

E. O. Lawrence Radiation Laboratory in his honor. The award will be made by the Commission upon the recommendation of its General Advisory Committee and with the approval of the President. It will consist of a medal, a citation, and up to \$25 000. It will be made to "not more than five recipients in any one year in amounts of not less than \$5000 each, but not necessarily every year, and will be presented in the spring of the year to men or women who are not more than 45 years of age at such specific time and place as is determined by the Commission". The recipients must be US citizens. The Lawrence Memorial Award and the Commission's Enrico Fermi Award are both authorized in a section of the Atomic Energy Act of 1954, but the Lawrence Award is designed especially for the recognition of young scientists who have made recent, especially meritorious contributions to the development, use, or control of atomic energy, while the Fermi Award is based upon the lifetime contributions of theoretical and experimental scientists.

The Gravity Research Foundation's annual essay contest has again been announced. Awards will be made for the best short papers (under 1500 words) on "the possibilities of discovering (a) some partial insulator, reflector, or absorber of gravity, (b) some alloy or other substance the atoms of which can be agitated or rearranged by gravity to throw off heat, or (c) some other reasonable method of harnessing, controlling, or neutralizing gravity". Essays must be submitted in triplicate and must include (on a separate sheet) a title and 100-word summary, and separately, a short biographical sketch. Entries should be submitted before April 15 to the Gravity Research Foundation, New Boston, N. H.

## Facilities

A new microscope laboratory has been established by E. Leitz, Inc., in New York City to provide consulting services on new optical techniques and equipment. The laboratory will be under the direction of Peter H. Bartels, a specialist in applied optics from the Ernst Leitz microscope factory in Wetzlar, Germany.

Expanded facilities for Technical Operations, Inc., Burlington, Mass., and its subsidiary Power Sources, Inc., include a new physics and radiation research lab, just completed, and a new  $\frac{3}{4}$ -acre, two-story addition, just begun.

Polytechnic Institute of Brooklyn plans to establish a high-speed electronic computing laboratory, built around an IBM 650 computer. It is intended for use in various educational and research programs, including those of the school's Microwave Research Institute. The facility was made possible by a \$60 000 grant from the National Science Foundation.

Philco Corporation will build a new Research Center on a 25-acre site in suburban Philadelphia, which will contain laboratories, offices, conference rooms, a symposium room designed to accommodate 150 people,

and an 8000-volume technical library. Work at the new facility will be carried out in such fields as space communications, microwave devices and systems, solid-state electronics, and electrovisual devices. Initial planning of the Center's research program is in the hands of an independent Research Division which came into being on January 1.

## Programs

Over the next five years, the University of Michigan will receive \$500 000 from the General Motors Corporation for continuation of research in industrial health and the peaceful uses of atomic energy. Under the terms of the grant, \$350 000 will be allocated to the University's Institute for Industrial Health, a unit created in 1950 with a \$1.5 million gift from GM to the Phoenix project (the school's memorial to its dead of World War II, which is devoted entirely to the peaceful applications and implications of atomic energy). The remaining funds will be used for unrestricted studies of the peaceful uses of atomic energy.

Michigan's Department of Astronomy has begun work on instruments for a satellite observatory, under contract to the National Aeronautics and Space Administration. The observatory, scheduled for completion within two years, will be able to measure ultraviolet radiation, x rays, and radio waves from extraterrestrial sources. Terms of the NASA contracts call for preliminary design studies for equipping a satellite as an astronomical observatory.

A temporary Advisory Panel on Radio Telescopes has been appointed by the National Science Foundation for the purpose of (1) studying the present and predictable needs of radio astronomers with regard to improved instrumentation; (2) studying existing and proposed instruments with regard to their capabilities and limitations, and (3) advising the Foundation with regard to the desirability and feasibility of more powerful instruments. The members of the Panel are: chairman, J. R. Pierce (Bell Telephone Laboratories), R. N. Bracewell (Stanford University), P. F. Chenea (Purdue University), L. J. Chu (Massachusetts Institute of Technology), R. M. Emberson (Associated Universities, Inc.), W. E. Gordon (Cornell University), D. S. Heesch (National Radio Astronomy Observatory), R. Minkowski (Mt. Wilson and Palomar Observatories), G. W. Swenson, Jr. (University of Illinois), and J. H. Trexler (Naval Research Laboratory). Scientists and engineers wishing to bring their ideas to the attention of the Panel are encouraged to write to one of the Panel members or directly to the Astronomy Program, National Science Foundation, Washington 25, D. C.

Registration of radiation sources has been under way in New Jersey for the past three months in accordance with a provision introduced in the public laws of that state in 1958. The New Jersey State Department

# A New Role for The Mature Scientist

## ... in a unique Military Systems Organization created by RCA

The fundamental mission of RCA's newly organized Advanced Military Systems Department is to develop new systems concepts that will satisfy military operational requirements in the period beginning five years in the future. In the establishment of this new department, all problems—e.g. organization, personnel, support, operating practices, and relations with other RCA departments—have been approached and solved with the firm objective of optimizing the ability of Advanced Military Systems to fulfill its mission. The result is, we believe, a unique organization operating in a uniquely creative environment.

