ers, seeks to inspire those science teachers who in turn can best inspire the scientists and science teachers of tomorrow.

Last year, according to surveys, American colleges turned out 57 percent fewer mathematics teachers than in 1950. Because of the acute science teacher shortage, more than half the high schools in the country now have *no* classes in physics or chemistry.

Since 1900, the percentage of students studying algebra in the high schools has fallen from 56 to 24 percent; the percentage of geometry students has dropped from 27 to 11 percent. Today, only 4.3 percent study physics—as against 19 percent some 55 years ago.

Stanford and Cornell were selected by Shell because of their outstanding science and education departments and their active role in trying to remedy the science teacher shortage. The fellowships are particularly designed for the able, experienced teachers who ordinarily might seek remunerative summer employment outside the school system. The intensive seminar programs will include graduate-level classes, lectures by outstanding scientists, and visits to modern industrial installations and research laboratories.

Mathematics, physics, or chemistry teachers with 5 years of experience and known leadership ability will be eligible for the fellowships. Thirty teachers from west of the Mississippi River will attend the 8-week Stanford program, which will be administered by the School of Education. Thirty teachers from east of the Mississippi will be invited to a similar 6-week series of courses at Cornell.

In addition to teachers, also eligible are present heads of departments or supervisors with good background in mathematics, chemistry, or physics who previously were teachers. Final selection of the candidates will be the full responsibility of Stanford and Cornell.

■ Fellowships in systems engineering for the academic year 1956–57 have been announced by the Ramo-Wooldridge Corporation in cooperation with California Institute of Technology and Massachusetts Institute of Technology. The program for each fellow covers a 12-month period and will provide the recipient with an opportunity to pursue a broad course of fundamental study as well as an opportunity to work with practicing engineers and physicists in the field of systems engineering.

The emphasis on systems engineering, which may also include the techniques and practice of operations research, is a reflection of the growing need in industry for individuals trained to solve advanced design problems involving the complex relationship between electrical, mechanical, aeronautical, and chemical portions of complete systems.

The award winners will be expected to begin the year's program in July 1956 with 8 to 10 weeks of advanced development work at Ramo-Wooldridge. The remainder of the time will be spent at C.I.T. or M.I.T. on work toward the doctor's degree or in postdoctoral study.

Each fellow will receive a cash award of $2000 or more, depending on his family responsibilities, in addition to a salary of about $2000 for summer and part-time work at Ramo-Wooldridge. A grant of $2100 for each fellowship will go to the institute involved to cover tuition and research expenses.

A candidate must be an American citizen whose qualifications and background will admit him to the graduate school of either C.I.T. or M.I.T. and who has completed 1 year of graduate study in mathematics, engineering, or science, before the beginning date of the fellowship.

Application may be obtained by writing to the Ramo-Wooldridge Fellowship Committee, Ramo-Wooldridge Corporation, 8820 Bellanca Ave., Los Angeles 45, Calif. Completed applications, together with reference forms and a transcript of courses and grades, must be received *not later than 20 Jan. 1956.*

■ Muscular Dystrophy Associations of America, Inc., New York, recently allocated $175,642 for six new projects to study muscular dystrophy and for continuation of 13 other research projects. This brings the number of current research projects to a total of more than 70. Some 200,000 Americans suffer from this disease, most of them children.

■ The Stewart-Warner Corporation, Chicago, Ill., has established four 4-year engineering scholarships, three in mechanical engineering and one in electrical engineering, to be awarded to deserving high school graduates of exceptional ability through the National Merit Scholarship Corporation scholarship award program [*Science* **122,** 508 (16 Sept. 1955)]. Stewart-Warner is the third organization to announce participation in the new program by establishing specific scholarships.

Previous scholarship contributors have been the Sears-Roebuck Foundation and Time, Inc. Stewart-Warner's action will release matching funds from the working funds of National Merit Scholarship Corporation for four additional scholarships.

