January 1959 were the producers of aircraft and parts, electrical equipment, and chemicals and allied products. Each employed more than 75,000 scientists and engineers; in all, they employed one-third of the total number of scientists and engineers in private industry and approximately half of the scientists and engineers engaged in research-and-development activities in private industry.

Each of two other industries employed more than 50,000 but less than 75,000 scientists and engineers; these two were machinery (except electrical) and engineering and architectural services. Next in size, in terms of scientific and engineering employment, were construction, fabricated metal products and ordnance, primary metals, and motor vehicles and equipment; each of these industry groups employed more than 30,000 but less than 50,000 scientists and engineers.

Employment of scientists and engineers in private industry was about 4 percent higher in January 1959 than in January 1958. Employment of engineers increased from about 605,000 in January 1958 to 630,000 in January 1959. The number of scientists in private industry increased from about 145,000 in January 1958 to 150,000 in January 1959.

Conference on Animal Cell Structure Scheduled in Colorado

The fifth annual Conference on Quantitative Animal Cell Culture in vitro will be conducted by the department of biophysics of the University of Colorado, 19–22 June. The conference is sponsored by the Colorado Division of the American Cancer Society and is open to persons with the doctoral degree who are doing research or graduate teaching in biology and medicine and to students who are currently enrolled as candidates for the Ph.D. degree in biological disciplines.

Lectures and laboratory demonstrations illustrating the basic techniques will be presented, but major emphasis this year will be placed on application of the quantitative methodologies to problems in mammalian cell genetics and chromosome analysis, biochemistry, virus-host cell interaction, and radiation studies. Application of these methods in clinical medicine will also be considered. Participants should be familiar with the principles of sterile technique and the philosophy of quantitative microbiology.

Because requests for admission have, in the past, always exceeded the available facilities, applicants up to the limit of 45 will be accepted in the order of receipt of their completed applications. Inquiries should be addressed to the Department of Postgraduate Medical Education, University of Colorado Medical Center, 4200 E. 9th Ave., Denver 20, Colo.

Neurological Institute Seeks To Advance Training in Neuroradiology

The first grants to support research training in neuroradiology have been made by the National Institute of Neurological Diseases and Blindness. Two grants, totaling \$50,000, will be used to establish postgraduate programs for the study of advanced methods in the diagnosis and treatment of diseases of the nervous system through the application of radiant energy such as x-rays. The training will be made available at two neurological centers in New York City: the Albert Einstein College of Medicine and the Neurological Institute of Columbia University. Both institutions will offer 2 years of highly specialized training to qualified candidates who desire to prepare for investigative careers in this field. The new programs will begin on 1 July. The institute is seeking other training centers where similar courses may be established in order to relieve the acute shortage of neuroradiologists adequately trained to conduct research on neurological and sensory diseases.

News Briefs

AEC laboratory plans. Atomic Energy Commission plans for the next decade for its 20 laboratories have been made public through the release on 17 March of an AEC report on the future roles of the laboratories. The study was carried out in compliance with a request from Congress' Joint Committee on Atomic Energy. Commission laboratories now employ approximately 42,-000 people and have a present annual operating budget of approximately \$660 million, excluding expenditures for weapon development.

The Joint Committee has sent copies of the report to industry, university, and government personnel with a request for comments. Replies should be returned by 15 April. After all comments have been received, the Joint Committee intends to publish them with the commission report as a committee publication. A few extra copies of the report are available in the Joint Committee Office, Room F-88, The Capitol, Washington, D.C.

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Medical curriculum revised. Northwestern University Medical School has announced that, beginning in the fall of 1961, its program will be reduced from the traditional 7 or 8 years to 6 years for a pilot study group of 25 talented students accepted by Northwestern directly from high school. During 2 years of liberal arts work, they will take premedical courses in a more concentrated form and in graduated sequence. The program, which is supported by a grant from the Commonwealth Fund of New York, will also include a rearrangement of the medical-school curriculum for all students and the introduction of noncredit required courses in the humanities in seminar form at the medicalschool level. Northwestern is reported to be the first school in the country to receive support to put such a plan into

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Scientific films. A wide variety of 16-mm scientific films will be shown in competition for the Blue Ribbon Awards of the second annual American Film Festival, which will be held 20-23 April at the Barbizon-Plaza Hotel in New York City. The Educational Film Library Association, sponsor of the festival, has announced that the program includes science films for students at all levels, primary to postgraduate. The showings and other program events, including a symposium on "Film Explorations in Science," are open to the general public upon payment of a small registration fee. Information may be obtained from EFLA, 250 W. 57 St., New York 19, N.Y.

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Science column. A column on science in industry, to appear three times a week, was started in the daily *New York World-Telegram* on 14 March. The new feature is being written by Richard E. Slawsky, an engineer with wide experience in writing and editing technical data.

