**Tobacco Industry Research Committee**

Booth 53. Information about the nature and extent of the scientific research program developed and directed by the Scientific Advisory Board to the Tobacco Industry Research Committee. The research program, covering all phases of tobacco use and health, contains three main areas of investigation within which are the specific fields of research. These areas and specific fields are described.

**United Fruit Company**

Booths 77 and 78. United Fruit Company's exhibit, "Problems and Progress in the Big Three," illustrates the major research program being directed against the three most serious plant diseases which limit banana production in tropical America. The research problem is defined by color transparencies of disease effects on the fruit and plant, by black-and-white photographs depicting experimental control procedures and the scientific effort involved, and by stylized models showing method of infection by the organisms. Tape recordings heard through a battery of French telephones briefly discuss further aspects of the scientific challenge. Side panels describe scientific research careers in the tropics and show the areas of company operations in Central America and the Caribbean.

**U.S. Department of Health, Education, and Welfare, Division of Radiological Health**

Booths 18 and 19. This exhibit names sources of radiation, effects on human life, and what must be done to curtail excessive radiation. It details the program of the Public Health Service in measurement and analysis of radiation, research, and training of personnel in detection and control of radiation, and gives specific examples of aid rendered to states in radiation control of detection.

**Universal Scientific Company**

Booth 90. Universal Scientific Company, Inc., Vincennes, Ind., manufacturers of science electrical and electronics educational equipment. The equipment is complete with texts and lessons. The equipment enables the instructor to convey the subject visually to the class in a very short period of time. Student equipment makes it possible for the student to discover the principle for himself.

**Washington Gas Light Company**

Booth 68. The method and economic advisability of storing natural gas underground in natural formations is described in the exhibit of Washington Gas Light Company. This company, which distributes natural gas to the greater Washington, D.C., area, is currently in the process of establishing such underground storage facilities in Prince George's County, Maryland. The central panel of the exhibit depicts a typical cross section of sediments, or water-bearing stratum, suitable for gas storage. It is animated to show graphically the injection and withdrawal of gas from the underground anticline, or storage dome. Adjoining panels illustrate the economic advantage of gas storage.

**W. M. Welch Manufacturing Company**

Booths 33 and 34. The W. M. Welch Manufacturing Company plans to display selected apparatus used in the physics, chemistry, and biology laboratories. These will include those especially adapted to the teaching of science in the secondary schools and colleges, as well as some items specifically designed for special use in research and industrial laboratories. A partial list includes, stainless steel balances, quick operating high vacuum pumps, electrical measuring instruments, electronics teaching devices, Densichron for measuring optical density, color saturation, and paper chromatograms. Many charts and other visual aids for teaching science, mathematics, and physiology, together with preserved specimens, synthetic skeletons, and other biological models, will be shown.

**Westinghouse Electric Corporation**

Booths 23 and 24. The Electronics Division display consists of a series of action diaramas depicting divisional fields of interest. Nine distinct scenes rotate fully in 90 seconds. Tieing in with the diaramas is a tape which tells the story behind the exhibit.

Some of the subject matter covered in the various diaramas are: (i) ground to air, ground to ground, and ground to ship communications; (ii) shipboard and submarine communications; (iii) missile ground control; (iv) shipboard radar; (v) tactical and air defense radar; (vi) anti-jamming techniques; and (vii) research.

Each of the diaramas is a replica of Electronics Division equipment applications actually in use or to be used by the military services.

**John Wiley and Sons, Inc.**

Booth 20. On display at the booth of John Wiley and Sons, Inc., will be text, reference, and professional books in all the principal fields of science and engineering technology; the level of these books is college and above.

# News of Science

## NASA Research Advisory Committees

Thirteen new Research Advisory Committees are being formed to provide technical counsel to the National Aeronautics and Space Administration. T. Keith Glennan, NASA administrator, reports that he expects to have the committees functioning early next year.

Glennan has also announced formation of a new Special Committee on Life Sciences to advise the NASA on matters connected with human factors, medical and allied problems of NASA's manned space vehicle program. Chairman of the Special Committee is W. Randolph Lovelace II, director of the Lovelace Foundation for Medical Education and Research, Albuquerque, N.M. Lovelace is a specialist in aeronautical and space medicine.

When he announced the advisory committees, Glennan explained that communication and coordination with industry, universities, and government organizations are required in order to maintain aggressive, progressive research programs. A committee will promote communication with other workers in the same or allied fields by reviewing research in progress, considering new problems, and making recommendations regarding the direction in which future research should go.

The committees will be concerned with the following fields: fluid mechanics; aircraft aerodynamics; missile and space craft aerodynamics; control, guidance, and navigation; chemical energy processes; nuclear energy processes; mechanical power plant systems; electrical power plant systems; structural loads; structural design; structural dynamics; materials; and aircraft operating problems.

All members of the committee will be

appointed in their professional capacities as individuals by the NASA administrator and the committees will report to him. As far as feasible, committee membership will be kept small to facilitate discussion and decision.

The new research committees will supersede the 28 technical committees and subcommittees of the National Advisory Committee for Aeronautics, which was absorbed by the NASA when it was established last October. The NACA committees and subcommittees are due to go out of existence on 31 December.

## Research Corporation Grants

The Research Corporation distributed $259,259 as grants-in-aid during the last quarter of fiscal 1958, which ended 31 October, bringing the annual disbursement to $1,244,000. The foundation distributed $1,257,000 in grants-in-aid in fiscal 1957.

