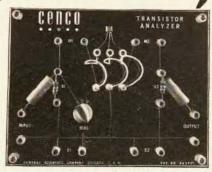
To demonstrate transistor functions...

NEW CENCO TRANSISTOR ANALYZER

Graphically demonstrates three basic transistor configurations—common emitter, base and collector. May also be used for

simple circuit experiments and plotting response curves. Utilizes any general purpose transistor. Mounted on "Lucite".





Ask for Booklet 311



CENTRAL SCIENTIFIC CO.

A Subsidiary of Cenco Instruments Corporation 1718-B Irving Park Road • Chicago 13, Illinois Branches and Warehouses—Mountainside, N. J. Boston • Birmingham • Santa Clara • Los Angeles • Tutsa Houston • Toronto • Montreal • Vancouver • Ottawa

PHYSICISTS

We need physicists to work on space environment chamber who possess experience or interests in any of the following:

- (1) Low pressure or high vacuum instrumentation
- (2) High vacuum research work
- (3) The handling of cryogenic fluids
- (4) Dealing with the problems associated with the simulation of solar radiation
- (5) Working with advanced space propulsion systems

Send resume to:

ARO, INC.

(Contract operator for the USAF's Arnold Engineering Development Center)

Technical Employment
Arnold Air Force Station (near
Tullahoma), Tennessee

Data Transmission

AN International Symposium on Data Transmission will be held September 19-21 at the Technische Hogeschool in Delft, Netherlands, under the sponsorship of The Benelux Section of the Institute of Radio Engineers in cooperation with Het Nederlands Radiogenootschap, the IRE Professional Group on Communications Systems, and the Sectie voor Telecommunicatietechniek of the Koninklijk Instituut van Ingenieurs.

Subjects to be covered include choice of modulation, detection of telegraph signals, error rates over land lines and radio links, computers for data transmission networks, communication feedback techniques, and evaluation of error detection and correction procedures.

Requests for further information should be directed to the symposium secretary, B. B. Barrow, The Benelux Section, IRE, Postbus 174, The Hague, Netherlands.

Space Electronics and Telemetry

SESSIONS on telemetry, space communications, electronic propulsion, signal conditioning, navigation of vehicles in space, effects of space environment on men and equipment, navigation on earth by means of satellites, propagation, tracking, and guidance will be presented at the fifth national symposium of the IRE Professional Group on Space Electronics and Telemetry. The ten panel-type sessions will be held September 19–21 at the Shoreham Hotel in Washington, D. C. Papers will be prepublished in the symposium *Proceedings* and only their highlights will be presented to allow sufficient time for discussion.

A complete listing of the panelists will be published in the *IRE Proceedings* prior to the meeting, and additional details may be obtained from the Institute of Radio Engineers, 1 East 79th Street, New York 21, N. Y.

Ultrasonic Inspection

A CONFERENCE on the theory and practice of ultrasonic inspection will be held September 22–24 at the Queens Hotel, Cheltenham, England, under the joint sponsorship of The Institute of Physics' Non-Destructive Testing Group, The Society of Non-Destructive Examination, and The Non-Destructive Testing Society of Great Britain. Details can be obtained from the conference secretary, Mr. I. M. Barnes, de Havilland Propellers Ltd., Hatfield, Herts, England.

Friction

THE 1960 International Conference on the Nature of Solid Friction will be held September 26-28 at the Midwest Research Institute, Kansas City, Mo. Invited papers on the following topics will provide the framework for the conference discussion: single contacts and multiple encounters, deformation losses

in friction, the influence of surface energy on friction and wear phenomena, the friction and lubrication of polymers, recent graphite experiments, kinematic analysis of stick-slip, the frictional behavior of a simple rheological material, friction of metals in reciprocation sliding, and a report on recent solid friction research at Cambridge University.

Further details can be obtained from the conference chairman, Bruce Daniel, Midwest Research Institute, 425 Volker Boulevard, Kansas City 10, Mo.

Optical Society of America

THE 1960 fall meeting of the Optical Society of America will be held October 12-14 at the Somerset Hotel in Boston. The Society's New England Chapter is arranging the meeting and serving as host.

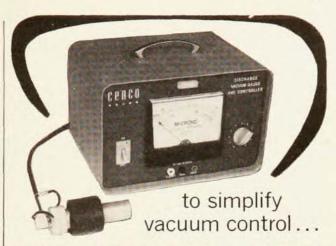
Six sessions of contributed papers will be presented on image formation, astronomical optics and optics in space, auroral studies, optics as applied to instrumentation, and other topics. One session of the meeting is to be conducted jointly with the IRIS group (Infra Red Information Services), and will include invited papers by the following speakers: Andre Maréchal of Paris, who will discuss "New Aspects of Diffraction Theory and Progress in Filtering Techniques"; Eric Inglestam of Stockholm, who will speak on "Interferometry, Phase Contrast and Image Assessment"; and L. Bovey of Harwell, who will talk on "Atomic Spectroscopy of Transuranic Atoms". In addition, three speakers have been invited from the Soviet Union. Two seminars, one on teaching and one on vision, will also be held.

Further information on the meeting can be obtained from the executive secretary of the Optical Society, Miss Mary Warga, 1155 16th Street, N.W., Washington 6, D. C.

Energies of Space

MEDICAL and Biological Aspects of Energies of Space is the title of an international symposium to be held October 24–26 at the Hilton Hotel in San Antonio, Tex. Southwest Research Institute is in charge of arrangements for the meeting, which is sponsored by the Air Force School of Aviation Medicine, Aerospace Medical Center, Brooks Air Force Base, Tex.

The program will be divided into three one-day sessions: "the delineation of the energies of space which are important from medical and biological standpoints; the applications of these energies for biological and medical purposes; and medical and biological protection against those energies of space for which protection is required." Among the invited speakers will be Walter W. Deiminger (University of Göttingen), Walter Orr Roberts and R. Grant Athay (University of Colorado), Cornelius A. Tobias (University of California Donner Laboratory), Roger Wallace (Lawrence Radiation Laboratory), Eugene Rabinowitch (University of Illinois), Robert W. Krauss (University of Maryland), Titus Evans (University



NEW CENCO DISCHARGE GAGE AND CONTROLLER

A gage and automatic controller that continuously reads from 0.001 to 20 microns total pressure of all condensable vapors and gases in your system. Starts instantly at any pressure. Controller provides automatic on-off switching at pre-set pressures—transistorized amplifier opens or closes contacts of relay to control up to 1 amp.

No. 94183

\$249.50



CENTRAL SCIENTIFIC CO.

A Subsidiary of Cenco Instruments Corporation 1718-B Irving Park Road • Chicago 13, Illinois Branches and Warehouses Mountainside, N. J. Boston • Birmingham • Santa Clara • Los Angeles • Tulsa Houston • Toronto • Montreal • Vancouver • Ottawa

APPLIED MATHEMATICIAN

or

THEORETICAL PHYSICIST

Position open at Denver Research Center of The Ohio Oil Company for young Ph.D. Research topics may be chosen from a variety of fields, including fluid flow, wave propagation, and operations research.

Unexcelled working and living conditions. Write to:

W. Jacque Yost, Research Director
THE OHIO OIL COMPANY
P. O. Box 269
Littleton, Colorado