PHYSICS and SOCIETY

The NEWSLETTER of the FORUM on PHYSICS and SOCIETY

Published by the American Physical Society, 335 East 45 Street, New York, New York 10017

VOLUME 5, NUMBER 2

JUNE, 1976

ANNUAL BUSINESS MEETING OF THE FORUM ON PHYSICS AND SOCIETY

> Thomas P. Sheahen Forum Secretary-Treasurer National Bureau of Standards

These minutes are published for the benefit of many who could not come to the Washington Meeting. If, in reading through them, you find some item that you would have spoken about had you been present, please write down your thoughts and send them to Chairman Lee Grodzins at MIT.

The Forum began its annual business meeting at 11:45 a.m. on April 28 in the Palladian Room of the Shoreham hotel in Washington D.C. Attendance was very light. It was recommended that for future meetings, the agenda be published in the Bulletin of the APS, much like an abstract.

The first agenda items dealt with financing the Forum awards. Chairman Lee Grodzins announced that Roland Good is now chairman of a committee whose goal is to put the Forum awards on a firm financial basis. A number of ideas were considered at the meeting. Grodzins read a letter from APS President William Fowler offering several suggestions, one of which was to raise the Forum dues in order to finance the awards. After some discussion, the consensus was expressed by Martin Blume: "The worth of the awards are established by the quality of the recipients. The price is secondary. We should not price ourselves above other divisions of the APS just to fund the awards."

One of our awards is named the "Forum on Physics and Society" award. Discussion took place as to the advisability of naming that award after someone. The consensus was that consideration of a name change be put off for a couple of years until the financing is clarified.

CALL FOR NOMINATIONS FOR 1977 FORUM AWARDS

Nominations are requested for the 1977 Leo Szilard Award and the 1977 Forum on Physics and Society Award. Both these awards recognize outstanding contributions in promoting public understanding of significant technology policy issues. The Szilard Award specifically honors the actions of a physicist, while the Forum Award honors the writings of an individual, who need not be a physicist. The awards will be presented at a special session at the 1977 APS meeting in Washington. Please send nominations to the chairman of the Forum Awards Committee, Dr. Martin Perl, Stanford Linear Accelerator Center, Stanford, California, 94305.

FORUM AWARDS PRESENTED AT WASHINGTON

The 1976 Forum award recipients are physicists Richard L. Garwin of IBM and Herbert F. York of the University of California at San Diego. At a special evening session at the Washington APS meeting on April 27, Dr. Garwin received the Leo Szilard Award from past Forum Chairman I. Richard Lapidus. The citation accompanying the award concluded: "...Richard Garwin assisted the Congress and the public to make independent judgments of the ABM and the SST. He demonstrated how a scientist can influence the course of public policy through public channels."

On behalf of her colleague, Professor York, Dr. Gertrud Weiss Szilard accepted the Forum on Physics and Society Awards from

(continued on page 2)

BUSINESS MEETING (continued from page 1)

The possibility of increasing the size and frequency of the newsletter was considered. This led quickly to a discussion of perhaps increasing the dues in order to finance the newsletter. This in turn led to the question of how to expand membership. The hope was expressed that by next year, a "voluntary contribution to the Forum" box might be added to the dues bill. It was widely agreed that membership maintenance and expansion require continuing effort by individuals in the Forum.

The Forum is working in 1976 to improve international cooperation in physics. Grodzins reported on his meetings with Hendrik Casimir (of the European Physical Society) regarding exchange of scholars, joint meetings between the Forum and our European counterparts, and other topics. Lee also reported that he has written to everyone in the Forum whose interest in international cooperation is known to him. (Other readers not so contacted may infer that their interest is not yet known.) Bill Blanpied of the AAAS will be taking over leadership in many aspects of the international program of the Forum.

The dissemination of information to the Forum membership, especially through the newsletter, is of critical importance. Former chairman Rick Lapidus reminded the attendees that Martin Perl has carried the load of the newsletter single-handedly since the Forum began. Rick suggested that a 3-man editorial committee be formed to put the newsletter on a tight publication schedule by organizing material for it. (This issues represents a step in that direction.) Lapidus further stated that we should have some Forum sessions at regional meetings; in this way a different constituency would be reached, thus improving communications.

Finally, the question was raised "What mechanisms should we have to bring controversial subjects from the membership to the society?" It was emphasized that the Forum newsletter often publishes things that can't get published elsewhere. The idea of a new journal was briefly discussed, but obtaining space within Physics Today was regarded by many as a better strategy of communication. Rick Lapidus suggested advertising contributed sessions at meetings on specific topics, with papers refereed for relevance to that topic; unrelated papers would go to other sessions, as usual. Brian Schwartz objected that no form of censorship should ever be imposed on contributed papers. Mike Casper pointed out that the Forum did this before, at the February 1973 session on the energy crisis. The idea of having specific contributed-paper sessions was well supported. (see call for papers on back page of this newsletter.)

FORUM AWARDS (continued from page 1)

current Forum Chairman Lee Grodzins. York's citation concluded: "Through his work, Herbert York has, perhaps more than any other individual, advanced the possibility of public understanding of the dynamics of the strategic race."

