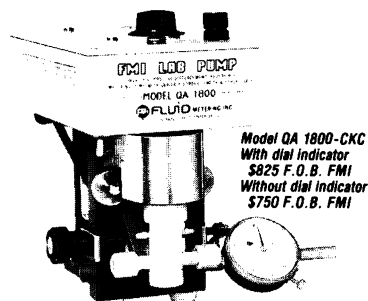


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begins in Washington, D.C., with events (or nonevents) that transpired in Foggy Bottom in the late winter of 1984. The mystery is not what happened, but why.

Several U.S. government agencies were formally invited to join the Vinogradov Expedition at least 1 year before the ship left port at Nakhodka (Vladivostok, U.S.S.R.), on 15 June 1986, but they failed to act on the invitation. At least one U.S. Geological Survey marine geologist received a personal invitation but was denied permission to attend by the USGS. It was he who started the chain of communications that led to my invitation to participate. In my search for travel funds, inquiries at two National Oceanic and Atmospheric Administration offices, the Minerals Management Service, and the Manganese Crust Project Office in Honolulu, and elsewhere brought the same response: "Vinogradov Expedition? Never heard of it!" The story was the same at the International Programs Office of the National Science Foundation.

As a geologist committed to and involved in international scientific cooperation since my tour with Harry Truman's Point Four Program in the Philippines in the 1950's I deplore what appears to be a hidden bottleneck somewhere in Washington, D.C., that results in the failure of international scientific projects and can even prevent usually cognizant government agencies from knowing that opportunities exist. I hope that this letter will arouse righteous indignation in the right quarters and that this bottleneck can be broken. Where are the champions of international scientific cooperation who believe in the role of scientists as forces for good in a world sadly in need of goodwill on all sides? Let us not miss golden opportunities like the Vinogradov Expedition again.

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### Symbiosis

Once again, and with customary wit and eloquence, Daniel E. Koshland, Jr., has, for the most part, put biological allusion to effective use in his analysis of science policy, in this case concerning the sources and sinks of university research funds (Editorial, 31 Oct., p. 525). However, in the interest of clarifying terminology, some comment on the sense in which he uses the word "symbiosis" is in order. As any ecologist worth his or her salt will, of course, recall, "symbiosis" refers to an intimate association between

(usually) two organisms, frequently involving the acquisition of food, and encompasses three major types of interaction: "commensalism," in which one partner gains while the other neither benefits nor loses in the relationship; "mutualism," in which both partners benefit; and "parasitism," in which one partner benefits at the expense of the other. Therefore, the phrase "The shift from symbiosis to parasitism . . ." is not only imprecise but constitutes a redundancy, since parasitism is a symbiosis. In keeping with the overall sense of the essay, "mutualism" would seem to be meant here rather than "symbiosis." This misappropriation of the latter, more general term appears to be rather widespread in both popular and professional publications.

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### Basic Energy Research

Mark Crawford, in his News & Comment article "R&D budgets: Congress leaves a parting gift" (31 Oct., p. 536), shows that "Most basic research programs have emerged from the agonizing budget drama in good shape." Included in those cited is the budget for the Basic Energy Sciences program of the Department of Energy, as follows: "Basic energy research expenditures also are rising—to \$536.67 million, \$33 million above the level recommended by the House Appropriations Committee and far above the \$441.3 million recommended by the Administration."

Referring only to the budget bottom lines without attention to the internal details can be misleading. In its final action on the Basic Energy Sciences budget, Congress provided \$102 million for projects, mainly university buildings, not requested by the Administration; reduced Administration requested items by \$6.7 million; and specified the expenditure of an additional \$11.4 million for purposes not included in the Administration's request.

The net result is not a program of research being increased by 22% compared to that proposed by the Administration, as could be inferred by the budget totals cited in the article. Nonetheless, we are pleased that in most aspects the Administration's proposed program is intact and funded so as to allow a strong program to go forward.

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