the prices and the advertising claims of some of his company's products, he was one of the few industry executives who ultimately announced themselves in favor of government regulation.

If industry's reaction to Connor's role in the campaign was incredulous, it was also restrained. The same cannot be said for various physicians throughout the country who regarded his efforts to elect a Democrat as so perfidious that, for a while, they made sporadic attempts to organize a boycott of Merck products.

Pharmaceutical reaction to Connor's appointment is one of jubilation. As Secretary of Commerce, Connor will have jurisdiction over one major area of interest to the drug houses, the Patent Office, and over certain other activities, such as overseas sales. Commerce has no authority over the licensing of drugs for domestic sale, over evaluation of drug safety and efficacy, or over drug advertising. All these activities are regulated by the Food and Drug Administration in the Department of Health, Education, and Welfare.

Apart from his links with the pharmaceutical industry, Connor, a lawyer with a B.A. from Syracuse and a law degree from Harvard, has also been associated with several government scientific enterprises. During World War II he was general counsel to the Office of Scientific Research and Development (OSRD), the agency which led the government into its still-growing involvement with science, and became closely associated with OSRD chief Vannevar Bush. After the war he became counsel to the Office of Naval Research and later was special assistant to Navy Secretary James Forrestal. In 1947 Connor joined Merck as general attorney, holding several executive offices until he became president in 1955. Partly at Connor's urging, Vannevar Bush also became associated with the firm, first as a director (in 1949), then, from 1957 until his retirement in 1962, as Chairman of the Board. It is felt in Washington that Connor's long connections with scientific activities will make him a sympathetic and knowledgeable administrator of the many scientific enterprises of the Department of Commerce. These include the Weather Bureau, the Coast and Geodetic Survey, the National Bureau of Standards, the Bureau of the Census, and the Patent Office.

-Elinor Langer

Announcements

The University of Saskatchewan has officially opened its new Linear Accelerator Laboratory. The Laboratory contains a linear electron accelerator with 140 Mev maximum unloaded energy, and a mean current of 200 microamperes at 100 Mev. L. Katz is the Laboratory's director.

The Carnegie Institute of Technology, Pittsburgh, has announced the establishment of a **Center for the Study of Information Processing**, financed by a contract of over \$3 million from the Advanced Research Projects Agency of the Department of Defense. The Institute is directed by Alan Perlis.

The American Council on Education, Washington, D.C., has announced the establishment of a training program for college administrators. Financed by a 5-year \$4,750,000 grant from the Ford Foundation, the program will provide "on the job" and related educational experiences to prospective administrators. ACE plans to request presidents of colleges and universities to nominate prospects for the program; participants will receive stipends equal to their current salary, and travel and moving allowances for their families. The project will be directed by Lanier Cox, on leave from his position as vice-chancellor of the University of Texas. (ACE, 1785 Massachusetts Avenue, NW, Washington, D.C. 20036)

Meeting Notes

The American Mathematical Society's annual meeting will be held 26-30 January, in Denver. The Society will meet in conjunction with the Mathematical Association of America (28-30 January), the Association for Symbolic Logic (27 January), and a regional meeting of the National Council for Teachers of Mathematics (30 January). Areas to be covered include differential geometry, differential topology, function algebras, ordinary differential equations, and rings of operators and group representations. D. H. Lehmer, professor at the University of California, Berkeley, will deliver the 38th Josiah Willard Gibbs Lecture on 26 January. (AMS, 190 Hope Street, Providence, Rhode Island 02906)

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The 39th National **Colloid Sympo**sium will be held at Potsdam, New York, in June. It will be sponsored by the American Chemical Society's division of colloid and surface chemistry, and will cover all aspects of colloid chemistry. Papers are now being solicited for the symposium; deadline for submission of completed papers: *1 February*. (E. Hutchinson, Department of Chemistry, Stanford University, Palo Alto, California)

A call for papers has been issued for a Conference on Nuclear Radiation Effects, 12-15 July, at Ann Arbor, Michigan. The conference will be sponsored by the Institute of Electrical and Electronics Engineers. General topics to be covered include the areas of theoretical and experimental nuclear radiation effects on materials, components, circuits, and systems from steady-state, space-pulsed, or charged-particle radiation; combined environments; dosimetry; and methods of evaluating, predicting, and presenting radiation effects data. Deadline for 200- to 400-word abstracts and titles: 1 February. (S. C. Rogers, Radiation Effects Department, 5312, Sandia Corporation, Albuquerque, New Mexico)

A 2-day advanced symposium will be included in a week-long conference on gas chromatography sponsored by the University of California Extension. It is scheduled 1-5 February, and will be held at the University of California, Los Angeles. "Progress in Gas Chromatography" will be discussed at the symposium, 1–2 February. Rounding out the week will be a course on "Fundamental Principles of Gas Chromatography," 3–5 February. The course will be nonmathematical, and will stress theory only to the extent necessary to understand the practical aspects of the field. (H. L. Tallman, Physical Sciences Extension, Room 6532, Engineering Building, U.C.L.A., Los Angeles, California 90024)

