

Announcements

A **Hiroshima Institute of Peace Science** has been established at the University of Hiroshima which will serve as a clearing house for scientific knowledge on the problem of world peace. The institute plans to maintain an international library of peace science, containing analyses and translations of documents and research papers relating to the bombing of Hiroshima, and to sponsor visiting scientists. Financial support will be dependent on individual and group donations, on a world-wide basis. (Earle Reynolds, Department of Political Science, University of Hiroshima, Hiroshima, Japan)

Copies of reports and articles related to **medical education abroad** are being solicited as an initial step in establishing an Information Center on International Medical Education. (Division of International Medical Education, Association of American Medical Colleges, 2530 Ridge Ave., Evanston, Ill.)

In late February a fire at the **University of Montreal** Institute of Experimental Medicine and Surgery destroyed the reference system for what was considered the most complete library in existence on endocrinology and stress. The index system, developed over a 30-year period, contained some 2 million entries covering scientific journals, research papers, and copies of documents. Less than half of the 400,000 items, including century-old books, could be salvaged.

Hans Selye, director of the institute, who developed the index system, estimated that restoration of the library would require \$250,000 and a year's work by 20 people. It is hoped that much of what the library contained will be available in printed form or microfilm from those scientists who referred to the library or secured abstracts of its records.

Seventy-one papers on **naval research**, presented at the 5th Navy Science Symposium (Annapolis, Md.; 18-20 Apr. 1961), are available in a three-volume report. (Office of Technical Services, U.S. Department of Commerce, Washington 25, D.C.)

Scientists interested in research on **radiation energy** in the production of plastics and chemicals, cold sterilization

of drugs and medical supplies, and preservation of perishable foods, are invited to use the facilities of the U.S. Atomic Energy Commission's Radiation Development Center, recently established at Brookhaven National Laboratory, Upton, N.Y. The center is expected to be in operation by mid-1962. (B. Manowitz, Chemistry and Chemical Engineering Division, BNL, Upton)

A collection of articles on new **Soviet medical instruments**, translated from a Soviet medical journal, is available through the U.S. Department of Commerce. The collection describes an amplifying electronic stethoscope, a pulse-generating stimulator, and a medical electric hygrometer. (Office of Technical Services, Department of Commerce, Washington 25, D.C. \$0.75. Order 62-11131)

The Naval Research Laboratory has compiled a bibliography of material bearing on the sources of **creativity in the physical sciences**. The publication covers references to characteristics, measurement, environment, education and training, and management. (Office of Technical Services, Department of Commerce, Washington 25, D.C. \$3. Order AD-265-477)

Poems or short compositions about scientists' research or study projects are being solicited for inclusion in a proposed anthology. Both serious and humorous treatments will be welcome. (Herman S. Forest, Biological Laboratories, University of Rochester, Rochester 20, N.Y.)

Grants, Fellowships, and Awards

National Science Foundation support is available to college and university professors in diverse areas of biology who wish to participate in an advanced seminar and research program in **fundamentals of tropical biology**, to be held at the University of Costa Rica during July and August. Applicants should have had at least 3 years of college teaching; research participants will be expected to have had previous tropical experience. Selected candidates will receive tuition, \$10 per diem subsistence, and travel allowance.

Applications for either the seminar (2 July-17 Aug.) or research program (2 July-31 Aug.) should be accompanied by a curriculum vitae, a general

description of interests, and reasons for wishing to participate. Deadline: *30 March*. (J. M. Savage, Dept. of Biology, University of Southern California, Los Angeles 7)

Small grants-in-aid for research in **wildlife conservation** or related fields of North American natural history are available through the Theodore Roosevelt Memorial Fund, established by the American Museum of Natural History. Preference will be given to graduate students and younger scientists. Deadline: *15 April*. (Director, American Museum of Natural History, Central Park West at 79 St., New York 24)

Courses

A 2-week intensive course in **neuromuscular diseases of children**, with special emphasis on cerebral palsy, will be presented in Chicago from 11 to 22 June. The course, for M.D.'s, will stress the clinical aspects of treatment and rehabilitation. Tuition is \$285. (John W. Neal, Cook County Graduate School of Medicine, 707 S. Wood St., Chicago, Ill.)

