

SCIENCE EDUCATION

Latin American Fulbrights

Opportunities for university lecturing and advanced research in Latin America for 1966 are available under the Fulbright-Hays Act. They include: Brazil, solid-state physics (two awards, lectures in English), undesignated fields (four awards, applications in any field); Chile, methodology of science teaching; Colombia, physics; Ecuador, astronomy; and Uruguay, physics (one month, Spanish not essential), solid-state physics (six months, Spanish helpful but not essential). Applicants must be US citizens. Prospective lecturers must have teaching experience at the level for which application is made. For research, a doctoral degree at the time of application, or recognized professional standing is essential. Candidates should have a good speaking knowledge of Spanish unless otherwise noted. Application forms and further information can be obtained from the Committee on International Exchange of Persons, Conference Board of Associated Research Councils, 2101 Constitution Ave., Washington, D.C. 20418. Applications will be accepted as long as vacancies exist.

Technicians in physics

The proceedings of a conference on education of research assistants in physics and related fields, held in January, 1964 at El Camino College, Calif., have been issued by the American Institute of Physics. Jointly sponsored by the AIP and El Camino College, the conference was attended by some thirty-four representatives from local industry, two-year and four-year colleges, and the universities.

Topics treated by the participants were the recruitment and supply of technicians, a consideration of the research assistant's position from the points of view of management, the scientist, and the research assistant himself, and a discussion of a proposed curriculum. The 69-page publication also includes a previous AIP report on technical assistants, selected sections of a report on chemical

technician training, and a discussion of the supply of technicians by junior colleges. A limited number of copies of the conference proceedings are available, without charge and while the supply lasts, from AIP, 335 East 45th Street, New York, N. Y. 10017.

Curricula report

Some two and a half years ago, the American Association for the Advancement of Science and the Science Teaching Center at the University of Maryland jointly established the Information Clearinghouse on New Science and Mathematics Curricula. Under the direction of J. David Lockard, the project seeks to gather data and materials from new and ongoing science and mathematics projects and to disseminate pertinent information to interested individuals and groups. The most recent report of the Clearinghouse supplies information about all major projects and many state and local school systems, encompassing materials from the full K-16 science-education curriculum. The data are in the form of replies to a three-page questionnaire which the Clearinghouse sent to all interested parties and is presented in four sections; National Science Foundation projects, other major projects, science and mathematics materials from state and local school systems, and the college commissions. Single copies of the *Third Report of the Information Clearinghouse on New Science and Mathematics Curricula* can be obtained, while the supply lasts, from J. David Lockard, Director, Information Clearinghouse, University of Maryland, College Park, Md.

International study guides

The Institute of International Education has issued a fourth edition of its two-volume set of *Handbooks on International Study*. One of the volumes, intended for Americans interested in pursuing education abroad,

presents data on systems and institutions in some 100 foreign countries as well as an expanded listing of US institutions that conduct undergraduate programs abroad during the academic year. Also included is information on awards and special programs abroad, summer opportunities at foreign institutions, and US schools having summer study programs abroad. Organizations providing services to US nationals going abroad, and government regulations affecting them are likewise covered by the handbook.

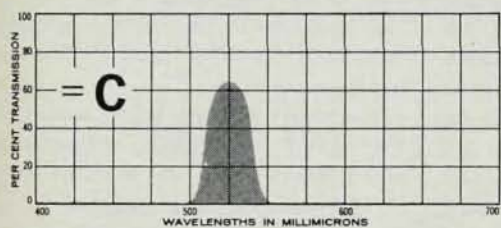
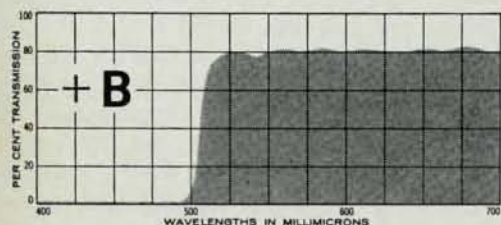
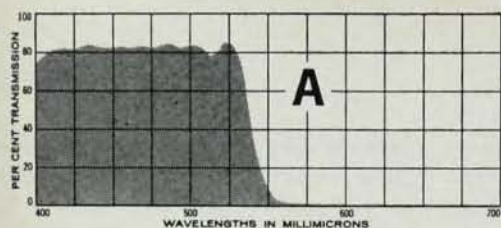
The other volume is a comprehensive guide for foreign nationals to educational systems and fields of study in this country. It includes a list of accredited institutions of higher education and the accredited curricula leading to degrees. English language and orientation programs offered by US schools and information on awards and special programs, as well as summer opportunities are also provided.

Either or both volumes of the *Handbook on International Study: For U.S. Nationals* and *Handbook on International Study: For Foreign Nationals* can be purchased from the Institute of International Education, 809 United Nations Plaza, New York, N. Y. 10017, at \$3.50 per volume or \$6.00 per set.

Low-cost acoustics study

With the use of custom-built organ pipes, and a government-surplus wave analyzer, several undergraduates at Randolph-Macon College in Ashland, Va., are making a study of the composition and intensity of musical overtones. Directed by Dr. Sanford P. Thompson, professor of physics at Randolph-Macon, the group has set out to measure the relative strengths of different overtones, breaking them into components which can be related to the shapes and conditions of operations in the pipes.

