

mathematical physicist

Schlumberger Well Surveying Corporation maintains a program of long-range industrial research projects at its Research Laboratory in Ridgefield, Connecticut.

The program includes such scientific fields as nuclear magnetic resonance, electromagnetic theory, nuclear physics, electronic systems, physical chemistry, wave propagation, data processing, sonics and fluid flow in porous media.

In order to implement our diversified program we have an opening for a Mathematical Physicist with a Ph.D. in physics, applied mathematics or electrical engineering with a strong interest in theoretical work. The applicant should have at least 2 years of experience in the use of mathematical techniques for the formulation and solution of physical problems.

Knowledge of transport theory, wave propagation or information theory are particularly useful. The research projects cover a wide spectrum from rather short feasibility studies to long term research programs in the fields mentioned. Specific projects involve the study of fluid flow in porous media, neutron and gamma-ray diffusion, sound wave propagation and digital computer processing of measurement data.

Our Laboratory is located in a small Connecticut town about 50 miles northeast of New York City. The facilities at the Laboratory are extensive and modern. Working conditions and fringe benefits are consistent with the highest industrial standards. Please send brief resume to:

MR. J. J. McNAMARA

**SCHLUMBERGER WELL
SURVEYING CORPORATION**

P. O. Box 307

Ridgefield, Connecticut

MEETINGS

Combustion

RADIATIVE properties of chemically reacting media and combustion of solid and liquid reactants at very low pressures, as well as topics of more general interest, will be discussed at the fall meeting of the Western States Section of the Combustion Institute. It will be held September 7 and 8 on the University of California campus at Berkeley.

To permit the program to center on prepared and extemporaneous discussion, with brief (five-minute) reports on current work in the field, it is planned to mail preprints of papers to registrants in advance of the meeting date.

Turbulence

BECAUSE of current interest on the part of atmospheric physicists, oceanographers, and other geophysicists in the application to geophysical problems of various physical concepts involving turbulence, the International Union of Goedesy and Geophysics and the International Union of Theoretical and Applied Mechanics have decided to organize a meeting on the subject. The two unions will accordingly join in sponsoring an International Symposium on Fundamental Problems in Turbulence and Their Relation to Geophysics at Marseilles from September 4 to 9.

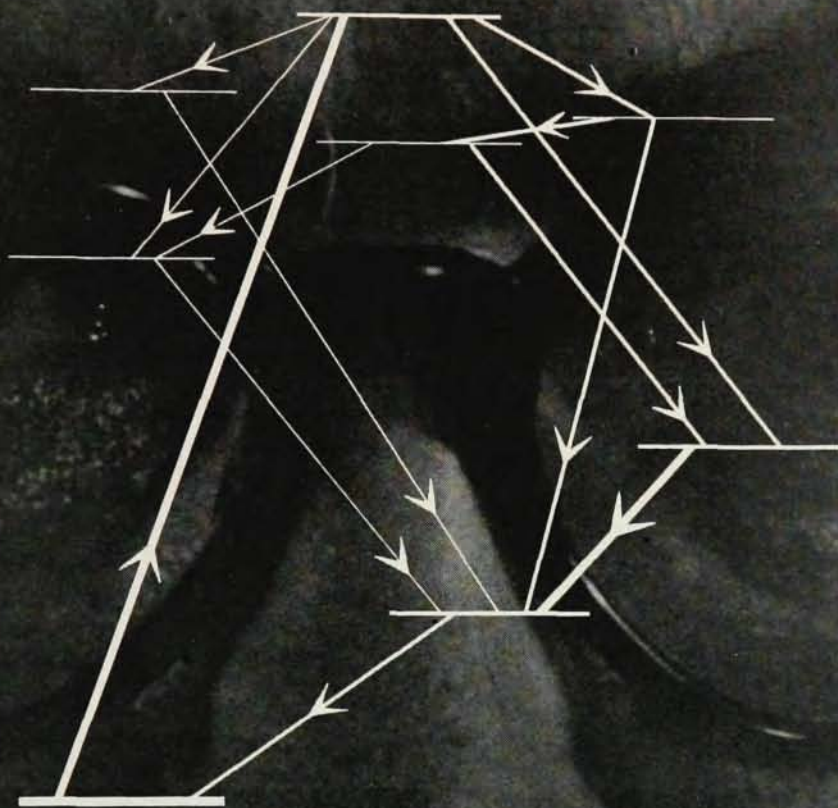
While the program of the meeting has not been finally determined, the topics provisionally under consideration include an examination of the theoretical basis of the dependence of atmospheric turbulence on vertical gradients of density, the generation and dissipation of turbulence in stratified shear flows, the interaction between turbulence and wave motion at the ocean's surface, turbulent transport in the deep ocean, and fundamental studies of statistical theory of turbulence.

The IUGG-IUTAM Scientific Committee for the symposium consists of G. K. Batchelor, K. F. Bowden, and Sir Graham Sutton of the United Kingdom, F. N. Frenkiel and W. V. R. Malkus of the United States, A. M. Obukhov (USSR), J. Pérès (France), and J. C. Schönfeld (Netherlands). The Local Organizing Committee consists of A. Favre and G. Laclavère. The time and place of the meeting have been chosen in coordination with plans for a French Colloquium on The Mechanics of Turbulence which will be held at Marseilles during the week preceding the IUGG-IUTAM Symposium. Further information can be obtained from the IUGG, 53, av. de Breteuil, Paris 7, France.