A 1-year course in **radiological physics**, leading to the M.S. degree, is being offered by Columbia University's College of Physicians and Surgeons. The course, designed to prepare candidates for positions as physicists in hospital departments of radiology, will also provide a foundation for prospective researchers in radiological physics, radiation protection, and dosimetry. Applicants must have a bachelor's degree, a major or strong minor in physics, and background in general chemistry and biology.

A limited number of scholarships, covering tuition and allowances, will be awarded; preference will be given to candidates sponsored by public health agencies. (W. Gross, 630 W. 168 St., New York 32, N.Y.)

The following intensive reading courses will be offered at Syracuse University from 4 to 16 June and 4 to 14 September:

Natural Science. Designed to present science, with its potentialities and limitations, as a reasoned inquiry into nature. Applicants (nonscience majors only) must have had 2 years of college, including a year of mathematics or natural science.

Social Science. Emphasis on the application of knowledge and techniques on a single problem or phenomenon.

Cost of each course is \$325, covering tuition, board, and room. (Edward Warren, Philosophy Department, Syracuse University, Syracuse 10, N.Y.)

The following related courses in **infrared spectroscopy** will be offered at the University of Minnesota:

Techniques of infrared spectroscopy: 10–14 July. Covers basic optics and instrument theory, instrument design, sample preparation, and laboratory techniques exploiting modern instruments and accessories.

Chemical interpretation of infrared spectra: 16–20 July. Covers the group frequencies useful in chemical diagnosis and structure determination, and the practical use of infrared work.

Participants should have basic training in chemistry and physics. Enrollment for each course is limited. (Director, Center for Continuation Study, University of Minnesota, Minneapolis)

Meeting Notes

A seminar in **animal-sediment interrelationships**, sponsored by the Bermuda Biological Station and Lehigh University, will be held at the Station from 1 August to 8 September. National Science Foundation fellowships are available to geology and biology students who have a minimum of 1 year's graduate work. Deadline: *10 April*. (K. E. Chave, William Hall, Lehigh Univ., Bethlehem, Pa.)

An international conference on **medical motion pictures and television as media for medical education** will take place from 25 to 27 April in Milan, Italy. (Leo L. Leveridge, Medical Television Unit, New York University Medical Center, 550 First Ave., New York 16)

The U.S. Public Health Service has launched a series of seminars on **viral hepatitis** to review available information on the identification, prevention, and control of the disease. The seminars, the first of which was held in Alabama on 2 March, will take place in San Juan, Puerto Rico (6 Apr.); Tucson, Ariz. (19 Apr.); Atlanta, Ga. (1 May); Des Moines, Iowa (4 May); Thermopolis, Wyo. (6 May); Salt Lake

City (8 May); Toledo, Ohio (8 May); Jefferson City, Mo. (16 May); Huntington, W.Va. (6 June); and Madison, Wis. (20 June).

Hepatitis, with over a thousand cases occurring every week, is now ranked third among the communicable diseases reported to the PHS. The 73,000 cases in 1961 represented an all-time high—a 46-percent increase over the previous high year of 1954.

The 3rd international **space science symposium** will be held in Washington, D.C., on 1, 2, 3, 7, and 8 May. Sessions will be devoted to upper atmosphere and exosphere of the earth and relationship to solar disturbances, the sun and the interplanetary medium, the moon and planets, galactic and extra-galactic astronomy, life sciences, and technologies of space research. (Secretary, Committee on Space Research, 28 Nieuwe Schoolstraat, The Hague, Netherlands)

The University of Arizona will sponsor a 6-week **engineering study tour** in Europe, beginning 27 June. The tour will include visits to educational institutions, research laboratories, and industrial arts centers in England, Netherlands, Germany, Austria, Switzerland, Italy, and France. Participants, limited to 30, will be required to submit a final written report within a year after the tour to qualify for course credits. (Benjamin S. Mesick, Mechanical Engineering Department, University of Arizona, Tucson)

