

chosen to make traveling less difficult.

If some of the APS members wish to use the allocation of the meeting sites as a club against political incompetency and police brutality, why was there not an outcry against holding the 1969 annual meeting in New York City? Are our memories so short that we can no longer conjure up the bloody incidents of last spring at Columbia University or examples of racial bigotry and violence condoned or handled ineffectively by Mayor John Lindsay this past fall? And unless there have been major improvements most recently, my personal recollections on the quality of urban government in Ithaca, N. Y., and Ann Arbor, Mich.—the stamping grounds of Jay Orear and Marc Ross, respectively—are not pleasurable. Perhaps to avoid lending tacit approval to imperfect municipal governments, all APS meetings should be held on Indian reservations or ocean liners.

The argument of Orear and Ross that past action by APS banning meetings in Southern cities represented a political policy is specious. This action was taken to ensure that all APS members receive proper respect, services and accommodations—things which are not always available in New York City. When it can be shown that APS members are likely to experience physical abuse or indignity at the hands of Mayor Richard Daley or the Chicago police while attending to their professional interests at a meeting, I shall be in the vanguard of those fleeing the city. Until then I trust that the majority of APS members will continue to show good judgment in exercising their concern for social and political justice outside the framework of APS.

HAROLD WEINSTOCK
Illinois Institute of Technology

To achieve greater relevance

The January meeting of the American Physical Society pointed up the growing recognition that physics (as well as many other intellectual disciplines) must somehow be more relevant to the society that nurtured it. Yet there is great division and some indifference among the membership about accepting the responsibility of judging the humanistic relevance of science. One group, small but concerned, wants the society at the very least to present the

technical facts on such issues as the antiballistic-missile system; they also believe that the APS Council, as well as the Governing Board of the American Institute of Physics, is "establishment." A larger, less vocal, group believes that its participation as scientist-citizens should be in organizations outside APS. A third group recommends strict neutrality (a concept held to be meaningless by the first group). The last two groups form the largest part of the membership. By virtue of its power the APS Council should also be mentioned as a separate group.

A progressive way out of this dilemma would be to synthesize these views. Such a synthesis, it seems to me, would embody the following elements:

1. The council should establish a division dealing with the interface between physics and society.
2. The council should be more representative of different types of members (small industry, large industry, graduate students, old-timers, et al).
3. Because a large part of the membership is apparently disinterested in some of the concerns of some scientists, individual members of groups 1 and 2 should pragmatically use the evenings of APS meetings to form non-APS groups of scientists who will "do their own things." The evening rump session at the New York meeting was in my opinion an excellent action that should continue.

These suggestions taken together should provide both a more relevant society that grows with the times and a more involved membership for those so inclined.

HERBERT N. HERSH
Zenith Radio Corp

Division on physics and society

At the January New York meeting of the American Physical Society we presented a petition (with approximately 600 signatures) to the APS Council asking for the formation of a Division on the Problems of Physics and Society. The petition is currently under consideration. Although the fact of the petition received some coverage in the scientific press, the text itself has not appeared, and we believe there is merit in bringing it to the attention of the society membership. The text follows:

"The purpose of the proposed division is to advance and diffuse a bet-

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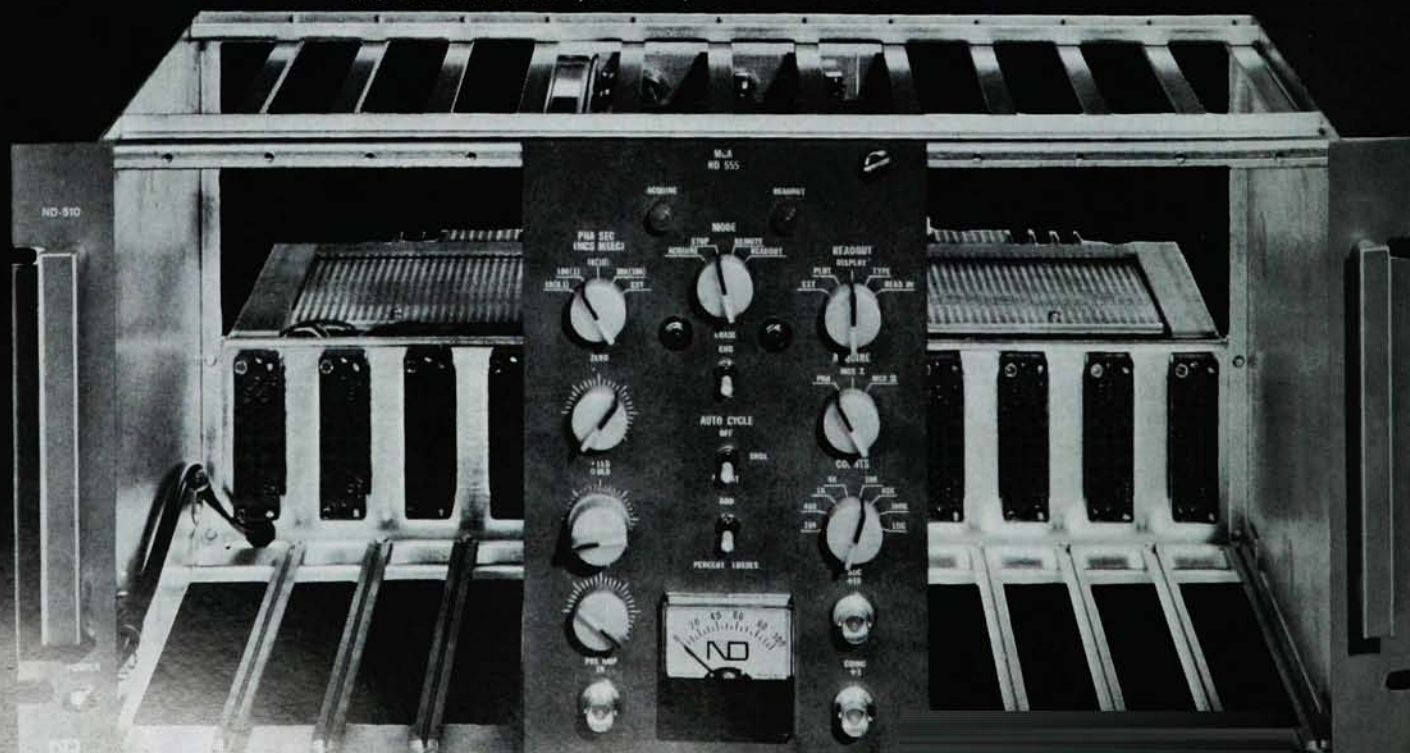
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ter understanding of the interrelations of physics and physicists with the environment and with society.

