
Miscellany

Facilities

Swarthmore College intends to construct a \$1.8 million science building with the help of a grant from the Longwood Foundation, a nonprofit corporation endowed by the late Pierre S. du Pont. Different wings of the proposed building will house the physics and chemistry departments (each complete with laboratories, classrooms, and faculty offices), the mathematics department, a science library, and a 200-seat demonstration lecture hall. Independent faculty research will be encouraged by the provision of private laboratory spaces adjoining faculty offices. Completion of the structure is expected by the early fall of 1959.

Tulane University has announced a \$26 million science building program as part of its projected 10-year, \$96 million fund-raising program. Plans include new science buildings; expansion, renovation, and equipping of existing science facilities; and establishment of a \$13 million restricted endowment fund to provide earnings for continued maintenance.

Atomics International, a Division of North American Aviation, Inc., has announced a \$1.25 million building program to expand nuclear field laboratory facilities in the Los Angeles, Calif., area. The project calls for the construction of six buildings and the support of site improvements and is expected to be completed before the end of the year. The new facilities will include a \$500 000 experimental facility for studying and testing nuclear reactor cores, a \$240 000 organic laboratory for developmental studies in connection with organic moderated power reactors, a \$160 000 sodium laboratory, and storage and warehousing facilities.

Fulbright Program

US Government grants for university lecturing and advanced research in other countries, awarded under the Fulbright Act, will again be available for the 1959-60 academic year. Applicants must be US citizens, and to be eligible for lectureships they must have had at least one year of college or university teaching experience. Applicants for research scholar awards must have a doctoral degree or recognized professional standing. In some cases a knowledge of the language of the host country is required. Awards are issued for one country only and applicants should specify a first choice and may list one alternative country. The following Fulbright awards are among those listed as being available for the coming year:

Austria

University of Innsbruck, Institute of Theoretical Physics. Specific topics of lectures (in German) to be arranged between grantee and the Institute.

Research scholarships in the physical sciences will also be made. A working knowledge of German is required.

Belgium and Luxembourg

Institut Inter-Universitaire des Sciences Nucléaires. A senior scholar is requested to lecture at four Belgium universities.

University of Liège has an opening for a research scholar in astrophysics.

China

Lecturing awards in basic science are available at National Taiwan University, Provincial Normal University, National Tsing Hua University Institute of Nuclear Science, and Taiwan Provincial Cheng Kung University.

Denmark

Århus University has a research position for either a theorist interested in nuclear or solid-state many-body problems or an experimentalist specializing in beta spectroscopy.

The Technical University of Denmark desires a specialist in nuclear nonferrous metallurgy.

Finland

The University of Helsinki has a lectureship open for a physicist who has had experience working with a van de Graaff accelerator.

A lectureship in experimental nuclear physics and/or reactor technology is available at the Finland Institute of Technology.

France

Lecturers have been requested as follows:

Aix-Marseille, Faculté des Sciences. Theoretical physics, particularly quantum field theory.

Besançon, Faculté des Sciences. Quantum mechanics applied to the solid state.

Lyon, Ecole Nationale Supérieure de l'enseignement technique. Physics of vibrations and servomechanisms.

Collège de France, Paris. Research scholars in biophysics and high-altitude studies are requested.

A short-term grant in theoretical physics is offered for the summer seminar at Les Houches. Knowledge of French is desirable.

Germany

Five full awards and two partial grants will be made to lecturers and five awards to research scholars in natural and applied science.

Ireland

Dublin Institute for Advanced Studies, School of Theoretical Physics has openings for a visiting lecturer in theoretical and cosmic-ray physics and a research scholar specializing in cosmic rays.

Israel

Weizmann Institute of Science has an opening for a research scholar in mathematical physics.

Italy

Universities of Rome and Naples. One lectureship in nuclear physics. Also additional lectureship in nuclear physics at Universities of Padua, Bologna and/or Milan.

HIGH-TEMPERATURE OPPORTUNITIES

Physicists • Physical Chemists • Chemical Engineers • Electrical Engineer

A highly creative group at Avco is beginning a major new phase of high-temperature studies based on its successful work with plasma jet facilities. Physicists and physical chemists at the Ph.D. level will find an unusual opportunity to assist in formulating long-range basic studies and in carrying them out.

- Physicists and physical chemists with interest in feasibility studies of novel propulsion techniques including plasma motors, ion rockets, nuclear propulsion, and atmospheric recombination. Supervisory and senior positions open.

- Physicists and physical chemists with interest in solid state physics and chemistry. Emphasis will be on studies related to structure and strength of materials. Supervisory and senior positions open.

- Physical chemists with strong theoretical background and an interest in chemical reactions and thermodynamic properties of materials at very high temperatures.

- Physicist with experience in gaseous electronics to work on a wide variety of problems connected with arc discharges and plasma jets.

- Chemical engineers with interest in high-temperature processes and materials. Experience desired.

- Physicist or electrical engineer with experience or interest in one or more of the following fields: microwaves, propagation through ionized plasmas, telemetry systems, energy conversion, ionospheric phenomena. This work requires a combination of analytical and experimental ability.

