Announcements

A symbol identifying the drugs included under the Drug Abuse Control Amendments will appear on **amphetamine and barbiturate products** packaged after 1 September, according to the Food and Drug Administration. The symbol must "be placed prominently on packages and labels so that wholesale and retail handlers, as well as physicians, can immediately recognize those products to be under the control of the Amendments."

When FDA orders additional drugs to be included under the provisions of the amendments, it will publish a notice in the *Federal Register* 60 days before the order goes into effect. Interested persons will have a month to file objections and to request a public hearing. Generally, the drugs must be packaged with the symbol within 180 days of the effective date.

Additional information is available from the new Bureau of Drug Abuse Control, established within the FDA to handle the compliance aspects of the amendments.

The National Academy of Sciences and the National Academy of Engineering have established the Committee on **Scientific and Technical Communication**, at the request of NSF. The committee is to "provide a focus for participation by scientists and engineers through their societies in the consideration of plans for a national network of information systems." It will make recommendations both to private organizations and federal agencies on how to maintain effective communication in the various fields of science and technology. The particular concerns will center about improving information transfer and promoting more effective relationships between information systems and their principal producers and users.

Chairman of the committee is Robert W. Cairns, director of research at Hercules Powder Company, Wilmington, Delaware. The executive secretary is F. Joachim Weyl, who has resigned as chief scientist in the Navy Department's Office of Naval Research to join the NAS as special assistant to the president. The other members are:

G. E. Holbrook, E. I. duPont de Nemours and Company

J. C. R. Licklider, IBM

C. H. Linder, General Electric

H. W. Magoun, UCLA

N. M. Newmark, University of Illinois

W. H. Pickering, Jet Propulsion Laboratory

B. Riegal, G. D. Searle and Company

W. C. Steere, New York Botanical Garden

J. W. Tukey, Princeton University

M. A. Tuve, Carnegie Institution of Washington

Paul Weiss, University of Texas

W. B. Wiley, John Wiley and Sons

Van Zandt Williams, American Institute of Physics

A 2-year program leading to the associate degree in **civil engineering technology** will be offered at Michigan Technological University beginning this fall. The curriculum is designed to train personnel to perform semiprofessional and scientific functions on the job, with minimal supervision from an engineer or scientist. Consequently, emphasis in the program will be on the applications of basic scientific and engineering principles, and students will spend 40 to 50 percent of their time in engineering graphics or laboratory-type courses. Thus they will have four to five times as many technical courses during the 2 years as candidates for the bachelors degree will have during the same period. High school graduates with 3 years of English and a strong background in mathematical subjects may be eligible. Applications and additional information are available from the Office of the Registrar, Michigan Technological Univeristy, Houghton 49931.

Publications

The Southern Regional Education Board has published a brochure listing **graduate courses in statistics** that will be offered this summer at 22 member institutions. The booklet includes the course titles, dates, and faculties. Fees and admissions procedures for the summer sessions vary among the universities and details must be obtained from the program directors. Copies of the brochure may be obtained in "reasonable quantity" at no charge from SREB, 130 6th Street N.W., Atlanta, Georgia, or from any of the participating universities.

A bibliography of physical, meteorological, and operational aspects of **air turbulence** has been released by the Cornell-Guggenheim Aviation Safety Center. The first part of the booklet consists largely of reports by NASA and other scientific groups up to 1964; the second part is made up of reports and articles published in 1964 and 1965. (The Center, 468 Park Avenue South, New York 10016. $1)

A summary of recent developments made under **AEC-sponsored research** programs has been released by the commission. The report, a supplement to the AEC's annual report to Congress, covers work in biology and medicine; physical, chemical, metallurgical, and controlled thermonuclear research; and nuclear reactor development and safety. (*Fundamental Nuclear Energy Research, 1965*. Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. 326 pages; $2.25)

Films

Sea River (sound, color; 14 minutes; free loan). Techniques used in obtaining scientific measurements of the Amazon River by U.S. Geological Survey hydrologists during 1963–1964. (Information Office, USGS, Washington, D.C. 20242)

The Data Processing Management Association has compiled a booklet describing nearly 100 films on **data processing** systems and automation. The films are available, most of them free of charge but some on a rental basis, from equipment manufacturers or independent producers. (DPMA, 524 Busse Highway, Park Ridge, Illinois 60068. 50 cents)

The Challenge of Change (sound, color; 20 minutes; $150) Activities of the library profession; designed to help recruit college juniors and seniors for careers in librarianship. (W. W. Matthews & Co., 130 Seventh St., Pittsburgh, Pa.)