> PHYSICS AND SOCIETY, the Newsletter of the Forum on Physics and Society of the American Physical Society is published for, and distributed free to, the members of the Forum. It. presents news of the Forum and of the American Physical Society; and provides a medium for Forum members to exchange ideas. PHYSICS AND SOCIETY also presents articles, letters, and columns on the scientific and economic health of the physics community; on the relations of physics and the physics community to government and to society, and on the social responsibilities of science. Space is preferentially give to those analyses and opinions which are less likely to be published in the established journals such as Physics Today and Science. Letters, short articles, suggestions for columns, and Forum news items should be sent to the Editor, Martin L. Perl, SLAC, Stanford, California, 94305.

PHYSICS AND SOCIETY is also distributed free to Physics Libraries upon request. Such requests and requests for other information should be sent to M.L. Perl.

PAGE 3

THE POLITICS OF UNEMPLOYMENT IN PHYSICS Robert J. Yaes, Memorial University of Newfoundland

Abstract

We argue that the unemployment problems of recent Ph.D.'s in physics must be viewed in a political context.

According to a recent report of the President's Biomedical Research Panel, the economic problems of physics are not unique to our discipline. According to the New York Times:¹

"The draft report said (that) the key problems were the severe shortage of job opportunities and research funds facing young men and women just entering careers in science. The report called these the central and dominant problems that must be faced if there is to be a future for biomedical research in this country... The plight of the next generation of biomedical scientists emerged as the dominant problem in all committee reports. It singled out the manpower situation for special comment because it viewed this matter as urgent."

What does, however, seem unique to our profession, is the "hear no evil, see no evil, speak no evil" attitude of its leading members towards these same problems. One would search the literature in vain for any report on the state of physics or any of its subfields that took a similar position. Unless one believes that these problems can be solved by pious expressions of hope that industry will provide the jobs that no longer exist in government or academia, it is clear that only a few isolated individuals in the physics community have even admitted that a serious problem exists, let alone proposed constructive solutions. Even the existence of an excess of industrial jobs, while solving the personal problems of unemployed physicists, would not halt the inevitable decline of academic basic research performed by a static ageing faculty.

As we noted elsewhere² the Bromley Report³ makes precisely those recommendations that will guarantee that the problem worsens. The central theme of the Bromley Report is the recommendation that priority in funding should be given to major facilities such as the (Fermi) National Accelerator Laboratory and the Very Large Array radio telescope system described as "high leverage situations" because "In the case of major facilities such a large fraction of the total funding is required to keep them in operation that even small changes in funding are reflected in large changes in the research component to which scientific productivity is more directly coupled". The unstated corollary to this proposition is that for every major facility supported, hundreds of small projects and individuals, sitting on the short end of the lever, must be sacrificed. This high leverage mentality totally ignores the need for a well balanced program. If the balance is not maintained between theory and experiment, between large and small projects, between national laboratories and university-based research, and between manpower and equipment, scientific productivity will drop to zero. The proposition that you can substitute expensive gadgets for skilled and dedicated manpower has failed miserably in Vietnam and will fail even more miserably in scientific research. You can not win the Indianapolis 500 by spending so much money developing a perfect engine that you have none left to buy the tires or hire a driver.

The conclusions of the ERDA High Energy Physics Advisory Panel (HEPAP) have been the same as those of the Bromley Report, only more so. The members of HEPAP have either been too busy deciding to built PEP instead of ISABELLE to notice that their own students can not find jobs or else, they have concluded, with infallible inductive logic, that since no members of HEPAP are out of work, there is no employment crisis in high energy physics.

ŀ.

UNEMPLOYMENT IN PHYSICS (continued from page 3)

This state of affairs can only be understood if we realize that decisions regarding the allocation of resources to scientific research are <u>political</u> decisions and that politics is an exercise in the use of power, not in the use of rationality and common sense. Thus, in the determination of which policies will be adopted, which projects will be funded and which facilities will be built, the political influence of their advocates and beneficiaries is much more important than their intrinsic scientific merit (whatever that means). We may thus be outraged, but we should not be surprised that the science funding policies eventually adopted by ERDA, NSF, NIH, etc., may be deterimental to the scientific enterprise itself and to most of its practitioners, but nevertheless, highly beneficial to the most influential members of the scientific community.

We are thus in complete agreement with the Bromley report's designation of major facilities as "high leverage situations" simply because the amount of <u>political</u> leverage that can and will be exerted on their behalf is directly proportional to their annual operating budgets. As in the case of military procurement, large projects are funded, not because they are particularly useful or desirable, but simply because they are large. Thus, the Universities Research Association Inc., whose sole purpose is to take money from ERDA with one hand and pass it on to FNAL with the other, spent \$392,852 to maintain its Washington D.C. offices⁴ in fiscal 1974. There is no way that an individual researcher who needs several thousand dollars to support his work, can compete with this kind of lobbying effort.