These positions offer ample opportunity for original contribution and publication, and association with a highly competent group with diverse professional backgrounds.

Write to: Dr. R. W. Johnston,
Scientific and Technical Relations,
Avco Research and
Advanced Development Division,
Lawrence, Massachusetts

Avco
Research & Advanced Development

WRITE FOR YOUR **FREE COPY**



**A
COMMUNITY
OF
SCIENCE**

We have recently published a 32-page booklet, "A Community of Science," designed to acquaint the reader with various aspects of professional employment at the Laboratory. The booklet contains objective descriptions of our research program, facilities and philosophies.

Physicists who are contemplating a forward step in their professional careers will find this booklet a helpful introduction to the Laboratory.

To get your free copy
please write to Mr. J. T. Kane
and request booklet T-4

CORNELL AERONAUTICAL LABORATORY, INC.
of Cornell University
BUFFALO 21, NEW YORK

**FOR SIMPLE,
STURDY ASSEMBLY**

**CENCO®
LATTICE ROD
CLAMPS**

Speedy assembly for all types of laboratory set-ups. Safe, dependable, exceptionally rigid. Easy to add or remove rods without dismantling structure. Made of tough alloy. Lock securely to rods by flush Allen screws.



No. 19092 Lattice Rod Clamps
in package of 12
with wrench

\$5.85



CENCO the most complete line of scientific instruments and laboratory supplies in the world.

CENTRAL SCIENTIFIC CO.
1718-B Irving Park Road • Chicago 13, Illinois
Branches and Warehouses — Mount Airy, N. J.
Boston • Birmingham • Santa Clara • Los Angeles • Tulsa
Houston • Toronto • Montreal • Vancouver • Ottawa

ENGINEERS—SCIENTISTS

Broad-Based Activities in Missiles, Aircraft, Space Technology Now Drawing Alert Engineers to Republic Aviation

GUIDANCE SYSTEMS

—EE or Physics background in design and analysis of inertial navigation systems.

RECONNAISSANCE SYSTEMS

—MS, Physics. Application of optics and infra-red techniques.

OPERATIONAL ANALYSIS

● Armament systems (advanced bombers). BS with 4–5 years relative experience. Understand current armament principles and damage criteria.

● Reconnaissance & detection systems. MS. Requires extensive knowledge of probability and game theory.

● Reconnaissance and detection systems. MS with broad background missile or aircraft fields (electronics, vehicle performance, armaments, structures or applied mathematics).

THEORETICAL FLUID DYNAMICS

—AE or Physics, MS or PhD. To conduct basic research in fluid dynamics related to hypervelocities of flight in rarefied atmosphere at orbital speeds. Requires strong aeronautics, understanding kinetic theory of gases applied to field, Reynolds number and dissociation effects.

*Please send resume
in complete confidence, to:*

MR. GEORGE R. HICKMAN,
Engineering Employment Manager



REPUBLIC AVIATION

Farmingdale, Long Island, New York

Japan

Tohoku University, Sendai, or Osaka University. Experimentalists preferred for these lectureships.

One research grant at Kyoto University, Research Institute for Fundamental Physics and one at Nagoya University for a specialist in process design and applied kinetics.

Hiroshima University. A lectureship in scientific and technical education for teacher-training program.

Norway

A junior scholar in either nuclear energy research, biophysics, or physics and a specialist in servomechanics.

Nigeria

University College, Ibadan, Department of Physics is interested in scholar with interest in ionospheric studies.

Applications must be postmarked no later than October 1, 1958, and should be mailed to the Conference Board of Associated Research Councils, Committee on International Exchange of Persons, 2101 Constitution Avenue, Washington 25, D. C.

In addition to the Fulbright awards listed above, about sixty university lectureships are offered annually under the Smith-Mundt Act, usually in countries not included in the Fulbright program. The lectureships are established only at the request of foreign universities and when there are dollar funds available to support them. Since the Conference Board Committee receives such requests intermittently, often on short notice, open competitions to fill them are impractical. Instead, the Committee has established a register of scholars who expect to be available in the future for overseas assignments. The register is the basic resource file of candidates for lectureships under the Smith-Mundt Act and it is also consulted for candidates for Fulbright awards not filled through the open competition. Those interested in such assignments are invited to file data sheets with the Committee at the address given above. Data sheets are provided by the Committee upon request.

Honors and Awards

Winners of the awards for the best essays on gravity have been announced by the Gravity Research Foundation of New Boston, N. H. The first award of \$1000 was given to Giuseppe Cocconi and Edwin Salpeter, professors of physics and nuclear studies at Cornell University, for a paper on "A Search for Anisotropy of Inertia". The second award of \$300 went to Quentin A. Kerns of the University of California Radiation Laboratory for his essay entitled "A Proposed Laboratory Measurement of the Velocity of Propagation of Gravity". The remaining awards were made to Joseph Weber of the University of Maryland, Winston H. Bostick of Stevens Institute of Technology, and Fritz Zwicky of the Mount Wilson and Palomar Observatories.

The Biennial Award of the Acoustical Society of America was presented on May 8 to Bruce P. Bogert of the Bell Telephone Laboratories at Murray Hill, N. J.,