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Man in space. A space symposium on problems of getting man into orbit and back to earth will be a feature of the 1960 annual meeting of the Iowa Acad-

emy of Science, to be held 22–23 April at the State University of Iowa, Iowa City. Taking part in the discussion will be James A. Van Allen, professor and head of the university's department of physics and astronomy; Col. John P. Stapp, chief of the Aero-Space Medical Laboratory at Wright-Patterson Air Force Base; and Edward R. Jones, group manager of aerospace psychology at McDonnell Aircraft Corp., St. Louis, Mo

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Biological rhythms. The seventh Conference on Biological Rhythms will take place in Siena, Italy, 5-7 September. The chief topics will be endogenous rhythms and the law of initial value. For information, write to Dr. Arne Sollberger, Dept. of Anatomy, Caroline Institute, Stockholm 60, Sweden. Deadline for the submission of papers is 1 June.

Israeli thermonuclear research. A research group in high-temperature physics was recently established at the Hebrew University of Jerusalem, within the framework of the department of experimental physics. The new group will move into a new building, erected with funds provided by David Marks of Los Angeles, sometime during the autumn of 1960. No decision has yet been made as to which approach the Israeli investigators will follow to produce and confine a very hot ionized gas. Initially only a modest program is planned.

Psychosomatic cancer research. A society for those interested in studying the psychosomatic aspects of cancer is being formed under the name of "The International Association for Psychosomatic Cancer Research." The first meeting will be in Amsterdam, 11–15 August. Those interested should communicate with L. LeShan, 144 E. 90 St., New York 28, N.Y.

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Growth symposium. Scientists from England, France, Belgium, Denmark, and Canada will participate in a symposium on growth at Purdue University, 16–18 June. The international meeting is sponsored by the departments housed in the university's new \$11-million life science building. The 31 papers scheduled will deal with the basic patterns of living organisms and with the way in which they multiply or grow in size. Two evening lectures open to the public have been planned: James F. Bonner, noted plant physiologist at the California Institute of Technology,

who has worked extensively with plant hormones, will speak on "The Biology of Plant Growth," and Ancel Keys, director of the laboratory of physiological hygiene at the University of Minnesota, will speak on "Changes with Aging."

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Soviet journal exhibit. The National Science Foundation has available for loan to professional and academic groups an exhibit entitled "Foreign Science Literature," designed to provide U.S. scientists and engineers with information on Russian scientific literature that is being translated into English. The fold-up book display features sample copies of some 70 Soviet journals that have been translated from cover to cover. A handout pamphlet provided with the exhibit lists the translated journals by discipline and contains other pertinent information. Inquiries about the exhibit, which is loaned free of charge, should be addressed to Office of Science Information Service, National Science Foundation, Washington 25, D.C.

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Lyophilization. For a 2-week period starting 29 August, a unique course in freeze-drying will be offered in Lyons, France, for individuals who are using this technique—research workers in the biological and botanical sciences and workers engaged in clinical and experimental surgery. Lectures will be presented in French and English by a distinguished faculty that includes A. S. Parkes of the National Institute of Medical Research, London, R. I. N. Greaves of Cambridge University, and H. T. Meryman of the Naval Medical Research Institute, Bethesda, Md. Full details concerning the 2nd International Course of Lyophilization may be obtained by writing directly to Dr. Louis R. Rey, Directeur des Cours Internationaux de Lyophilization, Laboratoire de Physiologie, Ecole Normale Supérieure, 24, rue Lhomond, Paris 5°, France.

Genetics journal. The Cambridge University Press has announced that, at the request of a group of senior British geneticists, it has founded a new journal, Genetical Research, to provide an international medium for the publication of original work on genetics. Copies of the first number are scheduled for distribution in the United States this month. Information may be obtained from the American Branch of Cambridge University Press, 32 E. 57 St., New York 22, N.Y.

Scientists in the News

Leo Szilard, professor of biophysics at the University of Chicago and a pioneer in nuclear research, has been selected by the trustees of the Lewis and Rosa Strauss Memorial Fund to receive the Albert Einstein Gold Medal and \$5000 award for 1960. In 1934 Szilard developed the new field of hot atom chemistry and, in a classic paper with T. A. Chalmers, showed that the irradiation of certain atoms bound in molecules could separate irradiated atoms of certain elements from the molecules, thus making possible the recovery of radioactive material from targets. During World War II Szilard was chief physicist at the Metallurgical Laboratory of the University of Chicago, operated for the Manhattan District, which was conducting the government's atomic weapon project.

After the war, he transferred his major interest to the field of biology, specifically investigating the growth, mutation, and genetics of bacteria and bacterial viruses. In association with Aaron Novick, Szilard developed a method for routine control of culture of microorganisms which has made possible significant genetic discoveries.

William W. Morgan, professor of astronomy at the University of Chicago, has been named chairman of the joint department of astronomy of the University of Chicago and the University of Texas. He has also been named director of the Yerkes Observatory, Williams Bay, Wis., and the McDonald Observatory, Mount Locke,

Frank N. Edmonds, Jr., associate professor of astronomy at the University of Texas, has been appointed associate director of the McDonald Observatory; Joseph W. Chamberlain, associate professor of astronomy at the University of Chicago, has been named associate director of the Yerkes Observatory.

William Licht, head of the departments of chemical and metallurgical engineering of the College of Engineering, University of Cincinnati, is on leave of absence until 1 September. At present he is studying engineering education programs at various colleges in the eastern United States; in mid-April he will leave for a world tour, in the course of which he will lecture at the Technion in Haifa, Israel.