Archeology in Southeast Asia

Archeologists working in a cave at Niah in the jungle of Sarawak, Borneo, have reached a layer of habitation dating back 10,000 years. A member of the research expedition, M. F. Tweedie, curator of Singapore's Raffles Museum, says that the finds of stone tools, pottery, matting, sea shells, and even the "leftovers" of a caveman's dinner present new evidence of the migrations of prehistoric people to what now are the multitude of islands in the Indian and Pacific Oceans.

The leader of the expedition, Tom Harrisson, curator of the Sarawak Museum in the British Crown Colony on the west coast of Borneo, has suggested that the cave should be turned into a museum for archeologists, geologists, and students of Southeast Asia. He believes the Niah Cave could turn out to be a major contribution to the understanding of the evolution of man in Asia and the islands.

Science on TV

On or about 29 Dec. of this year CBS Television will present, with the cooperation of the AAAS, a 1-hour program on the scientific advances that have taken place during 1957. In 1956 a similar program was prepared as part of a series of three telecasts that included a summary of the year's news events and a round-table report on world conditions.

The aim of the new broadcast that is being planned is to present a balanced picture of important achievements in all fields of science, basic and applied, during 1957. Preliminary work in the gathering of story material has begun. The producers of the show would like to be informed about scientific advances that could appropriately be included, especially developments that are recorded on motion picture film. Suggestions should be sent either to Raymond L. Taylor, AAAS, or to Michael Sklar, CBS Television, 485 Madison Ave., New York, N.Y.

Patent Examiners

The New York Patent Law Association reports that the Patent Office is still desperately in need of engineers and scientists to serve as patent examiners. The association reports that, while delays in the processing of patent applications in the Patent Office have been somewhat reduced during the past year, it still takes about 10 months before a new patent application is first examined, and an average of 3½ years before a patent is issued.

These delays create uncertainty about the patent status of new products and processes and tend to slow down or defer their adoption by industry and their introduction to the public. This situation should be of general concern because it can handicap the larger corporation and can be critical for the individual inventor and the small businessman whose operations revolve around patented products and processes.

Men and women holding college degrees in engineering or applied science, or a degree with a major in chemistry or physics, or with certain combined credits in these fields are eligible for appointment as patent examiners, without examination, upon application to the Commissioner of Patents in Washington, D.C.

Under the revised salary schedule the minimum starting salary is $4480 per year. Promotion to $5335 per year may be expected after 3 months' service, based solely on ability and work performance. With as little as 6 months of professional experience in engineering, chemistry, physics, or patent law, the starting salary is $5335 per year, with an expected increase to $6250 9 months later. It is usual for an examiner to be earning $8215 annually within 5 years after graduation from college, with additional opportunities for promotion up to $13,760.

The Patent Office during each of the past few years has been adding an increasing number of women to its staff of examiners, and the Patent Association stresses the fact that the Patent Office offers an unusually satisfying career for women with engineering or scientific backgrounds who wish to make full use of their training.

Euler Anniversary

Last month many of Europe's leading scientists converged upon Basel, Switzerland, to commemorate the 250th anniversary of Leonhard Euler, founder of the modern study of analytical mathematics. In the University of Basel's auditorium, Swiss scientist Andreas Speiser reviewed Euler's contributions. In addition to his work in pure analytical mathematics, Euler introduced modern abbreviations for trigonometric functions, put on paper the first complete treatises on calculus, and investigated the then obscure area of beta and gamma functions.

Although mathematics was the field closest to his heart, Euler, like his contemporary Goethe, explored a broad range of human knowledge. His studies included astronomy, hydrodynamics, optics, and music.

Despite total blindness during his last years, and undiscouraged by a fire that destroyed his home and many valuable papers, he continued to send communications to both the Prussian academy and the academy in St. Petersburg, where he had gone to live early in his life at the invitation of Catherine I. When he died in 1783, some 200 finished papers were found among his belongings.

N.Y. Central Laboratory

A $1-million research center that is equipped for work in atomic energy has been formally opened by the New York Central Railroad. This is probably the largest laboratory of its type for any railroad. The laboratory's findings should lead to more efficient operation of equipment.

ICA-Michigan Atomic Advisory Group

A consulting group designed to advise this country's International Cooperation Administration on ways to promote the peaceful uses of atomic energy throughout the world has been established at the University of Michigan. The project, operating under a 2-year contract with ICA, is being administered by the university's Memorial Phoenix Project of atomic research.

William Kerr, associate professor of electrical engineering, has been named supervisor of the group, which will be made up of six faculty members employed part-time on the contract. Later, special consultants from both on and off the campus will be called upon to assist in their particular fields.

Kerr has recently returned from Thailand, where he carried out the group's first overseas assignment: to help that government prepare a proposal for a training and research program in the atomic energy field. This proposal will be submitted to the U.S. State Department for support under the "Atoms for Peace" plan.

The following assignments will be carried out at the request of ICA's Office of Industrial Resources: (i) study the technical resources of the nations with which ICA is cooperating and recommend types of atomic energy programs technically and economically feasible for them; (ii) evaluate proposals from these nations for technical assistance and requests for equipment involving training and research; (iii) prepare estimates on the cost of facilities for the establishment of radioisotope research and training laboratories; (iv) survey the possibilities of atomic power development in the cooperating nations; (v) help ICA missions abroad disseminate information on the practical uses of radioisotopes and radiation in industry,

medicine, agriculture, and other fields; (vi) prepare training materials for ICA programs; and (vii) brief U.S. representatives or delegations planning to attend international meetings or conferences.

