

X-RAY DIFFRACTION SPECIALISTS

Sylvania's Research Laboratory on Long Island offers exceptional opportunities to Ph.D. or equivalent to take charge of X-Ray group doing basic and applied research with X-Ray diffraction and fluorescent X-Ray spectroscopy. Principal emphasis is on non-ferrous metallurgical applications with some effort directed to the study of ceramics and phosphors. Skills should include experimental techniques for determining crystal structures, crystallite sizes, preferred orientation textures, degrees of crystal perfection. Some knowledge of X-Ray spectroscopy desirable. Salary commensurate with qualifications. Excellent employee benefits available.

For confidential interview,
Write Charles F. Tufts



SYLVANIA ELECTRIC PRODUCTS INC.

Atomic Energy Division

P.O. Box 59

Bayside, N.Y.

POSITIONS OPEN

EXPERIMENTAL PHYSICISTS

with competence in electronic circuitry, or with radar experience, are required on the research and development staff of Paul Rosenberg Associates.

PRA is a long-established firm of consulting physicists conducting unusually interesting and challenging programs of applied research and development for Government and industry, in a stimulating, pleasant, academic atmosphere. PRA offers the advantages of employment in a small, growing company managed by physicists.

Applications are kept in confidence. U. S. citizenship required.

Paul Rosenberg Associates

100 Stevens Avenue, Mount Vernon, New York

TEXTILE RESEARCH INSTITUTE requires services of physicist or physical chemist with M.S. or Ph.D. for its program of fundamental research on the relations between fiber molecular structure and mechanical properties. Academic environment and opportunity to publish original work. Send replies, which will be held confidential, with brief resume to Director, Textile Research Institute, Princeton, New Jersey.

(a) COLLEGE TEACHER: (starting September 1957). 1st choice, experimental physicist with Ph.D. to teach graduate as well as undergraduate courses. 2nd choice, chemist with minimum of Master's degree to teach principally elementary sections. (b) PHYSICS TECHNICIAN: (starting July or September 1957). To maintain and build physics equipment. Preferably experienced in metal and wood working, glass blowing, and (or) electronics. Beginning salaries for above depend on training and experience. Send complete resume to H. W. Gould, Northern Illinois State College, DeKalb, Illinois.

Teaching Position open Physics Department, Assistant Professor or higher dependent upon qualifications; begins September, 1957. Apply Executive Dean, Fresno State College, Fresno, California.

rected toward those specifically interested in the various forms of nearly pure silica. Inquiries regarding the program should be sent to Alvin J. Cohen, Mellon Institute, 4400 Fifth Avenue, Pittsburgh 13, Pa.

Contemporary Physics

THE nineteenth annual Colloquium of College Physicists will occur at the State University of Iowa on June 12-15. The program will consist of lectures by prominent physicists on developments in contemporary physics and of round table discussions on the teaching of physics and on other current problems of the profession. One evening will be devoted to the exhibit of original demonstration equipment and other teaching devices, and of recent publications. The four associated June lectures will be given by R. P. Feynman of the California Institute of Technology. Registration is without fee and will begin on Wednesday morning, June 12. For other information, contact Dr. J. A. Van Allen, Department of Physics, State University of Iowa, Iowa City, Iowa.

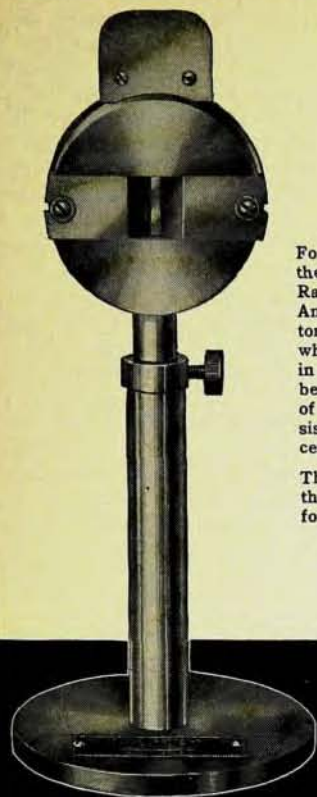
Ionization Phenomena in Gases

CONTINUING the series of conferences initiated by A. von Engel at Oxford in 1953 and followed up by A. B. Dorgelo at Delft in 1955, the Italian Physical Society is organizing the Third International Conference on Ionization Phenomena in Gases, which is to be held June 11-15, 1957, in the building of the "Fondazione G. Cini" in Venice. The program will be divided into the following four general sections, each of which will include survey papers and short communications:

1. Fundamental processes in ionized gases.
2. Mechanism and properties of various types of discharges.
3. Nuclear reactions in discharges; contraction mechanisms, neutron production, etc.
4. Technical and instrumental questions; applications.

