not provide an accurate picture of all Soviet nuclear medicine, Hasterlik pointed out that basic differences as well as similarities in the American and Soviet approaches could be seen at Geneva.

Soviet biologists have concentrated more on the effects of radiation on the central nervous system than have scientists in this country. They have also devoted much attention to the use of radioactive cobalt-60 in cancer therapy and are installing cobalt units in hospitals across the Soviet Union. They did not report on the use of radiocobalt in rotating therapy.

Soviet scientists have been working for at least 6 years on the use of radiophosphorus in the treatment of such diseases as leukemia and polycythemia vera. In addition, radioiodine is used to study the thyroid gland and radiosodium to measure the circulation time of blood.

More directly committed to practical ends, the Soviet scientists do not appear to be as active as U.S. scientists in the uses of radioisotopes as tracers in studying basic physiological mechanisms, particularly those involving the use of radiocarbon and tritium.

Soviet science in general tends to stress one problem at a time; consequently Soviet research men do not appear to have investigated the wide number of radioisotopes that are at present under study in the United States. No papers on radiation sickness in small animals were presented, nor were there any reports of studies of protective factors in radiation sickness. Hasterlik was impressed with some of the Russian studies on the use of radioisotopes in agricultural research, such as those concerned with the behavior of tagged fertilizers.

Hasterlik reported that Soviet scientists were friendly and eager to discuss scientific problems with colleagues from other countries. The discussions appeared to be free, interesting, and fruitful from the American point of view. In general, the scientific equipment the U.S.S.R. exhibited was comparable to the kind of equipment used in the United States.

■ The first contingent of the British Commonwealth Trans-Antarctic Expedition, led by Vivian Fuchs, will leave Britain on 14 Nov. It will be followed early next year by a New Zealand group that is to be directed by Edmund Hillary.

■ The U.S. Atomic Energy Commission announced recently that it is carrying on its major research effort in controlled thermonuclear reactions at Princeton University and at AEC laboratories operated by the University of California at Los Alamos, N.M., and Livermore, Calif. In addition, there are projects at Oak Ridge, Tenn., and New York University. The over-all program is known as Project Sherwood.

This long-range program, to which reference was made in August during the Geneva nuclear conference, has been under way since 1951; it is directed toward the possibility of controlling the release of the great amounts of energy from reactions involving the fusion of light nuclei.

In essence, the problem is that of heating an appropriate nuclear material (such as deuterium) to temperatures of several hundred million degrees and of confining it somehow at that temperature for a sufficiently long period of time to allow an appreciable portion of the nuclei to fuse together, with consequent release of energy.

Scientists in the News

AUGUST PI SUÑER, Spanish physiologist and director of the Institute of Experimental Medicine at the University of Caracas, Venezuela, has been awarded the 1955 Kalinga prize of £1000 for his work in popularizing science in Spanish-speaking countries. The prize is awarded annually by the United Nations Educational, Scientific and Cultural Organization. It is supported by a grant made by B. Patnaik of the Indian State of Orissa, who established the prize both to recognize competent interpretation of science to the general public and to strengthen links between India and other nations. Kalinga was an Indian empire that was invaded more than 2000 years ago by the Buddhist emperor Asoka. Asoka was so deeply impressed by the horrors of war that he resolved never to wage war again.

This year the jury was composed of Abdel Rahman, professor of astronomy at the University of Cairo; J. L. F. Brimble of the United Kingdom, editor of *Nature*; and Cortes Pla, chief of the Division of Science and Technology of the Organization of American States. Born in Barcelona in 1879, Pi Suñer joined the University of Caracas as a professor of physiology after a career of teaching and research in Spain. In 1922 he received the Achucarro national prize in Spain for his research in the physiology of the nervous system and in 1948 he was awarded the Prix Pourat of the Paris Academy of Sciences for his book, *The Vegetative Nervous System.*

In addition to his scientific work, Pi Suñer is the author of a series of books intended to bring science within the grasp of the layman. Among his works which have been translated into English are *The Bridge of Life* and *Classics of Biology.*

L. J. F. BRIMBLE, editor of *Nature,* returned to London on 15 Oct. after a month in the United States. He visited scientific centers and individual scientists in Boston, Chicago, Ithaca, New York, Princeton, and Washington.

C. B. LARRABEE, long an executive of *Printers' Ink,* will become director of publications for the applied journals of the American Chemical Society on 1 Nov. The new position was created by the ACS board to facilitate coordination of the increasingly complex publishing activities of the society.

Walter J. Murphy, editor of the ACS applied journals since 1943, will become editorial director of the journals. This is also a new position; its title describes Murphy's responsibilities more accurately than that of "editor."

