letters

Unconventional conference

Each December, Stockholm brims with distinguished figures from the world over attending the Nobel award ceremonies. This year, many renowned scientists from the free world converged on Stockholm for another purpose: to participate in a distinctly unconventional scientific meeting designed to help counteract the state of siege that severely restricts the professional activities of Soviet refusenik scientists.

Along with Nobel laureate chemist Paul Flory, we were privileged to form the American contingent, which joined with distinguished colleagues from eight countries to participate in an International Conference on Collective Phenomena. Acting on a moral imperative to defend scientific freedom, participants from diverse fields presented their own work at sessions dedicated to particular refusenik colleagues. In addition, they read papers prepared by isolated Soviet colleagues under conditions of virtual ostracism from mainstream science.

While this conference was an effective demonstration of support for scientists refused their right to emigrate, their own attempts in the past to hold international scientific conferences in Moscow intended to maintain their scientific vitality met with considerable interference. Of the five previously scheduled conferences in Moscow, two were aborted by Soviet authorities and three were held under obvious surveillance and with limited Western attendance, owing to the denial of entry visas to many would-be participants. Most recently, police threats and house arrests accompanied by wholesale refusal of visas to foreign scientists forced cancellation of the Fifth International Conference on Collective Phenomena, scheduled for September 1981.

Witnessing fresh arrests, trials and imprisonments, and battered by ongoing threats of retaliation, leaders of the Moscow refusenik scientific community, though thirsting for interaction with foreign colleagues, have eschewed convening another conference in the foreseeable future. They have nonetheless enthusiastically applauded our initiative and expressed their gratitude to us for providing them with an international forum for presenting their work. In response, we are firm in our resolve to convene the conferences they are not free to hold.

In the spirit of free scientific exchange, plans have been laid for the next conference at Tel Aviv University on 31 May and 1 June. We can all speak for the voiceless by lending our support to these conferences, pending the restoration of scientific freedom to our repressed colleagues. For further details, contact the Committee of Concerned Scientists, 330 Seventh Avenue, Suite 608, New York, New York 10001 (telephone: (212) 695-2560). Your participation would be warmly welcomed.

LEO GOLDBERG
Kitt Peak National Observatory
ANDREW SESSLER
Lawrence Berkeley Laboratory
1/84

Contributions to MX debate

In February 1982 (page 55) there appears a news report, "Physicists contribute to the MX debate," that omits several serious contributions by numerous physicists. For example, Sidney Drell and Richard Garwin proposed the SUM system and worked tirelessly with members of Congress to elucidate the difficult technical issues that surround the MX basing mode. In March 1978, before any other public mention of the MX missile, four physicists (M. Callaham, Bernard T. Feld and Kosta Tsipis of MIT and Evangelos Hadjimichael of Fairfield University) published a technical report on "The MX missile: An arms control impact statement," which was the product of a study performed by physicists in the Program in Science and Technology for International Security of the physics department at MIT. In May 1978, I published an article in *Technology Review* on the MX: "The MX missile: A look beyond the obvious," and in November 1979, Feld and I published an article, "Land-based intercontinental ballistic missiles," in *Scientific American* that detailed the various MX bas-

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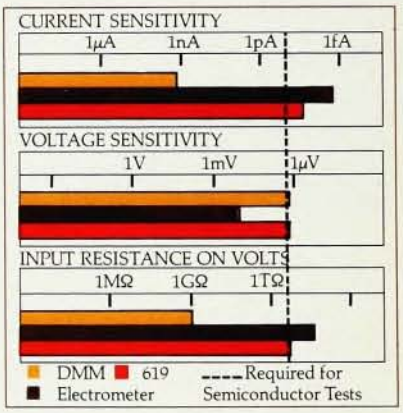

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ing options.

I believe these early reports and articles contributed substantially in the public debate on the MX, which, unlike the impression conveyed by the piece in PHYSICS TODAY, did not confine itself to classified documents (how can classified documents contribute to a public debate?) and reports to the Congress.

KOSTA TSIPIS
Massachusetts Institute of Technology
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2/82

PhD not dropped

A recent article ("Foreign Grad Students Raise Enrollment," June, page 62) erroneously lists the Colorado School of Mines among several universities having dropped their PhD programs in physics. To set the record straight, the Colorado School of Mines offers the MS in physics and PhD in applied physics and has no plans to drop either program. On the contrary, both programs are experiencing rapid growth. Prior to the approval of these degrees in 1968 and 1978, respectively, the school offered interdisciplinary MS and PhD degrees in physics combined with engineering. Nine such interdisciplinary degrees have been conferred, four at the doctoral level. Since approval of the new degrees, 24 MS degrees in physics and one PhD in applied physics have been conferred. Both progams are healthier now than at any time in their existence. Of the 20 graduate students enrolled last fall, five were in the PhD program. We expect to have six in the program this fall.

Research associated with these programs is concentrated in several areas having application to the energy and mineral resource fields. These include solid-state and materials science, solar energy, surface physics, nuclear physics, geophysics, particulates and lasers. The largest effort by far is in solid-state and materials science, some of which is in collaboration with the nearby Solar Energy Research Institute.

Apparently the error in the June article came about because I had not checked the box labeled "Doctor's" on the AIP form for the Annual Survey of Enrollments and Degrees.

FRANKLIN D. SCHOWENGERDT
Colorado School of Mines
Golden, Colorado
7/83

Erroneous siting

The December "Washington Reports," concerning the termination of the Brookhaven CBA (page 41), erroneously states that "Los Alamos has suggested SSC could be located in the picturesque caldera of an ancient volcano just a few miles southeast of the laboratory." This romantic notion is unfounded in fact and contradicts elementary geological considerations, as could have been found by a phone call to informed sources, or even a superficial glimpse at the appropriate topographical map. As an institution, Los Alamos National Laboratory has no intention of competing for administrative control of the SSC. Individual scientists at Los Alamos are understandably interested in participating in the development of this exciting facility.

The interplay of technical requirements with realities of site possibilities (very restricted for such a large facility) requires an early consideration of sites and their constraints on R&D issues. As a preliminary step in this direction, a collaborative (rather than competitive) working group has assembled the first edition of a site atlas (R. Slansky, "Site Atlas for the Superconducting Super Collider," Los Alamos Report LA-UR-83-3078), to facilitate an objective study of site-related issues. The first edition contains contributions from Arizona, Colorado, Illinois, New Mexico, Texas and Utah. We hope that subsequent editions will include all realistic possibilities in the US.

PETER CARRUTHERS
RICHARD SLANSKY
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1/84

Cost of astronomy in Chile

In reply to the news report that appeared in October (page 45) under the title "Observing in the high Andes with dollars, planes and bugs," we would like to point out the following:

The statement "while Cerro Tololo's current annual budget is $6.4 million, ESO spends nearly $4 for every $1 at the US observatory, according to NSF accounts" is unfortunately totally false. Actually, the total contribution to ESO in 1983 by its eight member countries was $16 million, of which $8 million are used for running the La Silla observatory, with the remainder serving to finance the European Center for Scientific Research, technological development, image processing and so on. With more than twice the number of telescopes as at Cerro Tololo—including a 3.6-m, a 2.2-m, three 1.5-m and three 1.0-m telescopes—the comparison of cost figures does not seem particularly unfavorable.

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