■ The National Academy of Sciences–National Research Council has announced the continued availability of grants-in-aid for research on sex problems. The NAS–NRC Division of Medical Sciences is responsible for the administration of the grants, which are awarded on recommendation of its Committee for Research in Problems of Sex. Funds for the support of this program are provided by the Rockefeller Foundation. The committee welcomes the cooperation of universities and research institutions in making these opportunities known to members of their staffs.

Applications for grants for the fiscal year 1956–57 must be postmarked *on or before 1 Feb. 1956.* Preliminary correspondence regarding research projects should be addressed to the Committee for Research in Problems of Sex, Division of Medical Sciences, National Academy of Sciences–National Research Council, 2101 Constitution Ave., N.W., Washington 25, D.C.

■ The Carnegie Institute of Technology has announced the availability of teaching assistantships, graduate fellowships, and research assistantships for 1956–57 in the College of Engineering and Science. It is suggested that candidates write for application forms and information at an early date.

Applications, together with transcripts of record and other supporting evidence, should be submitted soon, preferably *not later than 1 Feb. 1956.* However, applications from well-qualified candidates will be considered even if they are received at a later date. Address all inquiries to Dean of Graduate Studies, Carnegie Institute of Technology, Pittsburgh 13, Pa.

■ Establishment by Chas. Pfizer and Company, Inc., Brooklyn, N.Y., of a $4500 postdoctoral fellowship in microbiology at the Institute of Microbiology at Rutgers University has been announced jointly by Pfizer and Rutgers. The new grant will be known as the Pfizer Post-Doctoral Fellowship in Microbiology. It will become effective on 1 Jan. 1956. The recipient is to be selected by the fellowship committee of the Rutgers Graduate School recommendation of Selman Waksman, director of the Institute of Microbiology.

In the Laboratories

■ Fairchild Camera and Instrument Corporation, Syosset, N.Y., has established a nuclear instrumentation department headed by Harold Eugene DeBolt, nucleonics expert. DeBolt was formerly associated with the nuclear power division of the Navy's Bureau of Ships and the Naval Reactor Branch of the Reactor Development Division of the Atomic Energy Commission.

Products under consideration for development and manufacture include radiation monitoring equipment, control-rod drive mechanisms for reactors, neutron

detectors, and temperature, pressure, and flow controls. Packaged reactor controls and instrumentation systems will be designed mainly for commercial nuclear power developers and to some degree for the military.

Immediate expansion of the new group will be in the engineering field, with personnel being drawn both from within the company and externally. It is expected that actual product deliveries will begin in 1956.

■ The California Spray-Chemical Corporation formally opened its new biological research laboratory in Richmond, Calif., in September, marking the first stage of a major expansion of its research and development department. Future plans include a $16-million fertilizer plant and additions to chemical laboratories.

The new laboratory, which will be headed by W. D. Thomas, Jr., former plant pathologist for the Colorado Agricultural Experiment Station, was remodeled from a building formerly used by the California Research Corporation. It contains rooms with filtered air sources for maintaining experimental insect and animal colonies, and new equipment for expanding investigations on fungicides, insecticides, bactericides, herbicides, and nematocides.

■ Varian Associates, Palo Alto, Calif., has entered the field of high-energy radiation. The company is planning construction of its own linear electron accelerator, under license recently obtained from Stanford University, and has undertaken development of special accelerator parts for the University of Chicago.

■ Nearly 100 technologists attended the first Norelco electron microscope school, 14–18 Nov., in the application laboratory of the Research and Control Instruments Division, North American Philips Company, Inc., 750 South Fulton Ave., Mount Vernon, N.Y. Participants brought many of their own specimens and micrographs to the meetings for discussion and interpretation.

The school will be held again in 1956. Exact dates will be announced later, and technologists who are interested in attending should write to C. J. Woods at the Mount Vernon address as soon as possible.

■ Looking toward the potential world market for commercial nuclear reactors, North American Aviation, Inc., Los Angeles, Calif., has established the Atomics International Division as a separate division to handle all of the company's nuclear engineering and manufacturing operations. The division is headed by Chauncey Starr, vice president and general manager, who has directed the company's atomic energy research and development program for nearly 10 years.

