the physics community

NSF aids project for modular instruction

The National Science Foundation has funded the first phase of Project INTERMOD, an ambitious new program in modular physics instruction. Project INTERMOD is designed to produce and test physics modules for college-level students through a system of task forces and institutional consortia, and to provide a link with modular programs in related disciplines. The project is directed by Peter Signell, professor of physics at Michigan State University.

A modular instructional system consists of a series of self-contained units, each focused upon a single topic. Reading matter, problem sets, computer programs, demonstrations and other material may be used in each unit. The system of units may supplement a conventional format, or it may be used in an independent-study program.

Project INTERMOD is sponsoring the formation of a consortium of user-producer institutions, with N. Frank Six of Western Kentucky University as chairman. It is expected that this consortium will eventually hold the copyright to the materials actively used in the system. Priorities for the development of modules within physics subdisciplines will be set by task forces outside the consortium. An optics task force, for example, is sponsored by the Optical Society of America, and the governing board of the OSA appointed the task force members. The American Association of Physics Teachers is sponsoring a task force on issue-oriented modules for introductory physics students, to deal with the physics of such topics as energy flow and radiation damage. Five task forces are now in operation, and Signell envisages about six more to be developed over the next eighteen months.

When a task force has set its priorities, physicists will then be invited to submit modules. The task forces will publicize the search for module authors. and prizes will be awarded for the best modules. An author need only construct a single unit, because other units can be added for prerequisites or new material. Each unit will undergo formative evaluation and field testing by the consortium members. The final products are intended to form a cohesive network of physics instruction from the introductory level to advanced topics. The INTERMOD project will also promote communication and cross-fertilization among 13 modular programs in the physical and engineering sci-

The Board of Advisors for Project IN-



SIGNELL

TERMOD consists of D. Allan Bromley (Yale University), E. Leonard Jossem (Ohio State University) and Arnold A. Strassenburg (NSF).

The written instructional materials from another NSF-sponsored modular physics project, the Physics of Technology program, are now being published by McGraw-Hill, with apparatus for the program being produced by Thornton Associates. Developmental groups at Oak Ridge Associated Universities, the State University of New York at Binghamton, Florissant Valley Community College in Ferguson, Missouri and Technical Education Research Centers in Cambridge, Massachusetts wrote the 27 modules that were edited by Project Coordinator Philip DiLavore and a National Steering Committee supervised by the American Institute of Physics. Each module uses a common device-a toaster, a guitar, etc .- to develop physics concepts. The approach is strongly laboratory-oriented and geared to independent study. The project was originally intended for students in a twoyear program in engineering technology, but the physics modules have been used successfully as a one-year course in a liberal-arts program as well.

AAPT: Move for office and officers

The American Association of Physics Teachers has moved its executive offices to the Graduate Physics Building, State University of New York, Stony Brook, N.Y. 11794.

Arnold Strassenburg, the executive officer, is on leave to work at the National Science Foundation for two years, beginning 1 August. Strassenburg heads the material and instructional development section of the higher education division at NSF. Melba Phillips, professor emeritus of physics of the University of Chicago and a former visiting professor at Stony Brook, will become acting executive officer on a part-time basis.

Dean Zollman, on leave from Kansas State University, will be full-time staff physicist.

AIP publishes new physics and astronomy directory

The 1975-76 Directory of Physics and Astronomy Staff Members at North American Colleges and Universities and Federally Funded Research and Development Centers is now available. This AIP directory has been expanded to include about 3000 staff members at 37 federally funded research and development centers, as well as the faculties of North American colleges and universities. H. William Koch, director of the American Institute of Physics, says he hopes that next year's directory will include staff members of federal and industrial laboratories. This continued expansion of the AIP directory will improve communications between physicists and astronomers in government, industry and academia.

The directory also contains a new appendix listing areas of concentration of master's degree programs. The directory is available at \$15.00 per copy prepaid (\$2.00 billing charge) from AIP, 335 E. 45th Street, New York, N.Y. 10017.

AAAS and OSA sponsor joint Congressional Fellow

The American Association for the Advancement of Science and the Optical Society of America will sponsor a joint Congressional Fellowship for the 1976–77 year. The Congressional Fellowship program enables scientists to spend a year working in Congressional offices and with the staffs of Congressional committees (see page 107).

The AAAS/OSA Congressional Fellow will receive a stipend of \$15 000 in addition to a relocation subsidy of \$500 and a \$500 allowance for travel related to the Fellow's Congressional duties. Members of OSA are encouraged to apply. Further information and application forms are available from the Optical Society of America, 2000 L Street NW, Washington, D.C. 20036. The application deadline is 1 April.