

SCIENTISTS and ENGINEERS

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You are invited to address inquiries to M. H. Johnson, Advanced Research Staff at our Glendale, California address.

Other unusual opportunities are open for qualified engineers and scientists in the following areas:

SPACE TECHNOLOGY DIVISION

Astrodynamics • Space Environment • Theoretical Physics • Electronics • Radar • Information Links • Automatic Controls • Mathematics • Propulsion Research • Combustion • Materials • Aeromechanics

COMPUTER DIVISION

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TACTICAL WEAPON SYSTEMS DIVISION

Aero-Thermodynamics • Aero-Chemistry and Propulsion • Astronautics

Qualified applicants for the above three divisions are invited to send resumes and inquiries to Mr. K. A. Dunn, 1234 Air Way, Bldg. 21, Glendale, California. Phone CHapman 5-6651.

AERONUTRONIC SYSTEMS, INC.

a subsidiary of FORD MOTOR COMPANY
NEWPORT BEACH, GLENDALE, SANTA ANA
AND MAYWOOD, CALIFORNIA

operation throughout the conference. Additional information may be obtained from the general chairman, Dr. Edwin S. Hodge, Mellon Institute, Pittsburgh 13, Pa.

Theory of Fluid Flow Through Porous Media

SINGLE and multiphase fluid flow in porous solids will be considered from a theoretical point of view at a conference to be held March 23-24 at the University of Oklahoma at Norman under the sponsorship of the University's School of Petroleum Engineering. The proceedings will be published and distributed to all who attend. Further information may be obtained from the conference chairman, Prof. Charles G. Dodd, School of Petroleum Engineering, University of Oklahoma, Norman, Okla.

Color

THE Inter-Society Color Council will hold its 28th annual meeting on April 1 at the Statler-Hilton Hotel in New York City. A business meeting will be held during the morning and will be followed in the afternoon by a symposium on the use of material standards for color matching. The practical problems and acceptance of material color standards will be reviewed by A. J. Benjamin, the instrumental approach will be covered by Harry J. Keegan, and the visual approach will be discussed by Hugh Davidson and Henry Hemmendinger. The guest speaker at the evening banquet will be Deane B. Judd of the National Bureau of Standards.

Advance registration blanks and further information may be obtained from the council's secretary, Mr. Ralph M. Evans, Technology Division, Building 65, Eastman Kodak Company, Rochester 4, N. Y.

Optical Society

THE 1959 spring meeting of the Optical Society of America will take place April 2-4 at the Hotel New Yorker in New York City and will be held in conjunction with the Infrared Information Symposia (IRIS) organization. This will be the first meeting to be held jointly with a group with overlapping interests and the beginning of a policy which the Optical Society expects to continue.

On Thursday, April 2, invited papers will be given on the weather-eye satellite (W. G. Stroud), the balloon spectrograph (John Strong), and the balloon telescope (Martin Schwarzschild). At a parallel session on Thursday morning, Dorothy Nickerson will speak on "Light Sources and Color Rendition". On Friday morning, April 3, there will be an invited paper on infrared detectors (Henry Levinstein) and one on measurements of the earth's heat radiation (Lewis D. Kaplan). Three papers on microscopy will be given in the afternoon by W. Lewis Hyde, Shinya Inoué, and Cecil E. Hall. On Saturday morning, a panel consisting of several OSA members who recently visited Russia will discuss "Observations on Optics in the USSR".

At a joint OSA-IRIS banquet on Thursday evening,

National Aeronautics and Space Administration

The NASA Beltsville Space Center is engaged in a program of basic research covering all phases of experimental and theoretical physics associated with the exploration of space. The program emphasizes the following areas:

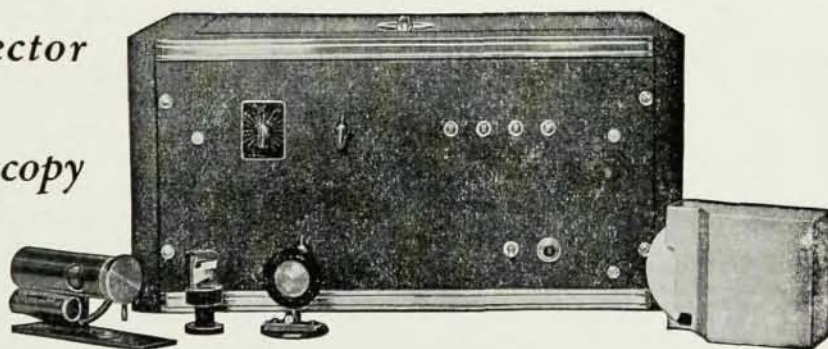
MOON AND PLANETS: The lunar surface; planetary atmospheres; ionospheric physics; atomic and electronic interactions; geodesy; celestial mechanics.