Miscellaneous

■ A new monthly journal, *Nuclear Physics,* is to be published by the North-Holland Publishing Company, Amsterdam, and distributed in the United States by Interscience Publishers, Inc., New York. An annual volume of approximately 700 pages is planned, but more volumes may be scheduled if required. The subscription price is $15 per volume.

The new journal will be devoted to the experimental and theoretical study of atomic nuclei, not excluding those lines of research that may be expected to throw light on the nature of the nuclear forces—that is, on the one hand, the quantum theory of fields, and on the other hand, the investigation of elementary particles. However, there is no rigid delimitation of the scope of the journal.

The emphasis will be laid on the publication of original papers, including extended reports of completed reseach as well as shorter notes announcing new results or presenting remarks and suggestions. An effort will be made to provide longer review articles or shorter reports dealing with questions of topical interest. Moreover, as occasion arises, the journal will publish book reviews and news items of interest to nuclear physicists.

The international character of the journal is insured by the composition of the editorial board, which includes representatives from all countries or groups of countries in which nuclear studies are being pursued.

Contributions may be sent to the editor, Prof. L. Rosenfeld, Dept. of Theoretical Physics, The University, Manchester, England, either directly, or preferably through the intermediary of one of the members of the editorial board of the country or region in which the author is working. A list of these board members may be obtained from Interscience Publishers, Inc., 250 Fifth Avenue., New York.

■ In January the American Psychological Association will initiate publication of a new monthly journal entitled *Contemporary Psychology: A Journal of Reviews.* Edwin G. Boring of Harvard University has been named editor of the new journal. Adolph Manoil of Park College will serve as film editor. A group of 26 consultants in the specialized fields of psychology will assist Boring.

It is the aim of *Contemporary Psychology* to provide critical reviews of books in the broad field of psychology and related sciences, thus providing more comprehensive coverage of the psychological literature. Book reviews that formerly appeared in the APA journals *Psychological Bulletin, Journal of Applied Psychology, Journal of Abnormal and Social Psychology,* and *Journal of Consulting Psychology* will be concentrated in the new journal.

Subscriptions to *Contemporary Psychology* will be $8 a year, foreign subscriptions $8.50 a year, with single issues priced at $1 each. Correspondence regarding subscriptions should be addressed to American Psychological Association, 1333 16 St., NW, Washington 6, D.C. Correspondence with the editor should be sent to Dr. E. G. Boring, Memorial Hall, Harvard University, Cambridge 38, Mass.

■ A group of friends of T. Duckett Jones have initiated the T. Duckett Jones Memorial Fund in the belief that the finest acknowledgment of Jones' work in medical research would be the establishment of a fund devoted to advancing the research objectives to which he gave so much of himself. At present the fund committee is of the opinion that research in rheumatic fever, which was the subject of much of Dr. Jones' own research activity, might be given priority by the fund's administrators, but not an exclusive claim on its income.

Depending on the amount received, there are a number of awards that might be made to represent the philosophy and professional interests of Dr. Jones. Among the several already suggested are fellowships for promising young investigators, short-term support for investigators holding permanent positions to permit completion of studies or projects, or endowment for a T. Duckett Jones professorship in a university.

Further suggestions are welcomed by the committee. Contributions are tax exempt and should be sent to the T. Duckett Jones Memorial Fund, 525 E. 68 St., New York 21.

■ The Society of Sigma Xi has awarded funds to Irving W. Knobloch in order that he may continue to compile a list of hybrids reported for the plant and animal kingdoms. Knobloch would appreciate receiving both published and unpublished lists of hybrids in any group of plants or animals. Address: Dept. of Natural Science, Michigan State University, East Lansing.

■ The problems of the arid lands and the methods used by modern science in an international effort to solve them, are described in the November issue of the *UNESCO Courier,* the monthly magazine of the United Nations Educational, Scientific and Cultural Organization.