

SCIENCE EDUCATION

Departmental Programs

The University of Maryland has announced plans to launch a new research and teaching program in astronomy next month. The University's Department of Physics will be renamed the Department of Physics and Astronomy, and courses of study leading to the BS, MS, and PhD degrees in astronomy will be offered. Faculty members will include Professor Gert Westerhout from the University of Leiden; Associate Professor William Erickson, who will come to Maryland from Convair Research Laboratory and the University of Leiden next year; Assistant Professor Uco Van Wijk, who joined the faculty last September; and at least two more astronomers to be appointed in the near future.

The University has also announced the establishment of a Center of Atmospheric and Space Physics within the expanded Department. It will encompass the present Space Research Group at Maryland and will draw upon other existing programs in physics and astronomy. The center will be directed by S. Fred Singer. He will be on leave of absence from the University until September 1963, and during the interim the acting director of the center will be Howard Laster, who is also associate chairman of the Department. Drs. Singer and Laster, together with Ernst Öpik, professor of astrophysics, will constitute three of the four senior faculty members of the center. A fourth senior member remains to be appointed.

The Astronomy Department of the University of California at Los Angeles will inaugurate a program of study leading to the PhD degree, beginning next September. At the same time a more concentrated undergraduate program in astronomy will be initiated, and two astronomers will be added to the faculty: Lawrence H. Aller, now of the University of Michigan, and Asst. Prof. Ray J. Weyman, now on the staff of the Steward Observatory of the University of Arizona. In addition to the fields of astronomy represented by members of the Department, UCLA graduate students will be able to specialize in a joint astronomy-engineering program in astrodynamics.

A Department of Metallurgy will be established this summer at Iowa State University. Although an undergraduate program in metallurgy will be undertaken as soon as possible, the new Department's immediate responsibility will be to administer the graduate program in metallurgy which has been offered on an interdepartmental basis since 1954. The departmental staff will include metallurgists now in the University's Departments of Chemistry, Physics, Chemical Engineering, and Mechanical Engineering, as well as members of the Institute for Atomic Research. Metallurgical courses previously taught in the other departments will

be moved to the Department of Metallurgy. Since 1954, fourteen Iowa State students have received PhD's and twenty have received master's degrees in metallurgy. The University currently has 30 graduate students majoring in that science.

Graduate programs leading to the MS degree in radiological physics and to the PhD in biophysics will again be offered during the coming year by the Sloan-Kettering Division of the Cornell University Graduate School of Medical Sciences in New York City.

The radiological physics program includes courses and training in radiation dosimetry, health physics, x-ray spectroscopy, medical applications of isotopes with associated dosimetry and metabolic studies, computer technology and application to medical problems, and x-ray physics relating to therapy and diagnostic applications, as well as selected courses in relevant biological, chemical, and mathematical topics. Several laboratory projects are available for thesis research.

The graduate program in biophysics involves courses in physics, biochemistry, physiology, and biostatistics. The thesis work is carried out in any of the laboratories in the Department of Biophysics with one of its faculty members. A few fellowships covering tuition and maintenance are available. Inquiries should be sent to the Department of Biophysics, Sloan-Kettering Division of the Cornell University Graduate School of Medical Sciences, 410 East 68th Street, New York 21, N. Y.

Summer Courses

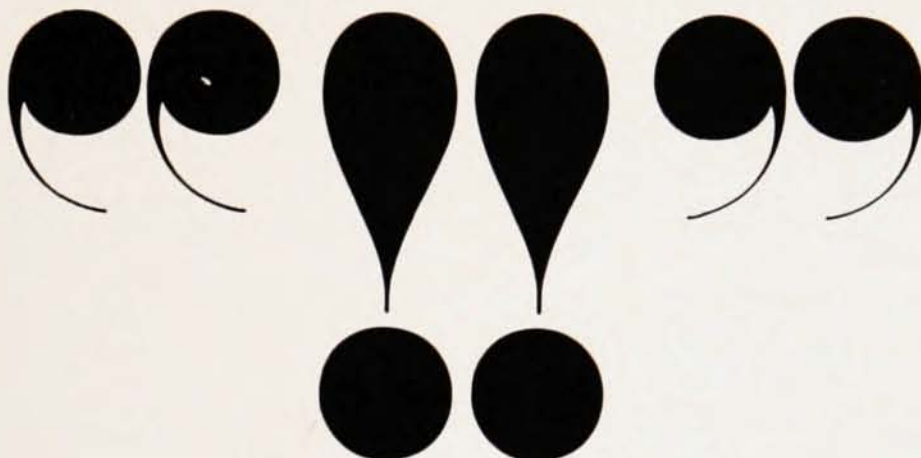
The McCrone Research Institute in Chicago is offering a nine-week summer program of courses in the research uses of the polarizing microscope and in related topics in chemical microscopy and crystallography.

The program will consist of an intensive three-week basic course followed by several shorter courses on special applications of microscopy. The basic course, *Industrial Use of the Polarizing Microscope*, will be given from July 9 to 27. The remainder of the program will include courses on advanced crystallography (July 30-August 10) and the photodecomposition of solids (August 13-24).

Further details can be obtained by writing to the McCrone Research Institute, 451 East 31st Street, Chicago 16, Ill.

A summer program on nonideal mechanical behavior of solids and fluids will be held August 13-31 at Princeton University under the sponsorship of the National Science Foundation. It is intended for college teachers of applied physics, applied mathematics, and engineering, and will aim at providing an understanding

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Further information and applications can be obtained from A. J. Maruca, 128 Pyne Administration Building, Princeton, N. J.

The Physics Department of Southern Missionary College at Collegedale, Tenn., will offer a course in industrial spectroscopy from August 8 to 22. Intended for persons interested in the design and operation of spectrographic laboratories, the instruction will be on the level of an undergraduate course. Applications (including a statement of background, qualifications, and interest, together with a photograph of the applicant) should be sent by July 1 to Dr. Ray Hefferlin, Physics Department, Southern Missionary College, Collegedale, Tenn.

The Uppsala Quantum Chemistry Group, in collaboration with the University of Florida's Quantum Theory Project, will sponsor an international summer institute in quantum chemistry and solid-state physics which will mainly be devoted to the application of quantum theory to the electronic structure of molecules. The institute will be held in Sweden from July 29 to September 1 and will consist of a course presented at the University of Uppsala, followed by a symposium to be held during the last week at Rättvik on Lake Siljan, a Swedish resort some 120 miles northwest of Uppsala. Inquiries concerning this year's program should be sent to the Director of the Summer Institute, Quantum Chemistry Group, Rundelsgränd 2A, Uppsala, Sweden.

Fellowships and Grants

The National Science Foundation will award individual grants to defray partial travel expenses for a limited number of American scientists attending the International Symposium on Stratospheric and Mesospheric Circulation, to be held in Berlin, Germany, August 20-31, 1962. Each grant will approximate the fare for round-trip tourist travel by jet plane between Berlin and the recipient's home institution. Completed application forms for these grants must be submitted by July 15. Application forms and further information can be obtained from the Division of Mathematical, Physical, and Engineering Sciences, National Science Foundation, Washington 25, D. C.

The National Aeronautics and Space Administration will begin this fall to support about 100 predoctoral students at ten universities in an effort to increase the supply of scientists and engineers for the national space effort. Students chosen will receive stipends of \$2400 per year for twelve months' study and expense allowances up to \$1000 a year. The participating universities will be reimbursed for tuition, fees, and other ex-