

# SCIENCE EDUCATION

## Summer Programs

**Geophysics** will be the subject of the 1962 session of the University of Grenoble's Summer School of Theoretical Physics, which will take place at Les Houches (Haute-Savoie), France, during the eight-week period from July 2 through August 25. Lecturers will include J. F. Denisse (plasmas), K. G. Budden (magneto-ionic theory), J. W. Chamberlain (motions of charged particles in magnetic fields), M. Nicolet (composition of the upper atmosphere), G. MacDonald (ionized layers), J. W. Dungey (the exosphere), and D. Barbier (aurora and airglow). The session will be partially supported by NATO, and classes will be given in French or in English.

Since the school is primarily intended for physicists who wish to become thoroughly acquainted with recent developments, a solid background in the fundamentals of theoretical physics at the graduate level is a prerequisite. Admission will be limited to thirty participants. Application blanks can be obtained from Mrs. B. S. DeWitt, Department of Physics, University of North Carolina, Chapel Hill, N. C. Completed blanks must be returned to Grenoble by March 1.

**A summer institute in plasma physics** will be held from June 25 to August 3 at Princeton University. Instruction in experimental techniques, as well as introductory and advanced classes in theoretical plasma physics, will be included in a curriculum planned to meet the needs of both academic and industrial participants. The faculty will be drawn from the University's Plasma Physics Laboratory.

Requests for further information and application forms should be sent to the Princeton University Conference Office, 128 Pyne Administration Building, Princeton, N. J. A limited number of fellowships with stipend will be available.

**Relativity and differential geometry** is to be the topic of a summer institute, sponsored by the American Mathematical Society and supported by the National Science Foundation, which will be held on the Santa Barbara campus of the University of California, Goleta, Calif., from June 18 to July 13. The theory of general relativity, the organizers observe, has often used mathematical techniques and results developed in differential geometry, and has, in turn, posed problems of interest to differential geometers. The intent of the institute is to bring together specialists in both of these fields to acquaint differential

geometers with recent results in general relativity and to inform specialists in general relativity of new techniques for the solution of problems in differential geometry. A series of lectures will review the history of general relativity as well as topics of current interest in the theory. There will also be lectures on modern work in differential geometry.

A. H. Taub of the University of Illinois is chairman of the organizing committee, which includes W. Ambrose (Massachusetts Institute of Technology), S. S. Chern (University of California, Berkeley), and C. W. Misner (Princeton University). Any individual interested in attending the institute is advised to have letters of recommendation sent to the committee member with whom he established contact. The committee hopes to include a limited number of graduate students among the participants.

**Last summer**, a three-week conference on curricula for undergraduate majors in physics was held at the University of Denver. It was attended by 178 college physics teachers, all of whom came from schools offering a major in physics (leading in some cases to the master's degree, although not to the PhD). Lectures were given by physicists well known for their work in physics education, and the program otherwise consisted of group discussions concerned primarily with the following four topics: (1) introductory courses in physics, (2) intermediate courses in physics, (3) the role of experimental work, and (4) the role of research and independent study. A complete report of the conference is available and an analysis of the report is to be published and distributed in the form of reprints to all colleges offering an undergraduate major in physics. Copies of the report can be obtained by writing to Prof. Byron E. Cohn, University of Denver, Denver 10, Colo.

## High-School Teachers Institute

**Temple University** has announced plans for a 1962-63 academic year institute intended exclusively for secondary-school physics teachers. The program will be conducted with the support of the National Science Foundation and will consist of eleven specially designed courses in physics, mathematics, and chemistry. These will include physics and chemistry demonstrations, courses in mathematical analysis and in modern physics and chemistry, and a short introduction to the topics and methods developed by the Physical Sciences



Study Committee. The MS degree in education can be earned through work done in the institute, and the program also offers the opportunity for teachers having sufficient background to work towards a master's degree in physics. Further information can be obtained by writing to Prof. Elmer L. Offenbacher, Director of the Academic Year Institute, Temple University, Philadelphia 22, Pa.

### *Indiana Dedicates Physics Annex*

A new wing has recently been added to Swain Hall, the home of the Physics Department at Indiana University. On November 21 and 22, 1961, the University celebrated the formal opening of the structure with a dedicatory conference attended by sixty physicists from various parts of the country. All had at one time or another received advanced degrees from the Indiana University Physics Department. One of the invited speakers at the conference was Atomic Energy Commissioner Leland J. Haworth, who received his BA in 1925, his AM in 1926, and an honorary DSc in 1961. Another was Paul W. McDaniel, director of the AEC's Division of Research, who received his PhD from the University in 1941. Nineteen of the University's former graduate students in physics presented contributed papers on topics associated with their current interests in physics.

The new wing has increased the space used by the Physics Department by about fifty percent and has more than doubled the amount of research space. Among the features of the building are a large machine shop, two chemistry laboratories designed for the handling of radioactive materials, a laboratory for a course in atomic and nuclear physics, a lecture room with a seating capacity of 250, and a number of research laboratories.

### *Advanced Study and Research*

Temporary memberships in New York University's Courant Institute of Mathematical Sciences are being offered for the 1962-63 academic-year to PhD-level mathematicians and scientists who intend to study or conduct research in the areas in which the Institute is particularly active; these include functional analysis, function theory, differential equations, quantum theory of fields, quantum-mechanical scattering theory, methods of mathematical physics, fluid dynamics and magnetohydrodynamics, electromagnetic theory, elasticity, numerical analysis, computers, or probability and statistics. The Institute's temporary membership program, which is supported by funds granted to the University both by private contributors and by the National Science Foundation, is designed to help increase the number of scientists trained in mathematical physics, applied mathematics, and mathematical analysis.

The one-year temporary memberships will be awarded in accordance with professional status, and