The four journals concerned, which have a combined circulation of more than 150,000, are *Chemical and Engineering News,* weekly news magazine and the society's official publication, and the society's three monthly journals—*Industrial and Engineering Chemistry, Analytical Chemistry* and the *Journal of Agricultural and Food Chemistry.* Larrabee's primary responsibility as director of publications will be that of coordinating the advertising, circulation, circulation promotion, and editorial programs of the four journals.

N. HOWELL FURMAN, professor of chemistry at Princeton University, delivered the seventh annual Friend E. Clark lectures that are sponsored by the Tau Chapter of Phi Lambda Upsilon at West Virginia University. The lectures are given in honor of F. E. Clark, former professor of chemistry and department head at the university. Furman's work is concerned with analytic chemistry, polarography, coulometry, and potentiometric titrations.

EMILE F. HOLMAN has been honored with a *Festschrift* issue of the *Stanford Medical Bulletin* (August 1955). The special issue contains 25 articles contributed by colleagues and former students. Although he is continuing his private practice and research, Holman retired on 1 Sept. as head of the department of surgery at Stanford Medical School.

In addition, a commemorative issue of the *American Journal of Surgery* was recently dedicated to Holman. Presentation was made at a surprise breakfast given by more than 100 associates.

D. J. HANKINSON, former head of dairy industry at the College of Agriculture, University of Massachusetts, has been named head of the new depart-

ment of dairy and animal science, which combines the former dairy industry and animal husbandry departments.

VICTOR A. RICE, formerly chief of animal husbandry and a faculty member for 39 years, retired on 1 Sept. to become director of instruction in the School of Agriculture at North Carolina State College, Raleigh.

LEE LORCH, formerly professor of mathematics at Fisk University, has been appointed professor of mathematics at Philander Smith College, Little Rock, Ark.

IAN MCMILLAN, of St. Thomas' Hospital, London, England, gave a lecture on 19 Oct. at Vanderbilt University School of Medicine. McMillan has made some unusual films on the motion and function of heart valves from inside the heart chambers.

BERNARD S. J. WÖSTMANN, assistant director of the Netherlands Institute of Nutrition and the Laboratory of Physiological Chemistry, University of Amsterdam, has been appointed biochemist on the research staff of the Lobund Institute, University of Notre Dame.

ARTHUR M. BUSWELL resigned on 1 Sept. as chief of the Illinois State Water Survey, which he has headed since 1920. Under Buswell's leadership the survey has developed into one of the largest units of its kind in this country, with a staff of 58 scientists and technicians. Buswell has accepted a position as research professor in the department of chemistry at the University of Florida, where he will participate in an expanded program of water research.

OLIVER H. GISH has been appointed visiting professor of physics at Southern Illinois University for the academic year 1955–56. From 1922 until his retirement in 1948, Gish was on the staff of the department of terrestrial magnetism of the Carnegie Institution of Washington, first as physicist and later as chief of the section of terrestrial electricity and as assistant director of the department. Since his retirement, he has been part-time consulting physicist to the U.S. Air Force and the U.S. Navy Mine Defense Laboratory.

JOHN EISELE DAVIS, pioneer in the development of recreation for the treatment of mental patients, retired from the Veterans Administration on 30 Sept. after 35 years of Government service. One of the first books on recreational therapy published in this country was written by Davis in collaboration with William Rush Dunton, associate professor of psychiatry at Johns Hopkins Medical School. The book appeared in 1933.

Davis is the author of five books and several manuals on the subject of medical rehabilitation, corrective therapy, and recreational therapy as psychotherapeutic-activity approaches. He has also written more than 100 articles, both technical and popular. His most recent book, *Clinical Applications of Recreational Therapy* (1952), was published both in this country and in England.

He was the founder of the Association for Physical and Mental Rehabilitation. In 1946, while he was conducting special training courses for corrective therapists in cooperation with Karl Menninger at Topeka, Kans., he founded the Association for Physical and Mental Rehabilitation. The organization now has chapters in every state.

Davis attended the University of Richmond in Richmond, Va., and Washington College in Chestertown, Md., where he received his M.A. degree. In recognition of his contributions to the field of physical and mental rehabilitation, the college later awarded him the degree of doctor of science, *causa honoris*.

He has taught, and assisted in the organization of, special courses in rehabilitation at Columbia University, New York University, and Springfield College. One of his contributions was his assistance in the development of the Roland technique for reaching the so-called "mentally dead" patients with a form of relaxation therapy that has been accepted as an addition to modern psychiatric treatment.

