

Controversy Warms as APS Sets Public-Issue Session

The council of the American Physical Society has decided to schedule a discussion of society involvement in public issues during the Chicago meeting. The session will take place as part of the APS business meeting on 30 Jan. (PHYSICS TODAY, November page 81. Further discussion of the matter appears in the editorial of this issue on page 128. The PHYSICS TODAY "Letters" department will, in the coming months, include exchanges of views on the subject.)

The issue was broached last July by Charles Schwartz of Berkeley who proposed to APS, through APS president Charles Townes, a new APS constitutional amendment designed to allow society members to initiate a vote "on any matter of concern to the society." The subject was treated by the APS executive committee on 11 Sept. when it was agreed that announcement of the issue should appear in the November *Bulletin of The American Physical Society*. At a later date, the entire society will have an opportunity to vote (by mail) on the amendment, whose adoption "shall require the affirmative votes of not fewer than two thirds of the members voting."

Meanwhile PHYSICS TODAY has received several communications expressing varying points of view on the matter. Those in favor of the amendment argue that the days of string and sealing wax are over, that physicists, because they are so deeply involved in the body politic and because many political judgements are based on technical knowledge, should discuss and advise on public policy and help to formulate it. Those opposed maintain that physicists as physicists should stick to physics, that there are other societies and other publications wherein to voice one's sentiments and that introduction of social issues would destroy the fabric of APS.

Among the several opposing viewpoints is that of Eugene Wigner of Princeton. Wigner notes, "It is my

opinion that the Physical Society should stick to physics. I believe it would be a corruption of democracy if all societies should participate in the discussion of political matters, no matter for what purpose they were formed. Naturally anybody can express his views privately, but I do not think political questions are valid subjects for discussion at our meetings."

Agreeing with Wigner is Robert Pound of Harvard. "In general I prefer the Physical Society not to take any stand in favor of discussing public issues. I think such a stand will tend to confuse its role as a strictly scholarly organization. This question has come up many times before, and it was strong just after World War II when issues such as the future of the AEC were matters of concern. I agreed then that the APS should not take a stand on these issues."

Contrary sentiments, however, are expressed by Jay Orear of Cornell, chairman of the Federation of American Scientists, and also by Schwartz. Orear asserts that scientists have a duty to communicate truth to all who need it. In our present burgeoning technology, he maintains, many political decisions are partly formed by

RESONANCES

1968 appropriations for the AEC, NSF, NASA and NBS have won final congressional approval.

The Atomic Energy Commission received \$2.54 billion, which is about \$270 million more than last year but about \$110 million less than the AEC requested. Congress also approved \$7.33 million for the 200-GeV accelerator, which is now being designed to allow for possible higher energies of 400-500 GeV.

The National Science Foundation was allotted \$495 million, which, with the \$21 million expected to be recovered from project Mohole, allows the foundation \$36 million more than last year but \$10 million less than its 1968 request.

The National Aeronautics and Space Administration got \$4.59 billion but no funds specifically for the Mars Voyager probe and only \$10 million for its university program.

The National Bureau of Standards was appropriated \$31.75 million for its operating budget (\$6.79 million less than requested) and only \$240 000 for plant and facilities.

scientific considerations. The original APS constitution, he argues, was fine for the age in which it was written but not for the space and atomic age of today. PHYSICS TODAY should help physicists fulfill their responsibilities to society; the APS should provide for one or two sessions at its meetings on science and society. Schwartz argues that physics is today firmly tied to government and business and that it is a national asset. Consequently, physicists have an obligation to seek and speak out the truth wherever it is found. Furthermore, he maintains, when sufficiently important questions arise, the entire APS membership should decide the path to follow.

Research Funds and Prospect Of Republican Victory in '68

A PHYSICS TODAY survey of ranking House Republican science committee-men and staff members indicates that a possible Republican victory at the polls in 1968 will not appreciably alter the trends toward tighter research budgets and emphases on practical goals started under the Democrats. Furthermore any change of administration, they add, would probably acceler-

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ate the pace of such trends now under way. That there is no partisan approach to basic science, that both parties affirm the necessity of federal support for fundamental research, was asserted again and again by Republicans at all levels. They note that while in a minority role, their party must perforce lead the attack on many R&D appropriations; on the other hand, should they gain control in 1968, their positions with the Democrats may very well be reversed. Comments by some of these Republican leaders follow:

Craig Hosmer (R-Calif.), ranking House Republican on the Joint Committee on Atomic Energy: "Our government must of necessity support a very large effort in science. In the event of a Republican victory, I would see a continued appreciation of the need for federal science support. I believe, however, that we will be faced with some new problems. They will not be brought on by political considerations but by a generally changing environment in the US. One reason is fiscal. We certainly have to start picking up the pieces from current budget deficits. In this area there will have to be a great deal of competition between physical and social science on one hand and between science and defense and welfare programs on the other.

"Our objective would be to get as much as or even more into the scientific areas than the Democrats have. We will also look at the organizational side of science. We have a proliferation of scientific effort among many federal departments and agencies. As a result, there are duplicated facilities and perhaps an underuse of staff. We might look forward to the designation of the Atomic Energy Commission or National Science Foundation as the executive agency for research. In this way other agencies would go to one agency with their scientific problems. I just see this as a way to get more out of our science dollar.

"Any future American president, Democrat or Republican, would be more inclined to appoint AEC commissioners who are engineering oriented rather than basic-research oriented. The love affair that the American people have had with science and space travel has eroded with time.