Courses

A course in **comparative pathobiology** will be held in Aspen, Colorado, 8–17 August. The first week will cover recent advances in nucleic acids, pro-

teins, lipids, carbohydrates, and ultrastructure. The second week will be devoted to studies of control mechanisms, including feedback and allosteric inhibition, repression, and induction inhibition. Registration will be limited to 75 advanced graduate students and senior investigators. A few partial scholarships are available. (Donald W. King, Department of Pathology, University of Colorado Medical Center, 4200 E. Ninth Avenue, Denver 80220)

A course in practical **astrodynamics** will be presented 11–22 July at UCLA. It is designed for scientists, research workers and managers, faculty members, and graduate students. The course will treat fundamental concepts, with emphasis on the astrodynamic constants and on applications. Fee for the course is $300. (R. E. Garrels, Physical Sciences Extension, UCLA, Los Angeles 90024)

Massachusetts Institute of Technology will present an introductory course on **probabilistic systems** 7–15 July. The program will focus on providing an understanding of methods used for analyzing systems which must be described by probabilistic methods. Participants must have a mathematical background through second-year calculus. Tuition: $350. (Director of the Summer Session, Room E19-356, MIT, Cambridge 02139)

Biological electron microscopy will be the subject of a course presented 8–19 August at the University of California electron microscope laboratory in Berkeley. Participants may choose a core program in the basic techniques, or a program of advanced work in different areas of interest such as botany, zoology, and virology. Tuition will be $300; three units of credit may be earned. (Letters and Science Extension, University of California, Berkeley)

Meeting Notes

The Society of **Engineering Science** will hold its technical meeting 31 October to 2 November at North Carolina State University, Raleigh. Papers are invited on mathematical or experimental research in coupled regions of mechanics, electricity and magnetism, thermodynamics, physical chemistry, and biomechanics. Deadline for papers, in triplicate: *1 August*. (A. C. Eringen, School of Aeronautics, Astronautics and Engineering Science, Purdue University, Lafayette, Indiana 47907)

Fairleigh Dickinson University will present a workshop on **fine particle properties** 11–15 July. Topics to be covered include the size, shape, distribution, surface area, and porosity of fine particles; various aspects of theory, methodology, and applications; and instrumentation. Tuition will be $125; dormitory room and board, $65. (Saul Gordon, Thermoanalysis Institute, Fairleigh Dickinson University, Madison, New Jersey)

A conference on **engineering in medicine and biology** will be held 14–17 November in San Francisco. The topics to be covered include biomechanical engineering, artificial organs, blood flow, biological control modeling, biomedical engineering education, and physiological feedback concepts. Sponsors: Institute of Electrical and Electronics Engineers, Instrument Society of America, with the American Society of Mechanical Engineers participating. Deadline for papers: *15 August*. (Dennis Le Croisette, Jet Propulsion Laboratory, California Institute of Technology, Pasadena 91103)

The Nutrition Research Institute of Oregon State University will sponsor an international symposium on **selenium in biomedicine**, 6–8 September, in Corvallis. The topics to be covered include distribution of selenium in soils, plants, and animals; analytical methods for determining its presence in relatively gross amounts and in microamounts; toxicity; nutritional requirements; therapeutic response; pathologic aspects in toxicity and deficiency; and biochemical relationships to enhancing and antagonizing substances. (O. H. Muth, Dryden Hall, Oregon State University, Corvallis 97331)

An international conference on the properties of **liquid metals** will be presented at Brookhaven National Laboratory, 19–23 September. Papers are solicited on the major topics: scattering from liquid metals, thermodynamic properties, mass and electron transport, electron states in liquid metals, and the general relationship between metal and liquid state theory. Sponsors are the U.S. Atomic Energy Commission and the International Union of Pure and Applied Physics. Abstracts: 200 words. (N. E. Cusack, School of Mathematics and Physics, University of East Anglia, Norfolk, England; Arthur Paskin, Metallurgy and Materials Science Division, Brookhaven National Laboratory, Upton, New York)

Grants, Fellowships, and Awards

The University of Colorado's recently established **Institute for Developmental Biology** will accept its first doctoral students this fall, for work with primary emphasis on heredity, developmental biology, cellular biology, or biochemistry. A limited number of stipends are available for students with bachelors degrees in biological or physical sciences. In addition, opportunities are available for postdoctoral fellows, research associates, and visiting professors. Information may be obtained from the Institute, University of Colorado Graduate School, Boulder 80302.

Scientists in the News

Ralph S. Holloway, chairman of sociology and anthropology at Wisconsin State University, will become professor and chairman of the department of sociology and anthropology at the University of Bridgeport, in September.

