

merged to form the present organization.

At an extraordinary meeting 27 Nov. in London, some members objected that one aspect of the charter application, elimination of the title

Fellow of the Physical Society (retained after the merger), violated a gentlemen's agreement that the historic distinction be maintained. Others feared too heavy a concentration on the professional status of phys-

ics. The vote, however, approved the application.

The decision on whether to go ahead with the application rested with the IPPS Council at the beginning of January.

Lycoming College Enjoys High-School Physics Day

The enthusiastic atmosphere in the physics department of Lycoming College effervesced at its second annual High-School Physics Day recently. Students from the neighboring Pennsylvania area hurried down corridors, wandered from optics to electronics and quietly listened to instructors.

In exposing talented high-school juniors and seniors to physics as a professional goal, the department hopes to combat the drop in college physics enrollment. A total of 140 students from 14 schools visited Lycoming.

Morton Fineman, department chairman, expressed the program's philosophy: "Physics is the science which the better high-school student should consider entering, not only for financial rewards, but more particularly for the great satisfaction physics can bring to those involved."

In rotating groups of 15, physics and chemistry students visited the introductory and advanced laboratories, where they argued over the kinds of displays on an oscilloscope, viewed a laser beam and saw centripetal force exhibited. Lycoming students also demonstrated trajectories, voltage am-

plification, magnetic susceptibility, determination of refractive index, wave superposition, uniform accelerated linear motion and the production of metastable molecules by electron impact. Several short films were shown continuously.

At an informal meeting Philip R. Marshall, the dean, welcomed the students and described the expanding physics department. The physics faculty, consisting of Willy Smith, M. R. Jamison, M. U. Kim and Fineman, discussed the opportunities of physics as a profession. "Physics is not so tough," stated Smith. "All you need is a feeling for math and an inquisitive mind."

Fineman outlined the Lycoming physics program, which has been revamped since his appointment three years ago. Two more PhD members were added to the faculty. Courses were improved to prepare students for graduate school; more emphasis was placed on research.

In the spring of 1968 Lycoming secured its first National Science Foundation grant to conduct research on the excitation of neutral to metastable

states by electron bombardment with crossed beams. Qualified seniors can now participate in the independent research program, initiated last summer with two students doing research under Fineman's direction.

Supplementing the new emphasis on research and improvement, Lycoming started weekly Physics Colloquia. This program brings to the campus physicists active in research or industry; local high school teachers and industrialists attend as well as students. Recent guests have been John R. Taylor of the University of Colorado, Edwin H. Fisher of Princeton Applied Research Corp and W. Lewis Hyde, provost of New York University, University Heights campus.

Fineman stressed that visiting physicists do not receive an honorarium; yet he has no problem in getting speakers.

Lycoming also has a three-two pre-engineering program. A physics major may attend Lycoming for three years and Penn State or Bucknell for two years, receiving a BA from Lycoming and an engineering degree from the other school. —TJ



FIGURING OUT RESULTS. Acting as instructor, a physics major at Lycoming College computes data from experiment as interested high-school students look on.

AIP Holds First Three-Day Science-Writers Seminar

The American Institute of Physics this year scheduled its first three-day seminar for science writers for 30 Jan. to 1 Feb., in place of the usual one-day meetings scattered throughout the year.

"Physics and Astronomy 1969" was held at the New York Hilton just before the annual meeting of the American Physical Society and the American Association of Physics Teachers.

On Thursday morning Gerald Feinberg led discussion on pulsars and quasars. He is professor of physics at Columbia University. Also from New York was panelist Hong Yee Chiu, a professor at the State University of New York at Stony Brook. In the afternoon Irwin I. Shapiro, pro-

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fessor of geophysics and physics at MIT, presided over a session on tests of relativity.

"New Advances in Optics" was the topic for Friday morning. W. Lewis Hyde, provost of University Heights, New York University, headed the meeting. Brian Thompson, director of the Institute of Optics, University of Rochester, spoke on holography. Albert Clogston lead the afternoon meeting on new advances in solid-state physics. He is director of the Physical Research Laboratory at Bell Labs. Speaking on plasmas in solids was W. M. Walsh, head of the Physics of

Metal and Solid-State Research Department at Bell Labs.

Chairman of the Saturday session on "High-Energy Physics—Where Is It Now?", was Robert Marshak of the University of Rochester. Also participating was Maurice Goldhaber, director of Brookhaven National Laboratory.

The seminar ended with a cryogenics meeting under the leadership of Mark Zemansky, professor emeritus of the City College of New York and executive secretary of AAPT. Bernd Matthias, of the University of California at San Diego and Bell Labs, spoke on "Unkept Promises in Superconductivity."

New Leaders Will Overhaul US Science Policy For 1970's

US science policy for the next decade is being laid down right now in a score of offices and conference rooms around Washington. A new administration with its own science adviser and assistant secretaries for science is taking up the reins; a new president is about to take over at the National Academy of Sciences, and the National Science Foundation expects to have a new director 1 July.

The time is right for decisions. Du Bridge listed as an "urgent matter" the question of what the US should do in space after the Apollo program. By investing \$5000 million a year in getting to the moon, the US has acquired a technological ability that some fear will be lost if the US does not push on to the planets.

Congressional committees have focused attention on other questions. Perhaps foremost is improvement of how the federal government makes and executes science policy. The new administration will examine everything from further strengthening NSF to finding a basic formula for paying the cost of university research.

Whatever choices they make and methods they adopt, President Nixon and his science adviser, former Cal Tech president Lee A. DuBridge, want to restore real growth to federal support of science. DuBridge said in December he wants the basic research budget to grow by 10% a year for the next few years.

How will the money be spent? In December Nixon named two task forces to brief him on decisions he could expect to face in the field of science. Charles H. Townes, who directed the study on nonmilitary use of

space, and H. Guyford Stever, who led a similar study of science in general, quickly assembled groups of experts; their findings were due before 1 Jan.

Neither group published their reports (even their membership was kept secret). Henry Loomis, executive director of all the task forces, told PHYSICS TODAY that the study groups were asked to identify issues and present alternative responses. Their findings were to be broken down into three groups:

- issues that might require action in the first 100 days of the new administration. Loomis called these the "Swords of Damocles." This area included positions the new President might want to take in his inaugural speech or in his early executive orders. He was to be warned of any surprises that might confront him, such as a Soviet first manned lunar landing.

- long-range decisions that could be handled in a routine fashion without any problems from Congress.

- long-range questions that involve new departures for national science policy. The post-Apollo space program falls into this category.

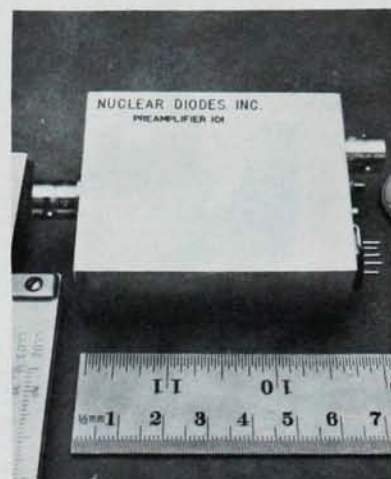
The man Nixon will lean on the most is DuBridge. DuBridge has said he expects to work toward pulling more and more scientists, particularly those outside the governmental sphere, into the federal decision-making process. He said he is particularly concerned over a breach between some scientists and the Defense Department, caused in part by disagreement over the war in Vietnam.

Nixon has asked DuBridge to bring periodically to the White House scientific leaders from this country and

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