

letters

tremendous interest to the planetary and space-science community: Mariner Jupiter Uranus because it would explore the only remaining unvisited category of planet in the solar system (the physical domains in Uranus and Neptune are quite distinct from those of Jupiter and Saturn) as well as being the first *in situ* observatory in interstellar space with an appreciable communication rate and design lifetime; Pioneer Jupiter Orbiter because of the desire to understand the details of the rich and varied physical phenomena revealed by Pioneers 10 and 11 in the atmosphere and magnetosphere of Jupiter.

Reference

1. "Opportunities and Choices in Space Science, 1974," Space Science Board, National Research Council; N.A.S., Washington, D.C. (1974).

MICHAEL J. S. BELTON

Kitt Peak National Observatory
Tucson, Arizona

EDITOR'S COMMENT: Michael Belton is correct. Our report should have read "... recommends elimination of the Jupiter-Uranus program or delay of the Pioneer Jupiter Orbiter" instead of "and."

Jewish physicists on trial

We have been informed by our colleagues, Yuri Gurevich, of the plight of two Jewish Russian physicists who, because of their desire to emigrate to Israel, have not only lost their jobs but are now facing criminal prosecution. Their crime, that they spoke the truth as they saw it, in the Soviet Union can be construed as a criminal offense—"Slandering the State." The files of Grigory and Isai Goldstein (ages 41 and 34 respectively) have just been turned over to the state prosecutor to begin criminal proceedings. They are being threatened with jail sentences from three to seven years for refusing to give up their fight to leave the Soviet Union and immigrate to Israel.

Their travail began in November 1971, when they, Isai Goldstein, his wife Elizabeta and his brother Grigory applied for permission to emigrate. Permission was immediately denied them, and in December 1971 both brothers were dismissed from their positions. Isai was the Director of the Safety Department of the Tbilisi Branch of the Institute for Meteorology (Mendeleyev Institute), and Grigory was the Director of the Laboratory of the Institute of Cybernetics, also of the Tbilisi Branch of the Mendeleyev Institute for Meteorology. Between them they are the au-

thors of thirty scientific papers, and Grigory has six inventions to his credit. Both are PhD's in physics. Elizabeta Bikova, Isai's wife, was dismissed from the University of Tbilisi while studying for her PhD in physics.

In shock at the USSR's indifference and blatant acceptance of the Munich massacre of Israeli athletes, they renounced their Soviet citizenship in a letter to the Soviet president Nikolai Podgorny in October 1972 and criticized the USSR for supporting the terrorists. They again reaffirmed their request to emigrate to Israel.

Since that time they have been subject to frequent harassment by the KGB and have had their mail deliveries suspended, their telephone disconnected and their internal passports taken from them, so confining them to Tbilisi.

More recently, while public attention in many parts of the world was focussed on events in Southeast Asia, the Soviet authorities moved against the Goldstein brothers. On 24 March 1975 they were taken off a train by the KGB who accused them of defaming the USSR. On 5 April 1975 the KGB informed them that sufficient evidence had been collected to bring their case to court. Information that has leaked out from the USSR indicates that their trial is imminent and they face long jail sentences.

We ask our American colleagues to help publicize the Goldsteins' case and help bring to bear any pressure at their disposal to secure the release and emigration of the Goldsteins from the USSR.

Not only must scientific freedom and integrity be protected everywhere, but we must all act to increase human values and freedom whenever we are able. It is only by our individual and joint actions that we may obtain a better and safer world. Please help!

DAVID A. OWEN

AND SIX OTHER FACULTY MEMBERS

Ben Gurion University of The Negev
Beersheva, Israel

UNESCO and Israel

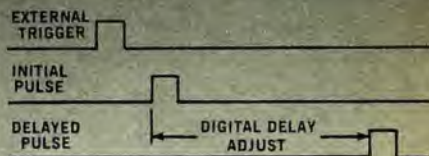
I was deeply disturbed by the letter of A. P. French and W. C. Kelly (May, page 13) concerning the UNESCO sponsorship of the international conference on physics education. French and Kelly mildly refer to "certain resolutions, discriminating against Israel," which were taken recently by UNESCO. They fail to mention that:

► UNESCO decided to expel Israel from all its regional bodies. These are the only bodies that are active on educational, scientific and cultural matters. The only activity in which Israel is still allowed to participate is in the meetings of the general UNESCO council in which these political resolutions are voted.