The object of the study, according to Dr. Thompson, is to "discover and



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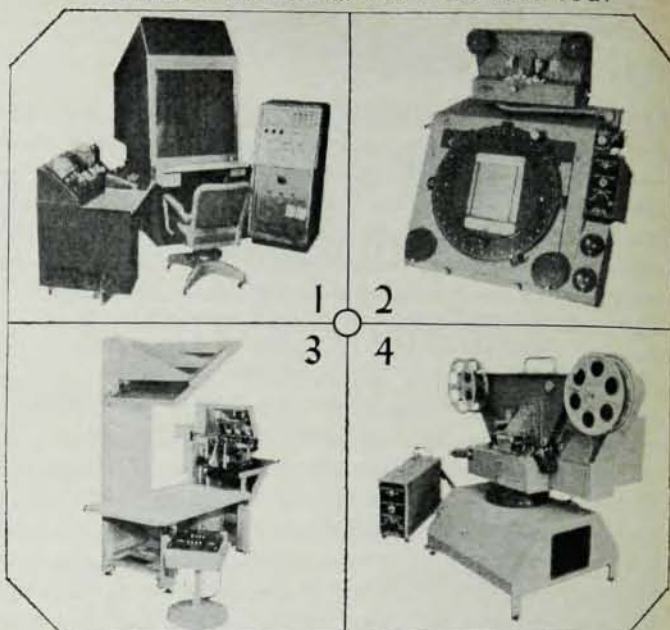
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control the physical basis of tone production in musical instruments which have been rated aesthetically by competent musicians." Dr. Richard E. Grove, chairman of the Department, feels that much fundamental physics can be studied in the context of this type of research project, and that the work can be carried on inexpensively, both important considerations for the private liberal-arts college with a limited research budget.

Nuclear studies

The National Association of State Universities and Land-Grant Colleges has compiled a booklet describing the facilities and programs in nuclear science and engineering in the public institutions which make up its membership. Designed primarily for students and their guidance counselors, the publication opens with an overall look at nuclear science programs in member institutions, followed by a description of accelerators at some forty-six schools. Also included are listings of institutions with critical as well as subcritical research and training reactors, and degree programs in the field. Copies of *Nuclear Science and Engineering at State Universities and Land-Grant Institutions* are available from the Office of Institutional Research, Association of State Universities and Land-Grant Colleges, 1785 Massachusetts Ave., NW, Washington, D. C. 20036.

Medical physics

The American Association of Physicists in Medicine has prepared a pamphlet for the benefit of recent graduates in the physical sciences and student advisers on the nature of medical physics as a career. The information provided in the pamphlet was gathered from a survey which the organization conducted in 1960 of its membership to determine the position of the profession. Included are discussions of what medical physics is, what the work entails, the training involved, and income and future demand. Partial lists of programs in medical physics and biophysics as well as traineeship programs in medical

physics are also given. Copies of the pamphlet and more detailed information about the profession can be obtained from Dr. C. S. Simons, Department of Radiology, University of Michigan Hospital, Ann Arbor, Mich.

Paying for college

The National Science Foundation has recently prepared a short guide for students on the subject of *Financing A College Science Education*. Discussions of what the family's proper role in paying for college should be and how this may affect the choice of school are followed by suggestions on locating financial assistance. Programs of federal support are described for the various agencies and departments of the government as well as nonfederal assistance from schools and state and national scholarship programs. The booklet concludes with a list of some useful references to further information on the subject. Copies of the brochure can be purchased from the Superintendent of Documents, US Government Printing Office, Washington, D. C. 20402, for 15 cents.

Summer programs

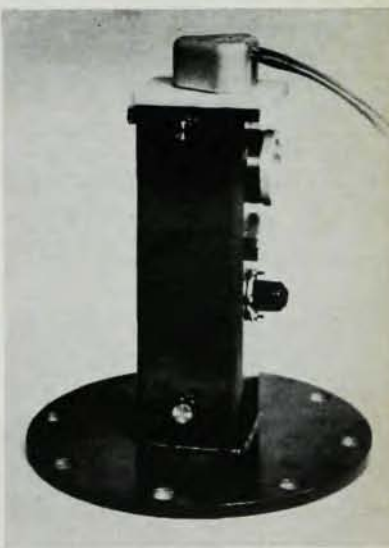
A short course in optical physics and its recent applications will again be conducted at the University of California's campus in Los Angeles during July 12-23. Directed by Max Garbuny, the course is intended for workers in development and research, engineers, teachers, or graduate students interested in optical radiation physics. Interaction processes involved in the generation, propagation, and detection of coherent and incoherent light from the infrared to the ultraviolet will be featured. The fee for this course will be \$250. Additional information and application blanks can be obtained from H. L. Tallman, Physical Sciences Extension, Room 6532 Engineering Building, University of California, Los Angeles, Calif. 90024. Phone: (Area code 213) 272-8911, Ext. 3121.

A two-week program on electromagnetic compatibility is being offered at the Massachusetts Institute of

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