Papers are being solicited for presentation at the 9th Ottawa (Can.) Symposium on **Applied Spectroscopy** (17–19 Sept.). Deadline for submission of titles and brief abstracts: *5 June*. (Ben Farrar, J. T. Donald & Company, Ltd., 1181 Guy St., Montreal 25, Quebec, Canada)

Argonne (Ill.) National Laboratory is offering a summer course on **methods in radiation biology**, to be held from 25 June to 20 July. Applications—a limited number of which will be accepted—should be accompanied by a brief curriculum vitae. Deadline: *21 May*. (John F. Thomson, Division of Biological Research, ANL, 9700 S. Cass Ave., Argonne, Ill.)

The Illinois Institute of Technology is offering a beginning and an advanced course in **x-ray diffraction**

analysis, to be held from 4 to 8 June and 11 to 15 June, respectively. The beginning course covers diffraction methods in the analysis of polycrystalline materials; the advanced course provides background necessary for analysis of complex problems. (Leonid Azaroff, IIT, Chicago 16)

Recordings

Sounds of Medicine; 12-inch, long-play, \$5.95 (order No. SLR40). Recorded on location. Contains operation; supervised surgical removal of a cyst; stethoscope sounds; normal and rheumatic heart and lung sounds; and breath sounds.

Sounds of the Sea; 12-inch, long-play, \$5.95 (order No. SLR5). Sounds of fish species recorded by the U.S. Naval Research Laboratory in isolated tanks at varying depths in the Atlantic and Pacific Oceans.

9:34 A.M. May 5, 1961; 12-inch, long-play, \$3.98 (order No. SAR18). Count-down, blast-off, and other sounds of the Freedom-7 space voyage. (All of the above records are available from Curriculum Materials Center, 5128 Venice Blvd., Los Angeles 19, Calif.)

Scientists in the News

Winners in the 21st annual Westinghouse Science Talent Search:

Christopher G. Cherniak, 16, of Eau Gallie, Fla.; 1st prize, \$7500 scholarship.

Lewis B. Haberly, 17, of Severance, N.Y.; 2nd prize, \$6000 scholarship.

Joseph Eyer, 17, of Philadelphia; 3rd prize, \$5000 scholarship.

Jack S. Catlin, 17, of Miami, Fla.; 4th prize, \$4000 scholarship.

Leonard H. Gordy, 17, of Rome, N.Y.; 5th prize, \$3000 scholarship.

Cash awards of \$250 were presented to 35 other finalists, selected from 23,000 U.S. high school seniors who entered the competition.

Paul L. Day, former professor of biochemistry at the University of Arkansas School of Medicine, has joined the staff of the National Heart Institute.

Recipients of the National Civil Service League's career service awards include:

Howard Andervont, editor of the

Journal of the National Cancer Institute.

William Godel, deputy director of the Defense Department's Advanced Research Projects Agency.

Abe Silverstein, director of National Aeronautics and Space Administration's Lewis Research Center, in Cleveland, Ohio.

Arthur L. Smith, former head of the Rohm & Hass Laboratory for application research, has been appointed manager of the new products research division at Burns & Russell Company, Baltimore, Md.

Robert P. Petersen, physicist and former president of Booz-Allen Applied Research, has been named president of Centech Corporation, a research and development firm recently established in Des Plaines, Ill.

Mones E. Hawley, a former manager with Radio Corporation of America's major systems division, has been appointed associate director of Planning Research Corporation's engineering division in Washington, D.C.

Recent staff appointments at Radio Corporation of America:

Edward Gerjuoy, of E. H. Plesset Associates in Los Angeles, has been named director of plasma and space-applied physics for the firm's defense electronic products.

Richard K. Brown, of the Institute for Exploratory Research at Fort Monmouth, N.J., has joined the staff of RCA's David Sarnoff Research Center in Princeton, N.J.

Seymour Levine, of the Institute of Psychiatry at Maudsley Hospital, London, has been appointed associate professor of psychology at Stanford Medical Center.

