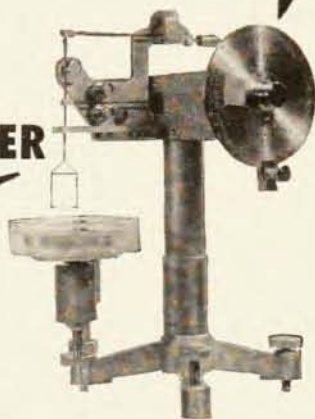


For fast, accurate
measurement of
**SURFACE-INTERFACIAL
TENSIONS**
CENCO-du Nouy
the original
TENSIOMETER



Measures surface or interfacial tensions by the ring method. Precise determinations in a matter of minutes. Upward or downward forces are read directly—reproducible to within 0.05 dyne. (See ASTM D971-50)

With platinum ring and metal case.....\$439.50



CENTRAL SCIENTIFIC CO.

A Subsidiary of Cenco Instruments Corporation
1718-B Irving Park Road • Chicago 13, Illinois
Mountainside, N. J. Montreal Santa Clara
Somerville, Mass. Toronto Los Angeles
Birmingham, Ala. Ottawa Vancouver Houston
Cenco S.A., Breda, The Netherlands Tulsa

PHYSICIST

THE RADIATION LABORATORY OF
THE JOHNS HOPKINS UNIVERSITY
HAS A POSITION FOR A QUALIFIED
PHYSICIST IN THE FIELD OF:

MAGNETOHYDRODYNAMICS

WITH EMPHASIS ON ELECTROMAGNETIC
PROPAGATION AND THE GENERATION
OF NOISE IN MAGNETICALLY
CONFINED PLASMAS

Favorable Arrangements for Doctoral and Post
Doctoral Study in the University Graduate
Schools

Faculty Privileges for Senior Staff

Excellent Laboratory Facility Located Near the
University Campus

Broad Opportunities for Personal Development

Address Inquiries To:

**RADIATION LABORATORY
THE JOHNS HOPKINS UNIVERSITY
Homewood Campus Baltimore 18, Md.**

Atomic and Nuclear Science

NUCLEAR frontiers—a challenge to industry is the theme of the 1960 annual conference of the Atomic Industrial Forum to be held December 14–16 at the Fairmont Hotel in San Francisco. The agenda will include such topics as the role of nuclear energy in space exploration, the impact of public attitudes on atomic energy progress, problems in industry-government relations, advanced nuclear technology, international atomic developments, and progress in radiation and radioisotope application.

The AIF conference is being held in conjunction with the winter meeting of the American Nuclear Society, which will take place December 12–15 at the Mark Hopkins (for details, write to E. Zebroski, P. O. Box 254, San Jose, Calif.) and the AIF-ANS "AtomFair-West", which will be held December 12–15 in San Francisco's Masonic Memorial Building (for information and complimentary tickets, write, on letterhead stationery, to Exhibit Manager, Atomic Industrial Forum, 3 East 54th Street, New York 22, N. Y.). A preliminary program and registration information are available from the Conference Manager of the Atomic Industrial Forum at the latter address.

Strong Interactions

IN connection with the Pacific Coast Meeting of the American Physical Society (December 29–31 in Berkeley, Calif.) a special conference on strong interactions will be held December 27–29 at the Department of Physics of the University of California in Berkeley. It will consist of invited papers and will be open to all APS members. The first two days will be devoted to experimental aspects, while the third day will review theory. Present plans call for ample time for discussions. There will be opportunity to visit the Lawrence Radiation Laboratory.

The official hotels for the conference are the Claremont, Durant, and Shattuck in Berkeley. The conference, which will be supported in part by the US Atomic Energy Commission and the Air Force Office of Scientific Research, is being planned by a committee consisting of V. F. Weisskopf, G. F. Chew, W. K. H. Panofsky, D. A. Glaser, R. L. Cool, and A. C. Helmholz, chairman. Further information can be obtained from Dr. Helmholz at the Department of Physics, University of California, Berkeley 4, Calif.

Materials and Electron Device Processing

THE chemistry and physics of device processing, with emphasis on various materials and processing problems common to electron tubes and solid-state devices, will be discussed at a three-day symposium on Materials and Electron Device Processing to be held April 10–12 at the Franklin Institute in Philadelphia. The American Society for Testing Materials Committee F-1 on Materials for Electron Tubes and Semiconductor Devices will be the sponsor. Subjects to be covered include: detection and removal of contaminants from

Research Progress . . .

. . . exemplified in our series of Research Center photographs, carries deeper meaning at Philco. Our new quarters will be complete for occupancy early next year—an important support for planned growth of the Research Division.

Requirements for scientists grow correspondingly. Numerous disciplines are needed; specific opportunities now exist for:

Physicists to investigate the application of novel metallurgical techniques.

Physicists to develop and evaluate solid state measurement methods.

Physicists to study solid state photoeffects.

For detailed discussion of the Corporation's research program, write to:



MR. LEONARD RAND • PHILCO CORPORATION • TIOGA & "C" STREETS • PHILADELPHIA 34, PENNSYLVANIA



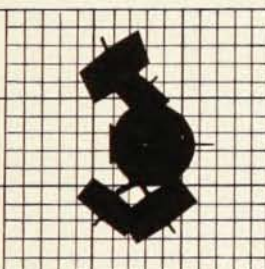
PHILCO

RESEARCH DIVISION

Materials

Research

Scientists



STL offers opportunities for Scientists and Research Engineers with advanced degrees who desire an environment that stimulates independent research in the field of solid state physics, radiation damage, mechanical properties, high temperature materials, high vacuum techniques and optical properties.