ASTRONOMY: Solar and stellar atmospheres; stellar interiors; cosmology; relativity.

PLASMA PHYSICS: Magnetohydrodynamics; magnetic fields in space; particle populations in space; cosmic rays.

Opportunities exist at the junior and intermediate levels for physicists, geophysicists and astronomers who wish to do fundamental research in these fields. Those interested should address their inquiries to Mr. R. J. Lacklen, Director of Personnel, NASA, 1520 H Street, N. W., Washington 25, D. C. Predoctoral as well as postdoctoral applicants will be considered. Applicants without a Ph.D. should include a transcript of college and graduate training. Continuation of graduate work will be encouraged.

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1. An effective sensitive area $3/32''$ in diameter.
2. Sensitivity of 6×10^{-11} watts RMSENI when used with "chopped beam" method and with recording time constant of 1.6 second.
3. Uniform sensitivity from the ultra-violet through the visible and the entire infra-red, and up to the micro-wave region.
4. Improved, drift-free, A.C. operated amplifier with step gain controls and four response periods.

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OPERATIONS RESEARCH OFFICE

ORO The Johns Hopkins University

6935 ARLINGTON ROAD
BETHESDA 14, MARYLAND

the after-dinner speech will be given by Brian O'Brien on "Optics and Outer Space". At this time the Optical Society's Edgar D. Tillyer Medal for 1959 will be presented to Gertrude Rand of Columbia University and the first \$250 prize for the best contributed paper which has been given at an Optical Society meeting and published in the *OSA Journal* in 1958 will be made.

Interested persons are invited to attend an informal dinner to be held on Friday night, April 3, to commemorate the 30th anniversary of the founding of the Institute of Optics of the University of Rochester.

Further information on the meeting is available from Stanley S. Ballard, Department of Physics, University of Florida, Gainesville, Fla.

High Vacua and Magnetism

THE British Institute of Physics has announced plans for holding two meetings on specialized topics this year. The first, a symposium entitled "Current Developments in the Production of High Vacua", is to take place on April 17 in London. The second, a conference on "Some Aspects of Magnetism", will be held September 22-24 in Sheffield.

The April symposium will be comprised of three sessions: (a) chemical and ionic pumping in kinetic vacuum systems, (b) problems in the production of high vacua in large equipment, and (c) analysis of residual gases in kinetic vacuum systems.

The subjects to be covered by the magnetism conference are: (a) fundamental theories of ferro-, ferri-, and antiferromagnetism, including magnetic structure, (b) theories of technical magnetization processes, including hysteresis, coercivity, anisotropy, and directional effects, (c) theoretical and experimental studies of domain phenomena in bulk materials and thin films, and (d) experimental and theoretical studies of antiferromagnetism in metals and nonmetals.

In each case, abstracts (but not preprints) will be circulated before the meeting and no proceedings will be published. Further particulars concerning these meetings are available from the Secretary, The Institute of Physics, 47 Belgrave Square, London, S. W. 1, England.

Research Administration

SCIENCE information classification, balance of internal and external research, effects of size and structure on productivity, indexing and retrieval, transition from research to production, and the human relations of research organizations will be discussed at the American University's fourth Institute on Current Developments in Research Administration. The institute will be held April 20-24 in Washington, D. C., and is under the sponsorship of the University's School of Government and Public Affairs. It is open to persons engaged in some phase of administration of scientific research and development activities.

Additional information may be obtained from Dr. Lowell H. Hattery, Director, Center for Technology and Administration Studies, The American University, 1901 F Street, N. W., Washington 6, D. C.