Presidential Science Adviser George Keyworth will comment on the APS nuclear-war resolution in the Guest Comment section of our April issue.

weapons distributed around the globe contains the explosive power of more than one million Hiroshima bombs;
Whereas a general nuclear war would kill hundreds of millions of people;
Whereas the aftereffects of general nuclear war are certain to be catastrophic for the survivors and could destroy civilization;
Whereas any use of nuclear weapons, including use in so-called "limited wars," would bring with it substantial risk of escalation to general nuclear war;
Whereas thirty years of vigorous research and development have produced no serious prospect of effective defense against nuclear attack;
Whereas nuclear arsenals of the United States and the Soviet Union are more than adequate for deterrence;
Whereas the continuation of the nuclear arms race will not increase the security of either superpower;
Whereas the proliferation of nuclear weapons to additional countries, especially in areas of high tension, would substantially increase the risk of nuclear war;
Whereas there has been no progress for several years now toward achieving limitations and reductions in strategic arms, either through ratification of SALT II or the negotiation of a replacement for it;
Whereas negotiations intended to achieve a comprehensive nuclear test ban have been indefinitely adjourned; and
Whereas negotiations intended to prevent or inhibit the spread of nuclear warfare to outer space have been suspended;
Be it therefore resolved that The American Physical Society, through its elected Council, calls on the President and the Congress of the United States, and their counterparts in the Soviet Union and other countries:
to intensify substantially, without preconditions and with a sense of urgency, efforts to achieve an equitable and verifiable agreement between the United States and the Soviet Union to limit Strategic Nuclear Arms and to reduce significantly the number of such weapons and delivery systems;
to conduct, in a similar spirit, negotiations to restrict the use and limit the deployment of battlefield and intermediate-range nuclear weapons;
to resume negotiations to prevent the spread of warfare into outer space;
to take all practical measures to inhibit the further proliferation of nuclear weapons to additional countries;
to take all practical actions that would reduce the risk of nuclear war by accident or miscalculation;
to continue to observe all existing arms-control agreements, as well as SALT II;
to avoid military doctrines and deployments that treat nuclear explosives as ordinary weapons of war; and
to initiate serious negotiations to ban the testing of nuclear weapons in all environments for all time as called for in the Non-proliferation Treaty.

The 30 elected members of the council approved the resolution almost unanimously.

Academy physics survey gathers steam

A comprehensive survey of physics, designed along the lines of the study completed in 1972 under the direction of Allan Bromley (Yale) is getting under way. William Brinkman (Bell Labs), who heads the survey for the National Academy of Sciences, told us that he has selected six members of a steering committee that eventually will have about 17 members. Thus far, those who have agreed to serve are William Fowler (Caltech), who will act as a liaison for the Academy Commission on Physical Sciences, Mathematics and Resources, as well as the steering committee, Theodor W. Hänsch (Stanford), Val Fitch (Princeton University), Ronald C. Davidson (MIT), Peter D. M. Parker (Yale) and Vincent Jaccarino (University of California, Santa Barbara).

Commenting on the need for the survey, Brinkman said, "The physics climate has gone through enormous changes in the past ten years. The Bromley report was written when relevance was the biggest issue; this is no longer true." Brinkman said that while the survey will emphasize the question of where physics as a science is going, it will also consider such issues as the role of big science in national

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facilities, increasing competition with the European and Japanese scientific communities, changes in the subfields of physics and how future opportunities within them will be influenced by both funding and research trends.

Brinkman estimates the total cost of this survey at $700 000; of this amount, $200 000 has already been requested from the Department of Energy. The Academy anticipates a similar level of support from NSF and the Department of Defense, and about half as much from NASA. The Academy is also seeking private funding to broaden the survey.

Current plans call for a report to be ready by February 1984; this will take about half the time the Bromley survey required, reflecting a reduction in scope. The steering committee, which met for the first time in February, is beginning by defining objectives for the study and setting up subpanels to meet these objectives. In addition to examining each of the subfields of physics, they will establish subpanels in physics applications, the unifying aspects of physics, the diversity of physics, and manpower and funding as they influence and are influenced by directions in physics research.

Brinkman, a solid-state theorist, now director of the Physical Research Lab at Bell Laboratories, received his PhD from the University of Missouri in 1965. Since 1966 he has been at Bell Labs, beginning as a member of the technical staff in the theoretical physics department, then serving as head of the infrared physics and electronics research department, from 1972 to 1974, and as director of the chemical physics research lab from 1974 until he assumed his present position in 1981. —JC

in brief

The American Vacuum Society will award scholarships for the 1983–84 academic year in vacuum science and