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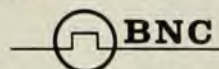
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letters

► Israel had been very active in the field of physics education. Under the leadership of the late Amos de Shalit, a major project was undertaken for reforming and improving physics education in Israel. This project has flourished into the present "Amos de Shalit Science Teaching Center" which, among its other activities, had close relations with many science teaching projects in various developing countries. The recent UNESCO resolution had terminated the UNESCO financial support that the Amos de Shalit Center enjoyed for many years. Israel is the only country in the world in which UNESCO refuses, as a matter of principle, to support the improvement of physics education of school children.

► Just a few days ago *The New York Times* reported that UNESCO has barred Israel from participating in a conference on education in the Mediterranean region. Israel is the only country with a Mediterranean shore excluded from this conference.

There is only one way in which the international scientific community can react to the UNESCO project of educational, scientific and cultural strangulation of Israel. As scientists we must refuse to associate ourselves in any way with UNESCO. We must refuse to accept UNESCO sponsorship, refrain from attending UNESCO conferences, and explain to the UNESCO politicians that freedom of education, science and culture must prevail in its fight with ugly political maneuvers. I call on French and Kelly to reject the UNESCO sponsorship of their conference, and I call on all physicists and educators to refuse to participate in the Edinburgh conference as long as its main sponsor is UNESCO.

I am personally convinced that no Israeli physicist will accept an invitation to the Edinburgh conference. It would be a sad moment for physics and education if physicists from all over the world, *except Israel*, will meet at a conference whose main sponsor is an organization that supports physics education all over the world *except Israel*.

HAIM HARARI
Weizmann Institute
Rehovot, Israel

THE CONFERENCE CHAIRMEN COMMENT: Both local and international bodies are active on educational, scientific and cultural matters and Israel is not excluded from these. The exclusion only applies to regional meetings.

UNESCO is *not* the main sponsor of the Edinburgh Conference. It is organized by IUPAP and supported by the Institute of Physics and the Royal Society. The direct costs of the conference

are to be met by contributions from the sponsoring bodies from industry and from the fees of participants. UNESCO has *not* contributed to the direct costs. It has provided funds that will enable 30 delegates from developing countries to travel to the UK and attend the meeting. UNESCO is also contributing towards costs of preparation and publication of working papers, which will be available throughout the world.

We expect to welcome to Edinburgh some 350 people from over 80 countries including Israeli participants.

A. P. FRENCH
International Chairman
C. A. TAYLOR
National Chairman
W. COCHRAN
Local Chairman
Edinburgh International Conference on
Physics Education

Support for basic physics

I should like to submit to my colleagues in the physics profession what I feel to be an urgently pressing problem, and I should like to propose a possible resolution. First: the problem is that we are so up-tight about the presently accepted ideas of physics, and we are so tightly organized about the business of physics, that many of us have literally lost sight of what sorts of problems are the primary concern of physics scholarship.

Are the problems dealing with social welfare, feeding the hungry masses, ecology, military preparedness, economic recession and inflation, fiscal problems of a university and so on problems of physics? As human beings, members of university faculties and responsible citizens, we must recognize these to be important *bona fide* problems. And to the extent that we are capable of solving these problems, we should get involved in them. But my question is: Are these problems of physics? I don't believe so.

And are the problems dealing with physics experimentation, from the point of view of representing the data, phenomenologically, *as an end in itself*, problems of physics? I don't believe so.

Then what are the real problems of physics? They are the problems that deal purely with a search for further *basic understanding* of the manifestations of the real world—in terms of abstract principles and concepts, from the elementary-particle domain to that of cosmology. This definition is not new! It has been held since ancient times!

If we learn to classify the data from the accelerating machines, including new and unexpected "tracks," in terms of more novel or economical categories of numbers, or other sorts of phenomenological descriptions, *and if we stop there*, we would not have learned anything new about the dynamical laws

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