



We stock!

TELLURIUM

92-780	Telluric acid
92-781	Telluric acid AnalR
92-782	metal, lump
92-783	metal, powder
92-784	oxide
92-785	tetrabromide
92-786	tetrachloride
90-084	Aluminum telluride

Ask for our NEW CHEMICALS CATALOG, listing over 3,000 fine BDH chemicals.



2227 Massachusetts Avenue
Cambridge, Massachusetts 02140

The CENTRAL INTELLIGENCE AGENCY



Important career opportunities are available for Physicists, Chemists, Engineers, Geophysicists, Life Scientists and Mathematicians in the Washington area and elsewhere. The work is classified and stands on the frontier of modern science and technological development. Laboratory and computer facilities are available for individual research. If you are interested in focusing your talents and experience on problems of unusual importance to the national security, you can explore these opportunities in complete confidence by writing to:

Dr. William R. Rumford
2430 E Street, N.W., Washington 25, D. C.

accelerator operation schedules could be arranged to encourage continuing frequent use of the national facilities by university scientists.

The chairman of the panel was Norman F. Ramsey of Harvard. Its members included Philip H. Abelson of the Carnegie Institution of Washington, Owen Chamberlain of the University of California, Murray Gell-Mann of Caltech, E. L. Goldwasser of the University of Illinois, T. D. Lee of Columbia, W. K. H. Panofsky of Stanford, E. M. Purcell of Harvard, Frederick Seitz of the National Academy of Sciences, and John H. Williams of the University of Minnesota.

New Observatory in Hawaii

The Institute of Science and Technology of the University of Michigan has announced that it will build an astronomical observatory on 10 000-ft Mt. Haleakala on the Hawaiian island of Maui. The new facility, which will conduct both astronomical observations and missile-tracking operations, will cost about \$5 million. Of this sum, \$4 350 700 has been provided by the Advanced Research Project Agency under a three-year contract with IST.

The site for the observatory was provided by the University of Hawaii out of land granted for scientific purposes. It is located on the Kole Kole peak of Mt. Haleakala and was chosen because it is near routes followed by many test missiles, in a good latitude for observing most satellites, and at an altitude where the stable climate provides optimum visual conditions. Observational conditions at the site were investigated by C. P. Kuiper of the Lunar and Planetary Laboratory of the University of Arizona.

Optical equipment will include one 60-inch reflector and two 48-inch reflectors. Infrared observing equipment will also be installed, and, according to IST's acting director, James T. Wilson, the station "will be the first astronomical observatory to conduct full-scale astrophysical and geophysical studies in the infrared portion of the electromagnetic spectrum". The manager of the observatory project is Robert L. Boggess of the IST Infrared Laboratory.

Review of Federal Agencies' Grant Policies

The scientific community's reactions to the policies followed by Federal agencies in the administration of grants and contracts in support of fundamental research are being reviewed by the National Academy of Sciences. The study will be conducted by the Academy's Committee on Science and Public Policy, and its major objective will be to recommend a set of broad policies and principles that will both "safeguard the fiscal responsibilities of Federal agencies and preserve a favorable environment for the conduct of scientific work".

