

difficulty." The other, written by John Woodward (27), who succeeded in finding the material supplies of plant life where van Helmont and Robert Boyle had failed, appeared in 1699. "There is," Woodward says, "a procedure in every part of nature that is perfectly regular and geometrical if we can but find it out." Timing systems and mechanisms are clearly examples of complexity and examples of regularity as well. The regularities become increasingly apparent as we pursue our investigations and extend our efforts to "find them out."

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News and Comment

National Academy: Public Policy Group, Headed by Kistiakowsky, Seems Bound for Important Role

Without fanfare, a 15-man group of scientists, conveniently referred to as "Kisty's Committee," is cautiously but surely moving toward a major role in relations between the federal government and the scientific community.

"Kisty" is George B. Kistiakowsky, Harvard chemist, White House science adviser under President Eisenhower, and a key scientific adviser to the Kennedy administration. As one of the elder statesmen of science and government, Kistiakowsky has for years radiated considerable influence, but now, as chairman of the National Academy of Sciences' recently established Committee on Science and Public Policy, he is engaged in a venture that may be one of the most significant things to happen in the science-government area in a long time.

The committee, which was formally established last February after a year's operation on an *ad hoc* basis, is yet to bring its role into clear focus, but it appears that this is going to be along the lines of critic, guide, and illuminator in the increasingly complex and troubled interdependence of science and government. This is a role from which the Academy has heretofore shied away, usually leaning on the argument that its chartered role as a nongovernmental adviser to government was one of waiting until its advice was asked, not of venturing on its own initiative into areas of controversy. There was nothing, of course, to prevent such self-initiated ventures, and occasionally they did take place, but usually against the feeling on the part of Academy members that mixing in public affairs would be detrimental to the Academy's image as the prestigious apex of American science.

Such feelings at first greeted the es-

tablishment of Kistiakowsky's committee, but, by and large, the response in and out of the Academy has been enthusiastic, for as the bond between science and government becomes thicker each year, it has become apparent that the scientific community has done little to equip itself for protecting its own interests in this relationship. Concern over this led Detlov W. Bronk to promote the establishment of the Science and Public Policy Committee in his final year as Academy president, and it has led his successor, Frederick Seitz, to look upon the committee as one of the Academy's most significant activities.

This is not to suggest that the Academy is setting itself up as the advocate of the nongovernmental scientist. The relationship between science and government is now too intertwined for any useful distinction to be made. (This is perhaps best symbolized by the presence of both Kistiakowsky and Seitz on the President's Science Advisory Committee.) But while recognizing that this intertwining exists and will continue, the Academy is now setting forth to bring some much-needed diversity—at least of an organizational sort—into the high councils of science and government. It might be argued that it isn't going to make much difference, since the multiple-hat-wearing in these councils will simply mean, in effect, that the committee members will be writing reports to themselves. But Kistiakowsky

An Invitation from Kistiakowsky

George B. Kistiakowsky, chairman of the National Academy of Sciences' Committee on Sciences and Public Policy, is seeking the assistance of "working scientists" in the committee's forthcoming study of federal grant policies. "We would like to have statements containing constructive suggestions and criticisms regarding current policies as they affect the working scientist," Kistiakowsky said. "This is the chance for scientists to make themselves heard. We don't want gripes," he added. "What we do need is the views of the scientists who have to work under these policies." Statements should be sent to the National Academy of Sciences, Committee on Science and Public Policy, Washington 25, D.C.

feels confident that the committee, composed of representatives from each of the Academy's 14 disciplinary sections, will be able to avoid special pleading and perform in the overall interests of the scientific community. One ground for optimism, of course, is that the committee is not going to become influential by parroting reports and recommendations of existing advisory bodies.