HERBERT SPRINCE, chief research biochemist at the U.S. Veterans Hospital in Coatesville, Pa., and visiting lecturer in biochemistry at New York Medical College and Flower and Fifth Avenue Hospitals, has recently been appointed research associate in psychiatry at the University of Pennsylvania. In his new capacity, Sprince will continue with his clinical biochemical studies of indole metabolism in schizophrenia at the Coatesville hospital.

A. E. NEHRENBERG and PETER LILLYS, both of the Crucible Steel Company of America, Harrison, N.J., have received the American Society for Metals 1955 Henry Marion Howe medal. They were honored for their joint paper on "High-temperature transformations in ferritic stainless steels containing 17 to 25 percent chromium."

WILLIAM JUSTIN KROLL, a native of Luxembourg, and an American citizen since 1950, is this year's winner of the society's Albert Sauveur achievement award. He was recognized for his pioneering work on malleable titanium.

JOHN M. HAMILTON, associate professor and head of the biology department at Park College, has been appointed acting dean of the college. He assumes the post left vacant last spring by the resignation of E. McClung Fleming. He will continue teaching and will remain head of his department.

EDMUND B. TUCKER, who for the past 5 years has been a member of the faculty at the University of Minnesota, has become a research associate at the General Electric Research Laboratory, Schenectady, N.Y.

MAURICE H. GREENHILL, formerly professor of psychiatry at the University of Maryland School of Medicine, has been appointed head of the department of psychiatry at the University of Miami School of Medicine and director of the Psychiatric Institute.

The following awards were announced by the American Society for Horticultural Science at its annual meeting in September:

HENRY M. CATHEY of Cornell University, the Alex Laurie award in floriculture and ornamental horticulture.

B. LENNART JOHNSON of the University of California, Los Angeles, the Leonard H. Vaughan award in floriculture.

OTMAR SILBERSTEIN of Westfield, N.Y., the Charles G. Woodbury award in raw products research.

C. M. GERALDSON of Manatee Station, Bradenton, Fla., the Leonard H. Vaughan award in vegetable crops.

E. L. PROEBSTING, JR., of Irrigation Experimental Station, Prosser, Wash., and E. L. KENWORTHY of Michigan State University, the J. H. Gourley award in pomology.

The following scientists received honorary degrees from the Polytechnic Institute of Brooklyn on 8 Oct. during the closing convocation of the institute's centennial year.

LINUS CARL PAULING, Nobel laureate in chemistry and chairman of the division of chemistry and chemical engineering at California Institute of Technology; ALEXANDER KARTVELI, vice president and chief engineer of Republic Aviation; THOMAS E. MURRAY, member of the Atomic Energy Commission; MERVIN J. KELLY, president of Bell Telephone Laboratories; OLE SINGSTAD, designer and builder of the Holland Tunnel; FREDERICK W. ZACHARIASEN, chairman of the department of physics at the University of Chicago; EGER V. MURPHREE, president of Esso Research and Engineering Company; PHILIP SPORN, president of American Gas and Electric Company; LLOYD V. BERKNER, president of As-

sociated Universities, Inc.; ERICH HAUSMANN, dean emeritus of the Polytechnic Institute of Brooklyn; HAROLD M. MORSE, mathematician, Institute for Advanced Studies; ERNEST PAYSON GOODRICH, engineering consultant; FRANK L. BABBOTT, former president of the Long Island College of Medicine; and ERNEST VAN NORDEN, retired engineer for Consolidated Edison, Inc.

The following appointments to assistant professor have been announced. Stanford University: FRANK R. ARNOLD, mechanical engineering. University of Oklahoma: MAURICE K. TEMERLIN, psychology. University of Massachusetts: FRANK E. POTTER, dairy chemistry.

Necrology

AARON B. BAGSAR, Drexell Hill, Pa.; 58; retired metallurgical engineer; 7 Oct.

FRED W. FITZ, Chicago, Ill.; 57; associate professor of medicine at Northwestern University; 9 Oct.

ERNEST P. GOODRICH, Brooklyn, N.Y.; 71; civil engineer; former professor of engineering economics at New York University; president of the American Institute of Consulting Engineers in 1951; 9 Oct.

DAVID W. HENRY, Toledo, Ohio; 70; retired dean of the University of Toledo; 12 Oct.

JOAN HOPKINS (Mrs. David M.) Los Altos, Calif.; 27; geologist, coauthor of a forthcoming publication on slope erosion to be issued by the Geological Society of America; 3 Oct.

HENRY JORDAN, Pasadena, Calif.; 80; retired expert on azo dyes at E. I. du Pont de Nemours Company, Deep Water, N.J.; 5 Oct.