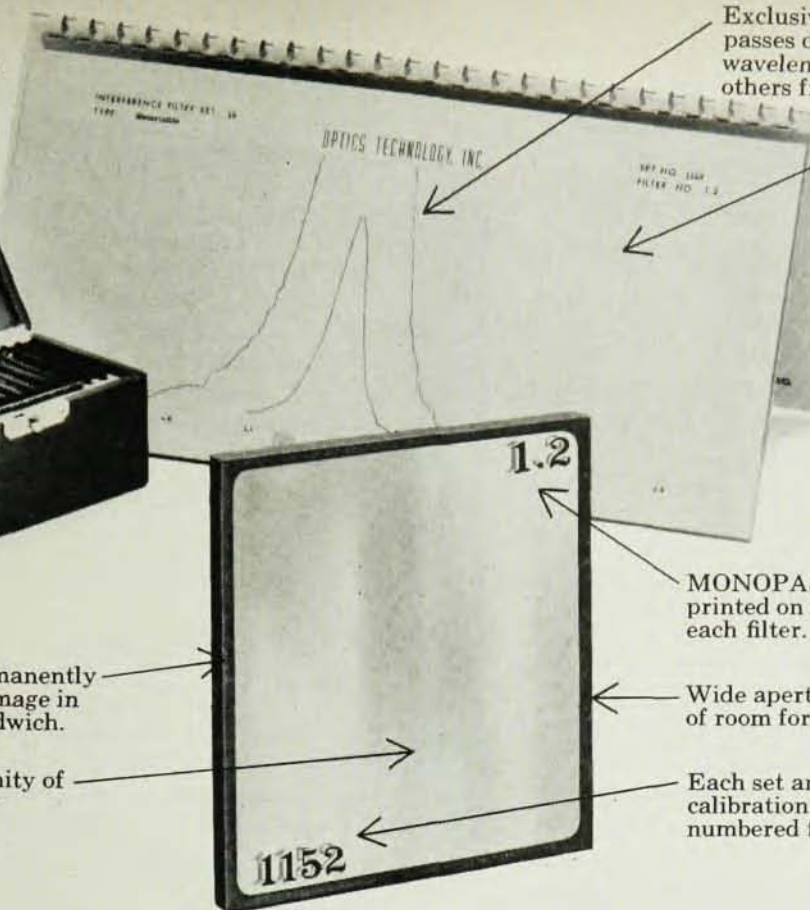
The committee is therefore soliciting constructive criticisms and recommendations from members of the

Every set of these filters comes in a leatherette felt-lined box.



Coatings are permanently sealed against damage in durable glass sandwich.

Excellent uniformity of transmission over entire surface.



Exclusive MONOPASS design passes only a narrow band of wavelengths, rejecting all others from X-band to X-ray.

Calibration charts assure pinpoint accuracy. Spectrophotometer traces include 10:1 scale expansion for each individual filter.

Each chart is laminated in heavy plastic and permanently bound into a rugged volume.

MONOPASS® wavelength printed on front side of each filter.

Wide aperture gives you plenty of room for your experiments.

Each set and its companion calibration charts are numbered for easy reference.

CALIBRATED FILTER SETS FOR IMMEDIATE DELIVERY

VISIBLE SPECTRUM SETS

5A/Four neutral density filters covering the entire visible spectrum, with density ratings of .5, 1, 2, and 3. Set comes complete with calibration tables. \$95.

10A/Ten MONOPASS filters which isolate principal lines such as K, Ca, Hg, etc., from 404 to 706 millimicrons. Essential for flame chemical analysis. Four neutral density filters, a linear spectral "wedge" filter, and book of calibration charts are included. \$395.

12A/Ten MONOPASS filters uniformly spaced from 400 millimicrons to 700 millimicrons, as well as four neutral density filters and a linear spectral "wedge" filter. Calibration charts are also included in price. \$395.

We also offer complete custom service for LASER technology. Reflectors to your specifications. Coatings on your substrates. We're at your service. Delivery normally within two weeks.

INFRARED SETS

15A/Ten MONOPASS filters spaced 0.1 micron apart between 0.8 and 1.7 microns. Individually drawn calibration charts accompany each boxed set. \$450.

20A/Ten interference filters on 1" diameter substrates, mounted in convenient plastic holders, spaced at every 0.1 micron between 1.8 and 2.7 microns. Complete calibration charts included. These filters are blocked past 3.2 microns (lead sulphide cut-off) on the long end and to X-ray on the short end. \$450.

PLUS: RUBY LASER SET 50A

This specially designed set includes seven all-dielectric mirrors and beam-splitters at several values of attenuation. Each is designed and manufactured to withstand high LASER energies without deterioration. Also included are a MONOPASS filter at 694 millimicron ruby wavelength and complete calibration chart for set. \$395.

R&D positions available for scientists and engineers in classical and modern optics. Contact Personnel Department.

OPTICS TECHNOLOGY, INC



248 HARBOR BOULEVARD
BELMONT, CALIFORNIA
LYtel 1-0358 (AC 415)

For additional information, write OTI or your nearest OTI representative: New England: H. J. Schutt Co.; New York, Metropolitan: E. C. Smith and Assoc.; New York, Upstate: E. W. Stone Co.; Mid-Atlantic: C. E. Snow Co.; Ohio-Indiana-Michigan: Electro Sales Associates; So. California: Abbott Instrument & Engineering; Southwest & Mountain States: Southwestern Engineering & Equipment Co.; Europe: HVL, Brussels; Other export: Henley and Co., New York, N. Y.