The new group will also take the initiative in suggesting programs or preparing materials it thinks may be of value in ICA's efforts to render technical and economic assistance to other governments. The ICA has bilateral agreements to provide information and consulting service to 56 nations.

IGY Annals

Pergamon Press has announced publication of the *Annals of the International Geophysical Year,* which will be the official journal of the IGY central committee (CSAGI). The *Annals* will describe the inception, the planning, the preparations, and the program of the IGY, and in due course the progress and some of the main results.

Harold Spencer Jones will serve as general editor with the aid of an editorial advisory board that consists of A. H. Shapley (world days), J. Van Mieghem (meteorology), V. Laursen (geomagnetism), S. Chapman (aurora and airglow), W. J. G. Beynon (ionosphere), Y. Ohman (solar activity), J. A. Simpson (cosmic rays), A. Danjon (longitude and latitude), James Wordie (glaciology), G. Laclavère (oceanography), L. V. Berkner (rockets and satellites), V. V. Beloussov (seismology), P. Lejay (gravity measurement), and M. Nicolet (nuclear radiation).

It is anticipated that from four to six volumes of the *Annals* will be published during 1957 and 1958. Subscription rates are £6 or $17 per volume. Orders should be placed with Pergamon Press at either 122 E. 55 St., New York 22, N.Y., or 4 and 5, Fitzroy Square, London, W.1, England.

Washington University

Washington University (St. Louis) has announced a gift of $200,000 from the Anheuser-Busch Charitable Trust for construction of a new laboratory for research in cellular and molecular biology. An additional grant of $150,000 from the National Institutes of Health makes possible completion of the building, which will be named the Adolphus Busch III Laboratory of Biology. Busch, who died of cancer in 1946, was president of Anheuser-Busch, Inc., from 1934 until his death. The new building is expected to be ready for occupancy late next spring.

Simultaneously, the university announced a new program of teaching and research in biology that will emphasize close collaboration among biologists, chemists, and physicists. Two new members will be added to the faculty of the department of zoology and the School of Botany, for the new program is to be established as a joint activity in those departments with the cooperation of the departments of chemistry and physics.

The program will encompass education and research in the general area involving life-processes of cells and the chemical and physical reactions which govern them. The area includes biological, chemical, and physical analyses of cellular processes such as inheritance, growth, differentiation, cell division, and metabolism as related to higher animals and plants, microorganisms, and viruses. Plans for the the new program were made by a faculty committee headed by Barry Commoner, professor of plant physiology.

Lipotropic Research

The Lipotropic Research Foundation of New York will receive applications for grants-in-aid for 1958 *until 15 Aug.,* with special attention being given to clinical studies. A request for application forms, which should include a short statement describing professional affiliations and experience, may be addressed to the administrative secretary, Dr. L. Lipton, 26 Vark St., Yonkers 1, N.Y.

Proposed Legislation

Of the many bills introduced in Congress, some have a special relevance to science and education. A list of such bills introduced recently follows:

HR 7465. Make the evaluation of recreational benefits, and fish and wildlife conservation, resulting from any flood control, navigation, or reclamation project an integral part of project planning. Smith (D Miss.) House Interior and Insular Affairs.

HR 7472. Amend Atomic Energy Act of 1954 to provide for establishment of an accelerated civilian atomic power program. Van Zandt (R Pa.) Joint Committee on Atomic Energy.

HR 7621. Authorize Federal assistance to the states and local communities in financing a program of atomic and disaster shelters in the Nation's schools. Edmondson (D Okla.) House Armed Services.

HR 7741. Extend for 3 years the Hospital Survey and Construction Act. Knutson (D Minn.) House Interstate and Foreign Commerce.

HR 7641. Amend section 27 of Mineral Leasing Act of 25 Feb. 1920, as amended, in order to promote the development of coal on the public domain. Thomson (R Wyo.) House Interior and Insular Affairs.

HR 7674. Amend Tariff Act of 1930 by placing beta-ray spectrometers on the free list. Gubser (R Calif.) House Ways and Means.

Scientists in the News

Eight scientists and administrative officials of the U.S. Department of Agriculture recently received Distinguished Service awards from the Secretary of Agriculture. Those honored were

ROBERT P. BEACH, assistant deputy administrator for operations of the Commodity Stabilization Service, who has made important contributions to the management phases of agricultural action programs;

JOSEPH A. BECKER, director of statistics for Foreign Agricultural Service, who has improved the statistical method employed in crop reporting;

CALLIE MAE COONS, director of human nutrition research, who is noted for her leadership in national research programs that further nutritional health;

ERIC ENGLUND, U.S. agricultural attaché in London, England, who has helped to establish international wheat and sugar agreements and to create abroad a better understanding of American agriculture;

STANLEY B. FRACKER, assistant to the administrator of Agricultural Research Service, who has been with the department for 30 years, and who is well known for his work in international agricultural scientific affairs;

RICHARD W. JACKSON, head of the fermentation section, Northern Utilization Research and Development Division, who directs a staff that has found new and economical methods for producing riboflavin, vitamin B_{12}, and other highly useful fermentation products;

ROY W. LENNARTSON, deputy administrator of the Agricultural Marketing Service, who has helped to reduce Government farm surpluses by moving them into consumption through expanded distribution at home and abroad;

RICHARD E. McARDLE, chief of the Forest Service, who has extended protection against forest fires to 20 million additional acres since he became head of the agency 5 years ago, and who has laid the groundwork for increased tree-planting under the soil bank program.

EUGENE F. MURPHY, chief of prosthetic research and development for the Veterans Administration, will leave for Denmark in July under a Fulbright award. Murphy, who is stationed in New