"The trend and pressures toward specialization in physics often keep physicists from seeing or considering the far-reaching connections between advances in their science and consequences for society as a whole. Although some have concerned themselves with special aspects, few have been able to share their insights widely and fewer still have considered the broad spectrum of problems.

"A major purpose of this division would be to provide a convenient and proper forum for the discussion of the problems of physics and society. This would expand the present APS practice of scheduling occasional talks dealing with these topics and lead to more regular sessions with wider membership participation. The primary emphasis would be to study, from a phenomenological viewpoint, the objective connection between the science and its societal and environmental consequences rather than the formulation of value judgments. Value judgments and public policy are the concern of all citizens and not merely of scientists alone. We believe that the forum furnished by this division would provide an objective background for independent judgment.

"Areas of discussion might include such topics as utilization of natural resources, the support of university research, the problems confronting the young scientists, basic research funding, aspects of space exploration, and arms deployment and control. All of these involve broad national questions which go far beyond the realm of science alone. Nevertheless within each of these are areas in which some can speak with authority and perspective while others can listen with profit. As responsible scientists and citizens we owe it to ourselves and society to do no less.

"The division would naturally solicit advice from the membership on appropriate topics and speakers. The division would cooperate with similar groups in other scientific societies."

As indicated in the text of the peti-

tion, the intent is to set up a forum where matters of interest to physicists may be regularly discussed. This implies no political commitment on the part of APS itself. Individual members, of course, always have the option to act on a political level through other appropriate organizations according to their views.

EMANUEL MAXWELL
BRIAN B. SCHWARTZ

Massachusetts Institute of Technology

Super-flux neutron generator

The need for more intense neutron sources has been described in your December PHYSICS TODAY in the excellent article by Robert M. Brugger. A paper by the same author among others at the September 1966 Seminar on Intense Neutron Sources (SINS) in Santa Fe, N. M., stimulated work at Los Alamos on ways and means for producing more intense neutron fluxes.

A concept that has evolved as a result of this work is known as "Kinetic Intense Neutron Generator (KING) Reactor." This concept promises to exceed the steady-state fluxes indicated on the Brugger charts in your recent article by an order of magnitude.

This device was briefly described at the 1968 American Nuclear Society meetings held in June in Toronto.¹ Another brief description is to appear in the May issue of the ANS journal *Nuclear Applications* under the title, "Applications of Low Critical Mass Studies to Reactor Design."

Neutron characteristics of this liquid-fuel moving-core concept will be tested in some static and dynamic experiments at Los Alamos. These experiments are now in the initial planning and procurement stage.

If these experiments prove that the KING reactor has satisfactory stability, the present flux limitation imposed by internal heat extraction can be removed.

Reference

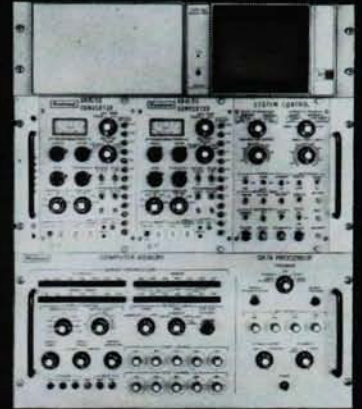
1. L. D. P. King, "Liquid Jet Super Flux Reactor," abstract in the Transactions of the American Nuclear Society 11, no. 1, 15 (1968); "Kinetic Intense Neutron Generator (KING) Reactor," LA-DC-9413, Los Alamos Scientific Laboratory (1968).

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