The first public performance by the committee came last spring with the release of a frankly worded study and series of recommendations on birth control and economic development (*Science*, 19 Apr. 1963). In some respects that was something of a test for the committee's future, for the report did not equivocate in its advocacy of heavy government involvement in the promotion of birth control. It also advocated a continuing role for the Academy by recommending the establishment of a standing Academy committee to stimulate and coordinate "programs directed toward the solution of problems of uncontrolled growth of population." Public response to this study was overwhelmingly favorable, and within the Academy itself no dissent was heard when the proposal came up for consideration. As a result, it has been decided that the Academy will set up the recommended committee, and Seitz is now in the process of selecting its members.

Kistiakowsky's committee is also turning its attention to other issues, most notably, perhaps, federal grants policies—an area that is bound by a great deal of custom but surprisingly little law or even explicit regulation. With Congress becoming more and more restive over the lack of hard and fast rules to govern the use of grant funds, something is clearly going to happen in this area, and the committee is now starting a study whose purpose is to make certain that when Congress

is ready to move, the views of the scientific community will be available, in cogent form, for congressional consideration. The study of grants policy was undertaken in response to a request from the American Society of Biological Chemists, but it is quite likely that if the society had not come along with its request, the committee would have gone into the subject on its own initiative. Unlike the birth control report, which was prepared by a panel appointed by Kistiakowsky, the grants study will be made by the committee itself, under Kistiakowsky's chairmanship. A report is expected to be completed by late autumn.

Meanwhile, the committee has established panels to conduct studies on astronomy, computer sciences, and plant sciences, and it is in the process of setting up studies in chemistry and general physics.

"The purpose," Kistiakowsky explained, "is to take a look into the future and see what the needs are. Major fiscal decisions have to be made in determining how much support should be given to these fields, and it is the hope of our committee that we can do a service for both the government and the sciences by looking into these problems."

The committee members, and their disciplines, are as follows: Philip H. Abelson, geophysics; Lawrence R. Blinks, botany; H. W. Bode, engineering; Frank Brink, Jr., physiology; Melvin Calvin, chemistry; Leo Goldberg, astronomy; Frank L. Horsfall, Jr., pathology and microbiology; A. L. Lehninger, biochemistry; Donald B. Lindley, psychology; Saunders MacLane, mathematics; William W. Rubey, geology; Harry L. Shapiro, anthropology; T. M. Sonneborn, zoology and anatomy; and Alvin M. Weinberg, physics.—D. S. GREENBERG

Foreign Aid: Latin-American Science Board Set Up To Help with Alliance for Progress

The foreign aid program, which has often been criticized for inattention to science and technology as factors in economic development, took a major step this week to incorporate these elements into its Latin-American program, the Alliance for Progress.

The task will be carried out by a Latin-American Science Board, organized by the National Academy of Sciences at the request of the Agency for International Development. The establishment of the board is in line with the Kennedy administration's interest in bringing scientific advisers into virtually every agency of government; they are now to be found at high-level posts in all sorts of places, from the United States Information Agency to the Department of Commerce.

The Latin-American Science Board will be headed by W. M. Myers, chairman of the department of agronomy and plant genetics at the University of Minnesota. Myers, who was an adviser to the U.S. Coordinator for the Alliance during most of 1962, said in an interview this week that the establishment of the board will provide a continuing review apparatus in place of an advisory service that heretofore has often been on a hit-or-miss basis.

"The board," he said, "will, among other things, be a channel for scientists who wish to make their skills available to the Alliance for Progress. We will have a permanent staff of four technically trained people, and we will be able to evaluate proposals in an orderly fashion, and relate them to the overall program."

In addition, he said, the board will recommend projects that it thinks should be part of the Alliance. The first meeting, which will be held 25 July, will be devoted to the development of educational institutions at the secondary, technical, and university levels.

The other members of the board are Allan R. Holmberg, anthropology; W. D. Johnston, Jr., geology; Ralph A. Krause, industry; Franklin A. Neva, public health; John S. Niederhauser, agriculture; A. J. Riker, forestry; Milner B. Schaefer, fisheries; Theodore W. Schultz, economics; J. Mayone Stycos, demography; F. M. Tiller, engineering; K. L. Turck, agriculture; and M. A. Tuve, geophysics.—D.S.G.