RAYMOND C. OSBORN, Columbus, Ohio; 83; professor emeritus and former chairman of the department of zoology and entomology at Ohio State University; 6 Aug.

HENRY C. SHERMAN, Hastings-on-Hudson, N.Y.; 79; professor emeritus of chemistry at Columbia University and one of the nation's leading nutritionists; 7 Oct.

KENNETH B. TURNER, New York, N.Y.; 54; cardiologist; associate professor of clinical medicine at the College of Physicians and Surgeons, Columbia University; 9 Oct.

Education

■ Four members of the staff of the College of Agriculture at Ohio State University have arrived in India, where they will spend the next 2 years assisting in the development of agricultural education, research, and extension programs. Thomas S. Sutton, assistant dean of the university's College of Agriculture, heads the project, which represents a joint undertaking with the International Cooperation Administration. Others from the university are Everett L. Dakan, department of poultry husbandry; J. P. Schmidt, department of rural sociology, Agricultural Extension Service; and Charles L. Blackman, dairy science extension.

The contract between Ohio State and ICA is the first of five with land-grant colleges in the United States. Other contracts are to be signed with the University of Illinois, University of Missouri, University of Tennessee, and Kansas State College.

The Ohio group will be joined later by a soils expert, a horticulturalist, and a highway engineer. The American visitors will work in the northwest portion of India, which includes the states of Punjab, Rajasthan, and Himachal Pradesh. A primary concern of the ICA program in India is to increase food production.

■ In celebration of its centennial year, Berea College conducted a program on 6 and 7 Oct. entitled "Atoms at work." The speakers included Hubert N. Alyea, professor of chemistry at Princeton University; Cyril Comar, principal scientist of the medical division, Oak Ridge Institute of Nuclear Studies; Merlin D. Peterson, professor of chemistry and head of the department of chemistry at Vanderbilt University; Thomas Strickler of the Berea department of chemistry; and W. G. Pollard, executive director of Oak Ridge Institute of Nuclear Studies.

■ A second special course in radioisotope techniques for foreign scientists and technicians opened at the Oak Ridge Institute of Nuclear Studies on 17 Oct. with 30 students from 20 countries participating. So many applications were received from interested foreign candidates for enrolment in the first special course, held in May for 32 students from 21 countries, that another session was set aside for those who applied but could not be accommodated earlier.

The special course is identical with the regular course that is given by the institute six times a year. Fundamentals of radioisotope use are taught during the 4-week intensive training period. The participants learn how to use and calibrate radiation detection instruments, how to purify and separate radioactive materials from inert or other radioactive materials, and how to apply them to a variety of chemical and biological research problems. More than 2000 men and women have received this training, under ORINS, since it began in 1948.

Grants, Fellowships, and Awards

■ The United Nations Educational, Scientific and Cultural Organization has an annual fund of $17,000 for assistance to research projects on arid lands problems. Grants from the fund are made on recommendation by the Advisory Committee on Arid Zone Research. The committee's next meeting is scheduled *for 7–10 Nov.* in Paris. Details and application forms are available from Division of Scientific Research, Department of Natural Sciences, UNESCO, 19 Avenue Kléber, Paris, France.

■ The School of Medicine and Dentistry at the University of Rochester has announced the availability of eight U.S. Atomic Energy Commission fellowships in industrial medicine for 1956–57. The fellowships are open to men and women physicians who are citizens of the United States, who have graduated from an approved College of Medicine at least 2 years prior to beginning tenure of the fellowship, and who are licensed to practice medicine in one of the states or territories of the United States. Successful candidates will be required to have a full FBI background investigation and to receive clearance from the AEC prior to award of a fellowship.

The training program consists of two parts: an academic year, with lecture and laboratory instruction, and an in-plant training year in which the fellow will be assigned to one or more of the medical departments of the major operating plants and laboratories under the direction of the Atomic Energy Commission.

Applications for the academic year 1956–57 *should be filed before 1 Jan. 1956.* It is expected that the selection of fellows will be made on or before 1 Feb., but fellowships may be assigned at any time at the discretion of the Committee on AEC Fellowships in Industrial Medicine.

The stipend during a fellowship or academic year is $3600. The sum of $350 is added to the stipend for a wife, and $350 more is added for each dependent child. Tuition and laboratory fees, which would be required of students of similar university status, will be paid in academic courses. Certain other expenses incident to the work of the fellow will be paid when approved by the committee. During the in-plant year the stipend will be $6000.

The fellowship year of academic training may be taken at a university offering an approved graduate course in industrial medicine that can provide the special training facilities necessary in the study of the health problems associated with atomic energy. The in-plant year of training will be given at AEC contractor installations such as Oak Ridge,