The last quarter grants were made among four areas of the foundation's interests. These areas, and the amounts granted, are as follows:

Frederick Gardner Cottrell Grants—$146,908 granted to 46 colleges and universities in 24 states, and abroad to the American University of Beirut for basic research in the natural sciences;

The Williams–Waterman Fund for the Combat of Dietary Diseases—68,260 granted to universities both in the United States and abroad for basic research and experimental programs related to the field of human nutrition;

The Brown-Hazen Fund—$4,700 granted to Baylor University for support of fundamental research in biochemistry, microbiology, and immunology;

Howard Andrews Poillon Fund—$39,391 granted to four universities in the United States for programs of "exceptional scientific merit" which fall outside the scope of the major funds.

Research Corporation is a nonprofit foundation established in 1912 by the late Frederick Gardner Cottrell, who was a professor of chemistry at the University of California. The foundation supports research in the natural sciences in educational and scientific institutions.

## Teacher Recruitment in New York

Some 526 leading scientists, including 15 Nobel prize winners, have announced their support of a far-reaching proposal by a committee of science educators to spur recruitment of teachers and improve science instruction in the New York City public high schools. The proposed plan calls for a sharp increase in expenditure on the high schools. It asks the Board of Education to initiate public relations efforts, legislative activity, and independent budgeting in order to mobilize public support for the increase. It details requirements in the high schools on which money must be spent to make science teaching more effective.

The plan was framed by the Joint Committee on Science Teacher Recruitment, representing science department chairmen of the New York City high schools. Stanley L. Weinberg is chairman of the committee, which has an office in the headquarters of the New York Academy of Sciences, 2 E. 63 St.

Harold C. Urey, Nobel Prize winner and distinguished service professor of chemistry at the University of Chicago, says of the proposal:

"I think this is an excellent statement. The budget of the schools of the United States should be doubled. I have just visited Israel, a country of two million, in very difficult circumstances, and yet able to afford three institutions of higher learning. Saudi Arabia, with hundreds of millions of oil royalties, cannot afford primary-school education. A people can afford what they wish to afford, and it is necessary to get the people of the United States to understand that we must afford better education. The city of New York should lead in this."

## The American Scientist's Knowledge of Foreign Languages

More than 97,000 scientists in the National Register of Scientific and Technical Personnel in 1954–55 reported a knowledge, with varying degrees of proficiency, of at least one foreign language. This constituted approximately three-quarters of the 127,000 persons in the Register, and it is estimated that more than one-half of all American scientists were included in the Register during this period.

German was the language reported most often, and French next, obviously a reflection of educational requirements for scientific training, particularly at the graduate level. By scientific field, those in chemistry and chemical engineering and in physics and astronomy showed a greater concentration in the Germanic languages, while in psychology and the earth sciences there were proportionally greater numbers with knowledge of French, Spanish, and other Romance languages.

Only about 1 in 50 of those reporting a language ability had a knowledge of Russian and less than 1 in 100, of Chinese. In the case of these languages, it appears that such knowledge stems largely from nativity and family background. These findings indicate that nearly all American scientists must depend on translations for knowledge of scientific developments in the Soviet bloc countries.

## Blood of Aquatic Animals

The first symposium on the blood of aquatic animals was held in Tokyo, Japan, on 3 November under the sponsorship of the Japanese Fisheries Agency and the Japanese Fisheries Society. The purpose of this symposium was to establish an organization for the discussion of problems relating to the blood of aquatic animals. Abstracts of the seven papers presented will be published in English in the *Japanese Journal of Ichthyology*, volume 7, Nos. 2, 3, 4 (now in press). These papers were concerned with antigens in the blood of oysters, mackerel, tuna, and whales, the blood composition of carp, and the physiology of blood in relation to the productivity of fish ponds. Correspondence concerning this symposium and succeeding ones should be sent to Professor Y. Suyehiro, Chief, Department of Fisheries, Division of Agriculture, Tokyo University, Bunkyoku, Tokyo, Japan.

## Argentine Astronomy

On 7–9 November, a meeting was held by Argentine astronomers at the Felix Aguilar Observatory of the University of Cuyo in San Juan. Seventeen papers, three general reports and ten progress reports, were presented. An important outcome of the meeting was the founding of the Argentine Astronomical Association and the election of the members of the Argentine National Committee for Astronomy. The officers of the new association are B. H. Dawson, president, J. J. Nissen, vice-president, C. Jaschek, secretary, J. Landi-Dessy, treasurer, and C. U. Cesco and J. L. Sersic, councilors. L. Gratton, C. Jaschek, R. Platzeck, and J. Sahade are the members of the National Committee.

## Foreign Medical Graduates' Examination Results

Results of the first world-wide American Medical Qualification Examination held 23 September in 30 U.S. examination centers and 30 foreign centers have been announced by Dean F. Smiley, executive director, Educational Council for Foreign Medical Graduates. The foreign centers were established in Latin America, the Far East, the Middle East, and Europe.

Statistics reveal that of the 844 foreign-trained physicians taking the examination, 418 passed and will receive the ECFMG Certificate. According to the council, these physicians are certified as possessing medical knowledge reasonably equivalent to that expected of graduates of approved American and Canadian medical schools and as having