Members of the Technical Staff are mature scientists and engineers who operate either independently or in loosely organized teams. They have no responsibility for administrative details, but rather are kept unencumbered for either purely creative work or giving guidance to program implementation. They have, of course, full access to all available information—military, academic, and indus-

trial. Investigations in support of their studies may be requested of appropriate RCA departments. In a word, they are provided with every opportunity and facility—all the resources of the vast RCA organization—to use their creative and analytical skills to maximum advantage and at the highest level.

In its wholly stimulating and challenging work, the Department operates at the very frontiers of knowledge in the physical sciences, mathematics, engineering, and military science, to develop advanced system concepts applicable to such military areas as

**AICBM      UNDERSEA WARFARE  
LIMITED WARFARE      SPACE**

At the present time, there are a few openings for mature scientists, engineers, and mathematicians who have already attained recognition in their fields. If you have at least 15 years of education and defense *systems* experience beyond a bachelor's degree, in electronics, vehicle dynamics, physics, or operations research; if you are creative and interested primarily in working with pencil, paper, and imagination, we should like to hear from you. Please write to:

*Dr. N. I. Korman, Director*  
*Advanced Military Systems, Dept. AM-6B*  
**RADIO CORPORATION OF AMERICA**  
*Princeton, New Jersey*



**RADIO CORPORATION of AMERICA**

## Accent is On the Individual at ALCO...

A pioneer designer and manufacturer of nuclear thermal equipment. Active programs in the SM-1 operation and Core 1 loading, SM-1A and PM-2A final engineering and startup, and SM-2 design and development, as well as Core 1 procurement. Small groups providing many individual opportunities. Liberal employee benefits including company assistance in furthering educational development at nearby universities.

### REACTOR ANALYSTS & REACTOR PHYSICISTS

To establish core nuclear and thermal characteristics.

### REACTOR PHYSICISTS

To perform shielding and hazards analyses.

### HEAT TRANSFER & FLUID FLOW ENGINEERS

To perform analyses of fluid dynamics, thermodynamics and heat transfer phenomena and to perform steady and transient thermal stress calculations.

College degree with several years' experience required

Some supervisory positions available

Please send complete resume and salary requirements in confidence to:  
G. Y. Taylor, Administrative Services



# ALCO PRODUCTS

INCORPORATED

Schenectady 5, New York

of Health is registering x-ray machines, fluoroscopic devices, electron microscopes, particle accelerators, high-voltage rectifiers, and other radiation-producing equipment, and the registration program will eventually cover all radioisotopes and other radiation-producing materials in use in the state.

## Publications

The second revised and expanded edition of the Atomic Energy Commission's *Reactor Handbook* is now in preparation and will be published and distributed by Interscience Publishers, Inc. The four volumes are expected to total more than 3500 pages, which would be about 1000 pages thicker than the first edition. The editorial board in charge of the revised edition is under the chairmanship of W. H. Zinn (General Nuclear Engineering Corporation); other members are H. Brooks (Harvard University), P. F. Gast (General Electric, Hanford), J. P. Howe (North American Aviation), Stephen Lawroski (Argonne National Laboratory), and M. C. Leverett (GE Aircraft Nuclear Propulsion Department). The first volume, scheduled to appear in May, will be *Materials*, edited by C. R. Tipton, Jr. (Battelle Memorial Institute). In contrast to the first edition, the volume will deal not only with solid materials, but with liquids and gases as well. The remaining volumes are *Physics and Shielding*, edited by H. Soodak and E. P. Blizard, *Engineering*, edited by Stuart McLain and James J. Dutton, and *Fuel Reprocessing*, edited by R. B. Richards and Sidney Stoller.

A new journal to provide a medium for the rapid publication of selected mathematical papers treating classical analysis and its manifold applications has been announced by Academic Press under the title of *Journal of Mathematical Analysis and Applications*. To facilitate speed in publishing papers, the journal will substitute the usual refereeing system with a board of associate editors, each of whom may accept manuscripts. The editor of the new periodical is Richard Bellman (The Rand Corporation, Santa Monica, Calif.); the associate editors are F. V. Atkinson (University of Canberra, Canberra, Australia), G. Birkhoff (Harvard University, Cambridge, Mass.), R. P. Boas (Northwestern University, Evanston, Ill.), S. Chandrasekhar (University of Chicago, Williams Bay, Wisc.), C. Dolph (University of Michigan, Ann Arbor, Mich.), R. J. Duffin (Duke University, Durham, N. C.), K. Fan (University of Notre Dame, Notre Dame, Ind.), M. Juncosa (The Rand Corporation, Santa Monica, Calif.), S. Karlin (Stanford University, Stanford, Calif.), J. Kemeny (Dartmouth College, Hanover, N. H.), P. Lax (Institute of Mathematical Sciences, New York University, New York 3, N. Y.), N. Levinson (Massachusetts Institute of Technology, Cambridge, Mass.), J. Richardson (Hughes Aircraft Corporation, Culver City, Calif.), P. Rosenbloom (University of Minnesota, Minneapolis, Minn.), H. N. Shapiro (Institute of Mathe-