These challenging assignments are with a newly created group of scientists in the materials field. Selected applicants will be invited to follow their independent interests in the field of Materials Research.

STL is an expanding organization with a professional staff of more than 1,700 scientists and engineers engaged in advanced space and missile programs.

Resumes directed to Dr. R. C. Potter, Manager of Professional Placement, will be treated in confidence and will receive immediate attention.

SPACE TECHNOLOGY
LABORATORIES, INC.

a subsidiary of Thompson Ramo Wooldridge Inc.
P.O. Box 95005W, Los Angeles 45, California



CENCO® HYVAC GAS BALLAST PUMPS

For vacuum applications plant and laboratory. Eliminates use of oil separators, centrifuges, refrigerated traps. Wide range of capacities.



No. 91506-1 rated displacement,
70.0 liters per min. . . \$284.25



CENTRAL SCIENTIFIC CO.

A Subsidiary of Cenco Instruments Corporation
1718-B Irving Park Road • Chicago 13, Illinois
Mountainside, N. J. Montreal Santa Clara
Somerville, Mass. Toronto Los Angeles
Birmingham, Ala. Ottawa Vancouver Houston
Cenco S.A., Breda, The Netherlands Tulsa

INFRARED
Spectroscopists
**Dependable, Prompt Delivery
 on Cell Windows, Prisms, Accessories**



Crystals are not just a sideline at ISOMET. Years of research and development have enabled us to produce consistently the highest quality crystals obtainable and at attractive prices. We go all out to serve you with

**HIGHEST QUALITY
 ATTRACTIVE PRICES • PROMPT DELIVERY**
 —three good reasons why leading spectroscopists everywhere are turning to ISOMET for their crystal needs. Why don't you try us on your next order.

NaCl, KBr, KCl, KI, CsBr, CsI, BaF₂, MgO
 Rough blanks, polished windows, prisms, special shapes.
 Standard liquid and gas cells; special cells.
 Repair and polishing service for cells and windows.
 KBr Pellet Powder.

 **WRITE TODAY** for price list and free
 Technical Bulletin No. 15710.

Isomet
 CORPORATION
 P.O. Box 34—Palisades Park, N. J.

POSITIONS OPEN

PHYSICISTS

LOS ALAMOS SCIENTIFIC LABORATORY, Operated by the University of California and located in the mountains of Northern New Mexico, invites applications from PhD Physicists with experience or a strong interest in atomic and molecular physics, electronic and ionic collision processes, physics of ionized and hot gases, or upper atmosphere physics.

The programs are of a fundamental theoretical and experimental nature, and are related to advanced phases of LASL programmatic problems. The stimulating academic atmosphere and availability of modern facilities and elaborate instrumentation make employment at Los Alamos attractive and rewarding.

Please send resume to:

Recruiting Department
 LOS ALAMOS SCIENTIFIC LABORATORY
 University of California
 Los Alamos, New Mexico

device materials; examination and evaluation of materials and device processing facilities, such as chemical etchants and solvents; ambient conditions, including furnace atmospheres and dust and lint control; and the chemistry and physics of device activation and reliability.

Titles and 200-word abstracts should be submitted before January 2 to Dr. D. E. Koontz, Bell Telephone Laboratories, Murray Hill, N. J. The deadline for complete papers is February 15. Further information on the meeting can be obtained from the American Society for Testing Materials, 1916 Race Street, Philadelphia 3, Pa.

Macromolecular Chemistry

HIGH-POLYMER science, with emphasis on the newer fields of research, will be discussed at the 1961 International Symposium on Macromolecular Chemistry. The meeting will take place from July 27 to August 1 at the Queen Elizabeth Hotel in Montreal, Canada. Sponsored jointly by the Division of Polymer Chemistry of the American Chemical Society and the Commission on Macromolecules of the International Union of Pure and Applied Chemistry, it will be held under the patronage of the Chemical Institute of Canada, the Canadian Section of the Society of Chemical Industry, and the Canadian Association of Physicists. The Canadian High-Polymer Forum will serve as host.

According to a preliminary announcement, plenary and invited lectures are planned. It is intended that papers of like interest will be grouped together and introduced by an invited speaker. Persons wishing to receive additional information should write to the Organizing Committee, International Symposium on Macromolecular Chemistry, P. O. Box 816, Sarnia, Ont., Canada.

Information Theory

AN International Symposium on the Transmission and Processing of Information will be held September 6-8, 1961, at the Massachusetts Institute of Technology. Planned by the Institute of Radio Engineers Professional Group on Information Theory in co-operation with the Center of Communication Sciences in MIT's Research Laboratory of Electronics, the meeting is intended to provide an occasion for presenting new theoretical and experimental research contributions. As in the case of similar symposia held in 1954 and 1956, no tutorial papers will be given and the program will be planned specifically for active specialists in the field.

In order that the Symposium *Transactions* can be distributed at least two weeks prior to the meeting, the following deadlines have been set: January 1 for receipt of 500-1000-word abstracts; April 1 for receipt of complete papers. Abstracts and papers should be submitted to the chairman of the Program Committee, Peter Elias, Research Laboratory of Electronics, Massachusetts Institute of Technology, Cambridge 39, Mass., from whom further information can be obtained.