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ROUDEBUSH: "Conservative reactionaries like myself (as some . . . call me) realize that the very heart of the American enterprise is . . . research."

Today people are looking for engineering results out of basic-research discoveries. We must respond to what the electorate seeks and needs. This trend would be inevitable under any administration. But the pace of the trend would be faster if the Republicans win in 1968. For any change of administration permits a more rapid shift of objectives than would be accomplished anyway—but more slowly."

Richard Roudebush (R-Ind.), third ranking Republican on the House Science and Astronautics Committee: "A lot of people are going to be surprised if the Republicans win the leadership of the House in 1968 (as I think they will). The victory will give impetus



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to the scientific community. The bulk of the research programs will be maintained. For conservative reactionaries like myself (as some publications call me) realize that the very heart of the American enterprise is scientific research. The Republicans would also look with interest on legislative reform so that Congress could work more closely with scientists to solve our social problems. As for the Apollo project, there would be a great increase in unmanned probes of our solar system, and if I have my way, less dedication to manned shots and greater emphasis on scientific satellites."

Charles Mosher (R-Ohio), second ranking Republican on the Science and

Astronautics Committee: "I don't think any significant group of Republicans have attempted to design a peculiarly party position on basic research. There is a tendency, however, for the Republicans to give more weight to economy, to be more hesitant to approve the full amounts asked for by the administration. The executive branch faces us in quite a monolithic way in asserting administration policy. In our minority role, we find ourselves espousing more vigorously cuts in appropriations. Now if we become the majority party, we might be put in a reverse position."

James Fulton (R-Pa.), ranking Republican on the committee: "Support of research is not a party issue. But I think if we win in 1968, we'll treat the NASA enterprise with less program-mindedness than the Democrats and with more room for research. I have pointed out time after time that 95% of NASA's money is not research, and I have insisted that its laboratories be left open for research and not put into a rigid military program. Research was always emphasized more under Eisenhower."

Congress Finds Little Time For Legislation on Science

Much significant legislation affecting science was still bottled up in committee as the first session of the 90th Congress drew to adjournment. Bills concerning the National Science Foundation, metric-system study, National Standard Reference Data System, geographic distribution of research funds and others drew scant attention from Congressman preoccupied with poverty programs, urban riots, Vietnam and new tax proposals. Status of some of the science bills follows.

National Science Foundation. Earlier this year the House passed HR 5404, to give NSF an expanded role and strengthen its operation. The bill is still pending before the Senate Labor Committee, but hearings are planned.

Metric system study. HR 3136 reported by the Science and Astronautics Committee in both the 89th and 90th Congresses is still pending in the House Rules Committee where it has pended longer than any other piece of legislation before the committee in this session.

Standard reference data. The National Standard Reference Data System bill, to put a congressional stamp of approval on the system and facilitate its funding, won House approval with two restrictive amendments: that annual authorization of funds must be obtained and that FY 68 spending be limited to the FY 67 amount. No Senate action on S 998 seems likely this year.

Education. HR 875 providing \$150 million for institutional support for science, introduced earlier in the year, is still pending before the House Science and Astronautics Committee with no action planned this session. HR 5465, to encourage out-of-school cooperation between students and the scientific community, is pending before the General Education Subcommittee; no action is planned. HR 1185, to establish a National Science Academy for training scientists and engineers for service in the federal government, is awaiting action in the Science and Astronautics Committee.

Patents and copyrights. Patent reform legislation, S 1042, providing for patent awards to the first to file, has received hearings in both House and Senate but no further action is planned this year. The copyright revision bill, S 597, won early approval in the House but is shackled in the Senate over jukebox royalty controversies.

Congressional reform. The Senate passed by an overwhelming vote the Congressional Reorganization Act of 1967 (S 355), one significant feature of which would enable the Library of Congress science-policy-research division to expand its services to Congress. The House Rules Committee now has the bill but has held only one day of hearings, with no further action planned within the remainder of the current session.

In Brief

Publications

Physics of the Earth and Planetary Interiors, a bimonthly journal begun by North-Holland Publishing Co., Box 103, Amsterdam, Holland.

International Journal of Mass Spectrometry will be issued bimonthly by Elsevier Publishing Co., Box 211, Amsterdam, Holland.

Journal of Molecular Structure, published bimonthly by Elsevier.

A Directory of Information Resources in the United States: Federal Government, containing over 1600 items of federal and federally sponsored information resources. Purchase from Superintendent of Documents, Government Printing Office, Washington, D. C. 20402 (\$2.75 per copy).

Systems for Measuring and Reporting the Resources and Activities of Colleges, issued by the National Science Foundation. Report presents the problem, rationale and main features that must be included in a data system as well as suggestions on specific items of data needed. Purchase from Superintendent of Documents, \$2.00 per copy.

Industry

Laser Industry Association has been formed by representatives of 31 manufacturers of laser beam-emitting products. Information from Arthur Lubin, Korad Corp., 2520 Colorado Ave., Santa Monica, Calif. 90406.

Stevens Institute of Technology will develop a new industrial research center, costing in excess of \$20 million, on a 12-acre waterfront tract adjoining the school campus at Hoboken, N. J.

Magnon has acquired Strand Labs, a manufacturer of electron paramagnetic resonance spectrometers and microwave equipment.

Varian Associates has newly acquired Mess- und Analysentechnik, a West German maker of research instruments, including mass spectrometers.

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