"The Challenge of Change" will be the theme of the Society of Automotive Engineers' National Aeronautic and Space Engineering meeting, 4–8 October, in Los Angeles. The meeting is on a broad range of topics in space technology and operations. Deadline for 25- to 50-word abstracts: 15 January. Abstracts must be submitted on SAE forms. (C. C. King, Chairman, Program Planning Committee, SAE Western Branch Office, 999 North Sepulveda Boulevard, El Segundo, California 90245)

"Testing and Evaluation of Information Systems" will be the theme of the seventh institute on Information Storage and Retrieval. Scheduled 1-4 February in Washington, D.C., the institute will be sponsored by the American University. Major areas to be discussed include value engineering in information systems; indexing methodologies, manual and machine; abstracting techniques, manual and machine; search strategies; implications of business record and data systems for scientific and technical information systems; command and control systems, military and nonmilitary; total scientific and technical information systems; and gaps in testing technology. The registration fee of \$175 includes background materials, and daily luncheon. (P. W. Howerton, Director, Center for Technology and Administration, American University, 2000 G Street, NW, Washington, D.C.)

The University of California Extension, in conjunction with Informatics, Inc., will sponsor a 3-day symposium on on-line computing, 2-4 February, at U.C.L.A. The symposium will discuss on-line systems in which response times are measured in milliseconds, such as in military satellite control systems and radar tracking and recording systems, and those computer systems to which a number of interrogation and display devices are connected, such as in military command and control systems, and various commercial systems. Principles, disciplines, and practices in machinery and programming will also be covered. (T. Kramer, U.C. Engineering Extension, U.C.L.A., Los Angeles, California)

Courses

The Marine Biological Laboratory at Woods Hole, Massachusetts, will offer a research training program in fertilization mechanisms and gamete physiology during the summer of 1965. The program will emphasize current research problems exemplified by marine invertebrates. Predoctoral and postdoctoral fellowships at stipends of \$600 and \$1800, respectively, are available. Deadline for applications: *1 February*. (Charles B. Metz, Institute of Molecular Evolution, University of Miami, 521 Anastasia Avenue, Coral Gables, Florida) The University of California, Los Angeles, has scheduled three courses in current and future practices in the **uses and fabrication of metals** during its spring semester, 1965, as follows:

1) "Powder Metallurgy," scheduled 1-5 February, will focus on basic principles and powder metallurgy in space, and nuclear technologies;

2) "Fundamentals in Metal Forming," 8–12 February, will investigate explosive and magnetic methods and basic principles; and

3) "Mechanical Behavior of Fibrous Composite Metals," 26–30 April, will stress fiber-reinforced materials. The courses are being presented by the University of California Extension in cooperation with the American Society for Metals. (University of California Engineering Extension, U.C.L.A., Los Angeles, California 90024)

Grants, Fellowships, and Awards

The school of forestry at Yale University has announced the availability of scholarships, fellowships, and assistantships in **forestry** to students in masters or doctoral programs for 1965–66. Scholarships will cover the cost of tuition, fellowships will carry grants up to \$2000, and student assistants will earn from \$850 to \$2700 during the school year, with an additional stipend for summer work. Deadline for applications: *1 February*. (Registrar, Yale School of Forestry, 205 Prospect Street, New Haven, Connecticut)

The University of Chicago's Graduate Library School has announced the availability of fellowships for the 1965-66 academic year in librarianship and information science. Approximately 15 fellowships and scholarships are open, carrying stipends up to \$4000. In addition both predoctoral and postdoctoral training stipends for medical librarianship may be awarded; postdoctoral stipends will carry amounts to \$6500. A bachelor's degree, or its equivalent, is required for admission to the school. Deadline for applications: 1 February. (Dean of Students, the Graduate Library School, University of Chicago, Chicago, Illinois 60637)

The Harbor General Hospital at U.C.L.A. has announced the availability of 1-year postdoctoral fellowships in **reproductive physiology** for the year beginning 1 July 1965. The program,

sponsored by the U.S. Public Health Service and the Ford Foundation, is designed to stress an interdisciplinary approach to the biology of early reproduction, from spermatogenesis through implantation, and includes programs in electron microscopy, biochemistry, and primate physiology. Basic research on the physiology, biochemistry, metabolism, pathology, and ultrastructure of reproductive tissues is emphasized. Candidates under 35 years of age are preferred. Fellows supported by the USPHS must be U.S. citizens or have permanent resident status; however, U.S. citizenship is not required for fellows supported by the Ford Foundation. Deadline for applications: 1 February. (L. Fridhandler, Department of Obstetrics and Gynecology, Harbor General Hospital, Torrance, California)