English will be the preferred language of the Conference. The proceedings will be published in the *Supplemento di Il Nuovo Cimento*. It is understood that invitations to attend the Conference have been accepted by:

H. Alfven (Stockholm), W. P. Allis (Cambridge, Mass.), D. Alpert (Pittsburgh), E. Amaldi (Roma), L. A. Arzimovic (Moscow), C. Bernardini (Roma), A. L. Boers (Amsterdam), G. Bolla (Milano), L. Branscomb (Washington), D. Brini (Bologna), S. C. Brown (Cambridge, Mass.), B. Brunelli (Roma), P. Caldirola (Milano), C. Cassignol (Saclay), L. Colli (Milano), M. Conversi (Pisa), J. D. Craggs (Liverpool), C. Della Pergola (Roma), H. B. Dorgelo (Eindhoven), J. Druaux (Saclay), J. Dutton (Swansea), G. Ecker (Bonn), W. Elenbaas (Eindhoven), K. G. Emelous (Belfast), H. Faraggi (Saclay), W. Finkelburg (Erlangen), L. H. Fisher (New York), G. Francini (Roma), W. Fucks (Aachen), S. Gallone (Milano), E. Gatti (Milano), A. Gilardini (Roma), L. Goldstein (Urbano), V. Gori (Roma), L. R. Griffin (Swansea), N. Herlofson


EPLAB

Thermopiles

For many years the thermopile has been the accepted instrument for measuring Radiant Heat from Radiant Heaters at the American Gas Association Testing Laboratory in Cleveland, Ohio. Since 1930, when Vandaveer first described his work in this field,* an Eppley thermopile has been used for this purpose in hundreds of tests and the results have been consistent and accurate to within 1 per cent.

This is but one of the many applications in the field of radiant energy measurements for which Eppley Thermopiles are ideally

suited. They may be obtained with windows of different materials, and various types of black are available for receiver coatings.

All Eppley Thermopiles are supplied with a certificate of calibration, this calibration being made against a Standard Lamp from the National Bureau of Standards.

If you have a problem involving the measurement of radiant energy we invite you to write us, describing your problem in as much detail as possible. We will be glad to make recommendations and there will be no obligation.

**Vandaveer, Industrial & Engineering Chemistry, Vol. 22, page 596, June 1930.*

BULLETIN NO. 3 ON REQUEST

ADDRESS: 10 SHEFFIELD AVE., NEWPORT, R. I.

THE EPPLEY LABORATORY, INC.

SCIENTIFIC INSTRUMENTS

NEWPORT, RHODE ISLAND, U. S. A.

WEAPONS EVALUATION and MISSILE FEASIBILITY STUDIES

Research Organization needs men for weapons evaluation and missile feasibility studies. Experience in one or more of the following fields required: statistics, physics and possibly game theory. Individuals must be imaginative, creative and original in dealing with concepts.

These positions offer opportunity to work on a wide variety of problems which encompass all forms of air and ground warfare. Work in small project group and an intimate environment of diversified scientific talents.

If you are interested in employment in a long established research organization in the metropolitan area offering cultural and educational advantages and access to a university campus, please send us your resume. Please send replies to 357D, Physics Today, 57 East 55 Street, New York 22, N. Y.

X-RAY DIFFRACTION AND FLUORESCENCE

Opening for responsible individual to take charge of new, well-equipped X-ray laboratory. Experience and interest required in metallurgical, corrosion, general diffraction problems and fluorescence applications. Submit resume and salary requirements to:

Employment Department QQ
GOODYEAR ATOMIC CORPORATION
P.O. Box 628
Portsmouth, Ohio



MAGNIFIERS



TELESCOPES



BINOCULARS



MICROSCOPES



COMPARATORS

RETICLES

PROJECTORS

POCKET MICROSCOPES

LENSES, PRISMS WEDGES

INSPECTION MIRRORS

SPECTROSCOPES

FASCINATING! INFORMATIVE!

GIANT CATALOG

OF OPTICAL BUYS!

..... Yours Free!

Over 1,000 Optical Items!

MANY ON-THE-JOB HELPS . . . QUALITY CONTROL AIDS!

Write for this amazing Catalog! You won't be sorry! 64 pages — hundreds of illustrations, charts, diagrams. A treasure-house of optical information . . . bargains galore. Optics for industry! Optics for research labs, experimenters, hobbyists! Instruments for checking, measuring — to speed your work, improve your quality, cut your costs. We give you FACTS, no fluff. Tell you what it is — how it works — where it's used!

COMPARATORS, MAGNIFIERS, MICROSCOPES

Countless war surplus bargains — ingenious optical tools from foreign lands. Thousands of optical components, lenses, prisms, wedges, mirrors, mounts — accessories of all descriptions. We are reliable. You deal with us by mail. No salesman will call. Shop the Catalog of America's greatest optical mart. Mail coupon. No obligation.