Paul V. Maney, director of scientific research at Pharmich Laboratories, a division of Michigan Chemical Corporation, has been named professor of industrial pharmacy at St. Louis (Mo.) College of Pharmacy.

Russell S. Poor, provost of the University of Florida's Miller Health Center, has been named director of the U.S. Atomic Energy Commission's recently established Division of Nuclear Education and Training. Poor will serve on a part-time basis until June.

John R. Barry, former associate professor of psychology at the University of Pittsburgh College of Medicine, has been appointed research coordinator of health and rehabilitation services and professor of psychology at the University of Florida.

Frederick M. Bayer, former associate curator of marine invertebrates at the U.S. National Museum, has joined the University of Miami's Institute of Marine Science as an associate professor.

At National Aeronautics and Space Administration:

Edmund F. Buryan, former president of Motec Industries in Minneapolis, and **Arthur E. Raymond**, former senior vice president of engineering at Douglas Aircraft Company, have been appointed consultants to Administrator James E. Webb. Buryan will advise and assist in developing practical applications of NASA-developed technological advances; Raymond will be concerned with organization and management of advanced research and development programs.

Orr E. Reynolds, former head of the Department of Defense's Office of Science, will direct and establish new programs in bioscience research.

G. E. Boyd, assistant director of Oak Ridge National Laboratory, is serving as visiting professor in chemistry at Purdue during the 1962 spring semester.

Juergen Tonndorf, research professor of otolaryngology at State University of Iowa, will become professor of otolaryngology at Columbia University College of Physicians and Surgeons.

Robert M. Witucki, former senior scientist with Hoffman Electronics' Science Center, has been appointed director of research for Astro Research Corporation in Santa Barbara, Calif.

Theodosius Dobzhansky, professor of zoology at Columbia University, will resign in July to accept a professorship at the Rockefeller Institute. He plans to retain his association with Columbia as adjunct professor.

John F. Grayson, senior research palynologist at Socony Mobil Oil Company's research laboratory in Dallas, Tex., has accepted a position as re-

search group supervisor of palynology at Pan American Petroleum Corporation's research laboratory in Tulsa, Okla.

William B. Harris, former director of environmental sciences at the U.S. Atomic Energy Commission's Health and Safety Laboratory, has joined the engineering staff of Del Electronics Corp. in Mount Vernon, N.Y.

Eric T. B. Gross, of Illinois Institute of Technology, has been appointed to the recently established Philip Sporn Chair in electric power systems engineering at Rensselaer Polytechnic Institute.

K. Venkataraman, director of the National Chemical Laboratory at Poona, India, is visiting professor of chemistry at Purdue.

Maximilian G. Duman, recently appointed professor of biology at St. Vincent College in Latrobe, Pa., has been named president of the college.

Recent Deaths

A. Elizabeth Adams, 69; emeritus professor of zoology at Mount Holyoke College in South Hadley, Mass.; 15 Feb.

Walter E. Bullington, 61; zoologist and former chairman of the department of biology at Randolph-Macon College in Ashland, Va.; 11 Feb.

George N. Papanicolaou, 78; developer of the Pap test for cancer diagnosis and emeritus professor of clinical anatomy at Cornell Medical College; 19 Feb.

Hakon A. Wadell, 66; consultant and research geologist at New Haven, Conn.; 1 Feb.

Louis F. Woodruff, 65; former chief scientific consultant to the director of Army Intelligence; 24 Feb.

Harold G. Wolff, 63; Titzel professor of medicine at Cornell and director of neurological service at New York Hospital; 21 Feb.

Erratum. The statement made in the January 1962 *AAAS Bulletin* that "it takes only 5 roentgens to kill a pine tree" was based on misinformation. Reliable data indicate that on the contrary it takes about 500 roentgens to kill a pine seedling and something like ten times as much to kill a mature pine tree. Chronic exposures of 5 to 10 r/day continued for an average of 8 months per year for 9 years will kill a large percentage of pine trees, according to experiments conducted by Arnold H. Sparrow at the Brookhaven National Laboratory.