Physics and Nondestructive Testing

OCTOBER 3, 4, and 5 are the dates for the second Symposium on Physics and Nondestructive Testing, which will be held in the Chemistry Auditorium at Argonne National Laboratory and will review progress that has been made in the investigation and use of tech-

Senior Physicists!



Inquiries are invited from mature scientists capable of directing their own research efforts in the following (or related) areas of electro-magnetics. Such research may be at theoretical and/or experimental levels.

BASIC STUDIES of the electronic properties of solids, semi-conductors (diode junctions, photo-electric and conductive effects); dielectrics; magnetic materials; paramagnetic resonance; interaction of radiation and matter. **BASIC STUDIES** of radiation damage in crystals such as "F" centers. **BASIC STUDIES** of pumping by means of optical or microwave stimulation; coherence and polarization of emitted energy from a resonant cavity; optimization of materials either gaseous (Cesium vapor, etc.) or solid state; rates of emission and duration of excited states.

Because of the advanced nature of these investigations, they should appeal to mature, experienced scientists at the doctoral or equivalent level. Such men will not be limited by rigid boundaries. They will be given freedom to choose and pursue their own lines of research providing this research is within the scope of corporate interest.

Our laboratories are new, modern and equipped with the latest optical, electronic and microwave gear including a Varian magnet, X-ray unit, ruby Maser, etc. Management at all corporate levels is scientifically oriented and provides assistance and new equipment as needed.

Studies are of the long-range sustained type and have strong corporate sponsorship. Salaries will be commensurate with experience and should be attractive to scientists who have already gained recognition in their chosen field.

Please write in complete confidence to Mr. W. A. Walsh.

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POSITIONS OPEN

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Applications are invited for one additional postdoctoral research fellowship with tenure to begin in January, 1962. Fellowships carry a stipend of \$6,000 p.a. with annual increments of \$500 and are tenable for periods up to three years. Removal assistance is provided by the Institute.

Applicants should ask two referees to write letters of recommendation. In addition, applicants should state their age, qualifications and experience and supply a list of publications. All correspondence should be addressed to L. E. H. Trainor, Physics Department, University of Alberta, Edmonton, Canada, from whom additional particulars may be obtained.

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Consultant: Chemical Instrumentation

Review, evaluate multi-plant instrumentation techniques. Must recommend profitable change opportunities in instrumentation and formulate improved maintenance procedures. Must be competent in system design and alert to new developments leading to more effective automated production. Engineering or physics background essential. Travel. Location: South. Salary: \$15,000.00. Write to Box 861-A, Physics Today.

POSITION WANTED

Department Head in major industrial research laboratory desires position in teaching or research for small company. Ph.D. in Physics with nearly thirty years experience in research and teaching. Box No. 861, Physics Today, 335 E. 45th St., New York 17, N. Y.

niques involving neutron radiography, neutron scattering, ultrasonics, mechanical vibrations, infrared, thermistors, and color radiography. The formation and development of latent images in films will also be discussed. A dinner meeting will feature a talk by A. V. Crewe on the Argonne accelerator program, and a tour of the Argonne facilities is also included in the plans. The technical chairman for the symposium is W. J. McGonnagle of Argonne, who may be contacted for further information on the program. The address is Argonne National Laboratory, 9700 South Cass Ave., Argonne, Ill.

Gaseous Electronics

ABSTRACTS of contributed papers for the 1961 Gaseous Electronics Conference must be received by C. J. Gallagher, General Electric Research Laboratory, P. O. Box 1088, Schenectady, N. Y., not later than August 25. The meeting, the fourteenth of the series, will take place at the GE Research Laboratory from October 11 to 13. Previous conferences of the series were sponsored by the APS Division of Electron Physics, which is still represented on the Organizing Committee. The 1961 meeting has been accepted as a Topical Conference of the American Physical Society and all members of the APS have the right to attend and to submit papers. The choice of papers accepted for presentation will be made by the Organizing Committee, and to insure ample time for discussion and to avoid simultaneous sessions during the three-day meeting it is expected that the number of accepted papers will be restricted.

Appropriate subjects include the basic collision processes occurring in ionized gases, mechanisms of electrical breakdown and operation of electrical discharges, and plasma physics in general. Papers on specific devices are excluded. Abstracts must conform to the regulations applying to abstracts submitted for general meetings of the APS (for details, consult a recent issue of the *Bulletin of the American Physical Society*).

Creep and Fracture

ENGLAND'S Institution of Mechanical Engineers will join the American Society for Testing Materials and the American Society of Mechanical Engineers in organizing an international conference on creep and fracture to be held August 25-28, 1963, at the Hotel Biltmore in New York City. Contributed papers on fundamentals, design techniques, and service experience are currently being solicited. The deadline for 250-word abstracts is June 1, 1962; final manuscripts must be submitted by December 1, 1962. They should be sent to Dr. Kenneth Merckx, Hanford Laboratories Operation, General Electric Corp., Richland, Washington. Notification of intention to contribute papers to the meeting and requests for additional information should be addressed to the Conference Secretary, N. L. Mochel, Westinghouse Electric Corp., Steam Division, Lester Branch P. O., Philadelphia 13, Pa.