Jack K. Carlton, former dean of the college of sciences at Louisiana State University, New Orleans, has become professor of chemistry and dean of the faculties of arts and sciences for the University of West Florida. The university, under construction in Pensacola, will admit its first class of juniors in September 1967. It will be a coeducational, upper division institution, operating within the state university system.

Walter J. Burdette, head of the department of surgery at the University of Utah, has been appointed professor of surgery and associate director for research at the University of Texas, M. D. Anderson Hospital and Tumor Institute.

The University of Rochester has appointed **Elliott Waters Montroll** as Einstein professor of physics, effective 1 September. He is now vice president for research of the Institute for Defense Analyses, Arlington, Virginia, and editor of the *Journal of Mathematical Physics*.

Richard C. Lewontin, professor of zoology at the University of Chicago, has become associate dean of the university's division of biological sciences. He will be concerned mainly with the administrative and development aspects of the basic science departments in the division.

Mario J. Goglia, dean of the graduate division at Georgia Tech, has been appointed to the recently established post of vice chancellor for research, for the University System of Georgia, effective 1 July.

The Geologic Society of London will present its highest award, the Wollaston medal, to **Francis P. Shepard**, professor of submarine geology at the University of California's Scripps Institution of Oceanography. The award cites him for "distinguished researches in sedimentology and submarine geomorphology and the light they throw on the problems of ancient rocks."

Patricia L. Milic, formerly senior research meteorologist with Stanford Research Institute, has become professor of mathematics at South Dakota State University.

Harold S. Johnston has been appointed dean of the college of chemistry at the University of California, Berkeley, where he has been a professor of chemistry since 1957.

Warren H. Wagner, Jr., of the University of Michigan, has been elected president of the American Society of Plant Taxonomists.

Gunnar Källén, professor at the University of Lund (Sweden) will be at the State University of New York at Stony Brook in June, July, and August as distinguished visiting professor of theoretical physics.

Wesley J. Dale, on leave from the University of Missouri, Columbia, to head the evaluation group for the NSF science development program, has been named dean of the school of graduate studies and professor of chemistry at the University of Missouri, Kansas City. The appointment is effective 1 September.

J. E. van der Plank, chief of the Plant Protection Research Institute, Pretoria, South Africa, is distinguished visiting professor in the department of plant pathology, Pennsylvania State University. His visit started 1 April and will last until 30 September.

Francis A. J. Ianni, formerly deputy commissioner of the Bureau of Research in the U.S. Office of Education, has become director of the division of educational institutions and programs, and professor in the department of higher and adult education of Teachers College, Columbia University.

George S. Benton, chairman of the department of mechanics at Johns Hopkins University, in July will become director of the Environmental Science Services Administration's Institutes for Environmental Research, in Boulder, Colorado.

Ray W. Guard, formerly at North American Aviation Science Center, Thousand Oaks, California, has become head of the department of metallurgical engineering at Michigan Technological University. He replaces **R. L. Smith**, who became the university's president last vear.

John Troan, science writer for the Scripps-Howard Newspaper Alliance in Washington since 1958, has become an associate editor of the Pittsburgh Press; his work will center primarily on the scientific and technological fields. He had been a science reporter for the Pittsburgh newspaper for several years after World War II.

Peyton Rous, member emeritus of Rockefeller University, has received the Paul Ehrlich and Ludwig Darmstaedter prize, West Germany's highest medical award. The prize is 100,000 marks ($25,000), half of which was presented to Rous; the other half will be given to scientists chosen by a committee from among persons nominated by Rous. The prize is donated by the West German government.

REPORT FROM EUROPE

Cabinet Reshuffle Changes Italy's Science Minister

London. Senator Carlo Arnaudi, the socialist microbiologist who has been minister for science since the Italian center-left coalition created the job at the time of its own inception in late 1963, was eliminated in the recent reshuffle of Premier Aldo Moro's cabinet.

Behind Arnaudi's departure lay a broken promise—the promise to turn the science ministry into a genuine instrument for coordinating Italian government research and development activity so that it could be administered on fast-moving, rational lines. The ministry is now merely an oratorical platform, one of several ministries without portfolio which are used to maintain the coalition's complex balance. But when the Moro coalition took office, the premier promised to give the ministry strong powers over scientific spending and direct supervision of atomic energy, space, and basic research.

In accordance with this promise, a law was drafted to give real powers to what has been called "the phantom ministry of the Piazza della Minerva." But the draft never became law, and Arnaudi was left to conduct what propaganda he could for its passage. He was often interviewed in the press, and he held a special press conference for Italian journalists at the recent Paris meeting of science ministers held by the Organization for Economic Coordination and Development.

Arnaudi kept arguing that the proposed strong Italian ministry for sci-