PHYSICIST

A SOLID FUTURE IN RESEARCH DEVELOPMENT & APPLICATION

Expansion in our Crystal Solid State Division creates a unique professional opening for M.S. or Phd level Solid State physicist who is interested in application of insulators and semi-conductors to new and existing devices.

Will plan, design, perform and interpret experiments directed at obtaining an understanding of electro-optical phenomena in insulators and semi-conductors. Will devise measurement techniques for properties of solid state materials in connection with device research and materials preparation. Will study the development and application of devices utilizing photoconductive and photovoltaic properties of materials.

This position carries a good starting salary with excellent professional growth potential—the educational, recreational and cultural facilities are of the finest. Send your resume in confidence to Personnel Director

THE HARSHAW CHEMICAL COMPANY
1945 E. 97th Street Cleveland, Ohio
An Equal Opportunity Employer



Ph.D. — EXPERIMENTAL NUCLEAR PHYSICIST A UNIQUE RESEARCH OPPORTUNITY

If you are looking for a permanent position in industry which offers not only the opportunity for professional advancement, but will use your formal training to the fullest extent, we believe you will be interested in our organization.

Some of the research projects presently under way include:

1. Measurement of cross sections of slow charged particle induced nuclear reactions.
2. Study of 3-body nuclear break-up problems.
3. Investigation of new detector types, and associated electronic circuitry.

The individual we are seeking is not only a competent gatherer of experimental information, but has the ability to draw upon current theory to help him interpret what he sees in the laboratory. We feel that this depth of understanding of a problem is the only way to make our company grow and remain a leader in the nuclear industry.

Please submit your resume describing your training, experience, and publications to:

Personnel Division



333 East Howard Avenue

Des Plaines, Illinois

An Equal Opportunity Employer

scientific community. Comments and observations should be addressed to the Committee on Science and Public Policy, National Academy of Sciences, 2101 Constitution Ave., N.W., Washington 25, D.C.

The present members of the Committee on Science and Public Policy, and their disciplines, are: George B. Kistiakowsky, chairman, chemistry; Philip H. Abelson, geophysics; Lawrence R. Blinks, botany; H. W. Bode, engineering; Frank Brink, Jr., physiology; Melvin Calvin, chemistry; Leo Goldberg, astronomy; Frank L. Horsfall, Jr., pathology and microbiology; A. L. Lehninger, biochemistry; Donald B. Lindsley, psychology; Saunders Mac Lane, mathematics; William W. Rubey, geology; Harry L. Shapiro, anthropology; T. M. Sonneborn, zoology and anatomy; and Alvin M. Weinberg, physics.

Radiation Medicine

The Atomic Energy Commission and the Lovelace Foundation for Medical Education and Research have announced that Foundation personnel have begun to occupy recently completed portions of a new facility for the study of the biological effects of inhalation of radioactively contaminated air. The Fission Product Inhalation Facility, located at Sandia Base, N.M., will eventually consist of twelve buildings and will cost \$3 million. Four of the twelve units are now complete, including two main laboratory structures, a building housing veterinary support work and the central power plant, and one dog kennel. Later units will include administrative offices, a variety of specialized laboratories, and facilities for mice, rats, and guinea pigs. When all facilities are completed and the program is in full operation, there will be research observation of 10 000 small animals and 1000 dogs. The dogs used will be a special breed of beagles.

International Center for Theoretical Physics

Plans for setting up an international center for theoretical physics at Trieste early in 1964 have been announced by the International Atomic Energy Agency. The proposed center has been under discussion by the IAEA General Conference and its Board of Governors since September 1960, and a series of studies were made with the help of theoretical physicists from many countries. The Italian government has offered to construct a new building and housing facilities, to provide staff services and fellowships, and to contribute \$250 000 annually for five years. The IAEA will provide fellowships and professorships up to an annual value of \$55 000 for four years and make additional contributions up to \$110 000 in the same period. It was decided to establish the facility on a provisional basis and to evaluate its work after two years to determine the direction of future activity. A further review would be undertaken after four years to determine if it would be desirable to move the center to a developing country.