The University of Minnesota has announced the availability of fellowships for biological scientists in photochemistry and energy-conversion processes for the 1965 academic year. Junior fellowships carry a stipend of \$6667 for 12 months, and senior fellowship stipends will equal the total professional income of the fellow. Research areas available include: visible, ultraviolet, and infrared spectroscopy, including applications to biological systems; photochemical reactions and photosensitization; optical rotatory dispersion; fluorescence of small and large molecules; energy transfer and conversion in photosynthesis; triplet-state reactions and luminescence; chemiluminescence: electron paramagnetic resonance; and nuclear magnetic resonance and relaxation. Applications are open to U.S. citizens who are professional biological scientists in any type of organization. Deadline for applications: 31 January. (Rufus Lumry, Chemistry Department, University of Minnesota, Minneapolis 55455)

The New York Academy of Medicine has announced the establishment of two annual "Ferdinand C. Valentine Fellowships" in **urology** for 1965–66. They are open to candidates who have completed the required amount of training specified by the American Board of Urology, and who are recommended by a member of the section on urology of the NYAM. It is preferred that candidates have worked under the direct supervision of the member for at least 1 year. Preference, in the case of two candidates with equal qualifications, will be given to the person

who has received urological training in the New York metropolitan area. Stipends will range from \$7,000 to \$10,000 per year for the period 1 July to 30 June. Deadline for receipt of applications: *I February*. (Meyer M. Melicow, Columbia University, College of Physicians and Surgeons, 630 West 168 Street, New York 10032)

Sigma Delta Epsilon, graduate women's scientific fraternity, has announced the availability of a \$500 grant-in-aid. It is open to any woman who holds a degree from a recognized institution of higher learning and "has demonstrated outstanding ability and promise in research in one of the mathematical, physical or biological sciences." The period of the grant is for one calendar year, and the stipend may be applied either to the research project, or to course work relevant to the research program. Preference will be shown to applicants 35 years of age or older; however, the limitation is not an absolute one. Deadline for applications: 1 February. (Lura M. Morse, School of Home Economics, University of Minnesota, St. Paul 55101)

Scientists in the News

Jonathan W. Uhr, director of the Irvington House Institute for Rheumatic Fever and Allied Diseases, and associate professor of medicine at New York University's School of Medicine, has won the 1964 AAAS Newcomb Cleveland Prize. The prize includes an award of \$1000, together with a medal which is being awarded for the first time. The prize is given annually, for an outstanding scientific contribution, to the author of a paper given at the previous year's AAAS meeting, and reporting for the first time results obtained primarily from the author's own research. Uhr's paper was titled "The heterogeneity of the immune response."

Peter Gray, chairman of the University of Pittsburgh's department of biology, has been appointed to the Andrey Avinoff Professorship in the department.

Hiroshi Kuida has been appointed director of the cardiovascular division of the department of medicine of the University of Utah College of Medicine. Kuida, who has been associate

professor of medicine, replaces **Hans H. Hecht**, who has resigned to join the faculty at the University of Chicago.

At the Massachusetts Institute of Technology:

Robert I. Hulsizer, Jr., former professor of physics at the University of Illinois, has been appointed professor of physics, and director of the Science Teaching Center;

Icko Iben, Jr., has become associate professor of physics. He was formerly senior research fellow at the California Institute of Technology.

Recent Deaths

Hugo L. Blomquist, 76; professor emeritus, department of botany, Duke University; 28 November.

Leonard Engel, 48; science and medicine author, and editor of a new edition of Darwin's *The Voyage of the Beagle*, and of a volume, *New Worlds of Modern Science*; 6 December.

Lockwood W. Ferris, 69; metallurgist and former president of Bonneville Ltd., developer of processes for lithium extraction and potash drilling; 9 December.

Paul Gibbons, 44; professor of dentistry, University of Michigan; 1 November.

Carl B. Harper, 70; special consultant to the Justice Department in aeronautical engineering; 7 December.

Thomas W. Martin, 83; chairman of the board of the Alabama Power Company, and founder of the Southern Research Institute; 8 December.

Charles Ellis Miller, 51; associate director of the University of Washington's applied physics laboratory; 9 December.

Mary D. Rogich, 58; professor of biology, College of New Rochelle, New York; 26 October.

Evelyn Carroll Rusk, 64; professor and chairman of the mathematics department, Wells College, Aurora, New York; 5 December.

Col. Lawrence R. St. John, 51; director of adult education at the W. W. Holding Educational Center, a unit of the North Carolina community college program in Raleigh; 2 December.

Charles H. Sisam, 85; retired head of the mathematics department at Colorado College; 4 December.

Edward P. Stamm, 72; president of the American Forestry Association; 6 December.