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# **United States—Soviet Scientific Exchanges**

Our scientific relations with the Soviet Union are rapidly deteriorating. We have almost reached the point of the cold war situation 25 years ago. The reasons are clear enough: the persistent violations by the Soviet government of the human rights of scientists such as Orlov, Shcharansky, and many others, the persecution of Sakharov, and now the invasion of Afghanistan.

Many scientists in this country and elsewhere, aghast at these outrages, have resorted to one of the measures available to them: refusing to attend conferences and to participate in collaborative scientific projects. It is assumed that the Soviet leaders are so strongly interested in scientific contacts with the West that they will change their policy. We fear that it will not work that way. Most of the contacts took place in the fundamental sciences or in applied fields removed from weapons technology. These areas are not important enough to Soviet leaders to make them yield to external pressures. The primary victims are our colleagues in the U.S.S.R., for they lose a precious window on the world that was opened to them—and to us. Another victim is scientific progress, since we lose the personal contacts that are so important, particularly in those fields in which one side has more results than the other.

But there are deeper arguments against a boycott of scientific relations. Science is supranational and supraideological—the concern of humankind as a whole. It should stand above political turmoil and serve, as it has in the past, as a bridge for mutual understanding and peace in a divided world. Directly and indirectly, scientific contacts have led to actual disarmament measures—the test ban, for example, or the arms control talks.

We should not lose contact with some of the best elements of Soviet society, a group that basically agrees with our value scale and may have a significant influence on future developments in the Soviet Union. If, as we hope, the present situation will not lead to a catastrophe, there is a chance that, sooner or later, the character of the Soviet regime may change again for the better. We should leave our bridges intact for this eventuality.

Unavoidably, scientific contacts will be weakened in the near future because of the understandable reactions of many U.S. scientists against the recent happenings. However, the U.S. National Academy of Sciences' official suspension of bilateral agreements is a step in the wrong direction. Restrictions on scientific communication are not the right answer to the restrictions the Soviet government has imposed on some of their scientists. Repressive actions usually incite hostility, which often leads to misunderstandings, dislike, and retaliation. Not all of the Soviet scientists will understand the reasons for our actions when we no longer go there and talk to them openly and vigorously, as many of us have done in the past. We may have done the cause of human rights in the U.S.S.R. more of a disservice than a service.

The only appropriate way for the scientific community to deal with any kind of problem, scientific or human, is through reason and discussion: one scientist speaks or writes to another or addresses a meeting of scientists, be it an official one or one organized by refuseniks. Collaborative experiments offer unique opportunities for reaching a mutual understanding, especially through personal contacts during the hours of relaxation. In times of political tensions, we should extend collaborations—not cut them back.

The real problem is the danger of nuclear war. If we cannot learn how to rationalize our differences, how to resolve them by argument rather than by threats and by cutting off relations, then we are really lost. The least we scientists can do is show the power of reasoning. Despite its frustrations, only by reason will both human rights and peace flourish on this small planet.—Victor F. Weisskopf, Department of Physics, Massachusetts Institute of Technology, Cambridge 02139, and Robert R. Wilson, Department of Physics, Columbia University, New York 10027