IF IT'S OPTICAL—WE'VE GOT IT!

MAIL COUPON FOR FREE OPTICAL CATALOG!

EDMUND SCIENTIFIC CO., Barrington, N. J.

Please send me FREE OPTICAL CATALOG "K"

Name

Company

Address

City Zone State

POSITIONS OPEN

RESEARCH PHYSICIST

Ph.D. preferred or M.S. with experience.

Small expanding laboratory in Cleveland metropolitan area offers opportunity to develop with company engaged in electronics research and manufacturing. Experience in semiconductors and thin films desirable but not necessary.

KEMET COMPANY

a Division of Union Carbide & Carbon Corporation

P. O. Box 6087

Cleveland 1, Ohio

PHYSICIST—Physical Chemist for Study of Rate Processes relating to chemical and phase changes induced by shock waves. Box 357A, Physics Today, 57 East 55 Street, New York 22, N. Y.

ENGINEERS • MATHEMATICIANS Live in Beautiful Pasadena!

Fastest growing digital computer needs you in California. See ELECTRODATA, Division of Burroughs, ad in this issue, Please refer to Advertiser's Index.

(Stockholm), L. H. Höcker (Stuttgart), K. Honda (Tokyo), T. Kahan (Paris), J. Kistemaker (Amsterdam), W. Kluge (Stuttgart), L. Koch (Saclay), S. Korff (New York), J. Labeyrie (Saclay), M. A. Leontovic (Moscow), F. Llewellyn Jones (Swansea), W. Lochte Holgreven (Kiel), L. B. Loeb (Berkeley), H. Maecker (Erlangen), H. Margenau (Yale), J. M. Meek (Liverpool), C. Miller (Santa Barbara), C. G. Morgan (Swansea), F. Netter (Saclay), W. B. Nottingham (Cambridge, Mass.), M. Paic (Zagreb), E. Palm (Greifswald), E. Persico (Roma), A. V. Phelps (Pittsburgh), R. Pottier (Saclay), R. Post (Livermore), H. Raether (Hamburg), O. Rimondi (Bologna), P. K. Rol (Amsterdam), D. J. Rose (Murray Hill), A. Rostagni (Padova), C. Salvetti (Milano), J. Sayers (Birmingham), C. Schuhl (Saclay), P. Schulz (Karlsruhe), R. Seeliger (Greifswald), D. Sette (Roma), M. Silvestri (Milano), T. Sluyters (Amsterdam), Z. Sternberg (Zagreb), M. Surdin (Saclay), P. C. Thoneman (Harwell), L. O. Tideman (Ludvika), N. Varney (Saint Louis), P. Veronesi (Bologna), M. Vendryes (Saclay), A. von Engel (Oxford), G. Wehner (Minneapolis), J. Weill (Saclay), G. Weissler (Los Angeles), W. Weizel (Bonn), S. D. Winter (Saclay), I. Wolff (Princeton), K. Yamamoto (Nagoya), a Harwell delegation, a delegation from Russia, G. Francis (Oxford), P. F. Little (Oxford), C. Sanchez del Rio (Madrid), P. Hubert (Saclay), Sir John Cockcroft (Harwell).

All those who wish to attend the Conference or desire further information are urged to write before March 15 to the General Secretary of the Conference, Prof. Ugo Facchini, Laboratori CISE, Via Procaccini 1, Milano, Italy, who will send them application forms. Hotel reservations are to be arranged by the Compagnia Italiana Turismo (CIT), Milano.

Chemistry and Physics of Metals

THE 1957 Gordon Research Conference on the Chemistry and Physics of Metals will take place July 8–12 at Kimball Union Academy, Meriden, N. H. This year's meeting, under the chairmanship of A. S. Nowick, will consist of some 15 scheduled lectures on the following topics: Visual Observation of Dislocations, Irradiation Effects, and Properties of Dislocations; panel discussions will be held on Observation of Dislocations and on Interaction between Point Defects and Dislocations. Lectures are to be given by P. Hirsch, J. J. Gilman, G. H. Vineyard, R. Smoluchowski, K. Lark-Horovitz, J. H. Crawford, Jr., J. A. Brinkman, A. Sosin and C. J. Meechan, M. D. Fiske, T. H. Blewitt, R. W. Balluffi, A. Seeger, K. Lücke, D. O. Thompson, and W. Dekeyser. Requests for additional information concerning the conference should be addressed to W. George Parks, Department of Chemistry, University of Rhode Island, Kingston, R. I.

Theoretical Physics

THE Theoretical Physics Division of the Canadian Association of Physicists is planning to sponsor a Seminar and Conference next summer at Edmonton and Banff, Alberta. The Seminar, to take place August 12–30 at the University of Alberta at Edmonton, will consist of several series of lectures, those designated "re-