It is a fundamental law of politics that once you have given someone a government subsidy, you can never take it away, even if the conditions that prompted it no longer obtain, even if the funds involved are required to meet more pressing needs. Holders of such subsidies come to regard them as their personal property to which they have a devine right. Thus there has been no serious review of such "charity for the rich" programs as the payment of "summer salaries" and "overhead" most of which goes to the most affluent (and most politically influential) individuals and institutions. Thus, it is virtually impossible to shut down older "major facilities" when they become obsolete.

To summarize, one can state the basic reason for the unemployment problem in basic research in a single sentence. Unemployed Ph.D.'s have no political clout.

¹ New York Times, Feb. 1, 1975.

² Physics in Perspective, National Academy of Sciences, Washington, D.C. (1972).

⁵ R.J. Yaes, New Scientist, 63 462 (1974), Center Magazine, May/June, 1975, p.55.

Audited Combined Financial Statements, Universities Research Association Inc. and Fermi National Accelerator Laboratory, June 30, 1974 (URA Inc., Washington, D.C.).

> NEWS OF THE COUNCIL Earl Callen, American University

The APS net income for FY 1976 may be about \$210,000, or about \$80,000 more than budgeted. This is due to unexpectedly low committee expenses, and to savings effected in the printing of the Bulletin and the Physical Review. If the Forum comes forward with a worthy project it might be favorably received.

(continued on page 5)

Early APS dues bill returns for FY 77 suggest that about 87% of the membership are making voluntary contributions. Perhaps the 10% who return the bill early are not representative. But if they are, an 87% rate of voluntary giving is superb, isn't it! The membership must believe in the Congressional Fellowship program and our other activities. But we should have the Forum and other Divisions listed as checkoffs on the bill. That would increase Forum membership (now 2075). Grodzins will try to make this arrangement.

Elections: Herman Feshbach was elected by Council as Sol Buchshaum's replacement on the Executive Committee and as Vice-Chairman of POPA. Feshbach succeeds Philip Morse as chairman, in August. Ray Bowers, Cornell, was elected to the POPA board. Earl Callen, Roland Good and Jay Schiffer were elected to the Nominating Committee. Martin Blume and Brian Schwartz were appointed Council representatives on the Forum Executive Committee.

<u>UNESCO</u>: Past President C.S. Wu sent a letter to UNESCO, protesting discrimination by that body against Israel. Wu recommended setting up a committee to investigate persecutions of Soviet and other foreign physicists. Bernard Cooper and John Wheeler have agreed to serve on the new POPA subcommittee.

<u>Constitution</u>: Vera Kistiakowsky's committee on the APS Constitution and Bylaws has, after much debate decided not to recommend a change in Article II: "The object of the Society shall be the advancement and diffusion of the knowledge of physics." An important limitation is the tax-exempt status of the APS, which could be affected by a change in object. On the other hand, a less restrictive object clause could probably be accomodated by the tax exemption provision, and would give important legitimacy to POPA, Forum, Professional Concerns, Women's and Minority Rights and Manpower activities. Under Article II we are forever liable to the charge of ultra vires. If the Forum wants to urge a change, we must face the issue now.

<u>Public affairs:</u> The Council received proposed guidelines for public affairs activities of the Society. These will be voted upon at the October meeting of Council. Since these guidelines are directly applicable to Forum activities they are reprinted in full in this Newsletter (page 7). Comments are solicited.

<u>Manpower</u>: Council voted \$40,000 for studies by Milan Fiske, Lee Grodzins and the manpower panel.

Employment Guidelines: The guidelines, proposed by Esther Conwell's Professional Concerns Committee, set goals for professional employeremployee relations. Their initial major impact would be to underpin industrial relationships, but in the longer term they would benefit staff at universities, university-run laboratories and national laboratories as well. However, some members of Council have expressed a feeling against the adoption of any guidelines at all. These Councillors simply do not want the APS to get involved in employee-management relations. The matter will be discussed at the upcoming Council meeting in October, and will very likely go to a general membership referendum. Council cannot be expected to embark on this new venture unless the membership expresses a strong interest in its own well-being. APS PANEL ON PHYSICS AND PUBLIC AFFAIRS (POPA)

Benjamin Cooper, U.S. Senate Committee on Interior and Insular Affairs

The APS Panel on Physics and Public Affairs met in Washington on April 27 to consider a number of issues related to the role of the APS and the APS Council in public affairs. The

present POPA memebership is listed below.

NAME

AFFILIATION

Fay Ajzenberg-Selove			University of Pennsylvania
Benjamin S. Cooper			U.S. Senate, Committee on
			Interior and Insular Affairs
Paul Craig			University of California
Peter Eisenberger			Bell Laboratories
Raymond Emrich			Lehigh University
Milan Fiske			General Electric Company
Ronald Geballe*			University of Washington
Edward Gerjuoy			University of Pittsburg
Robert H. March			University of Wisconsin
Thomas H. Moss			IBM
Robert Parr			University of North Carolina
Arthur Rosenfeld			Lawrence Berkeley Lab
Rolf Sinclair			NSF
Norman Ramsey*			Harvard
Richard Werthamer*			New York State Energy Research
			and Development Authority
Herman Feshbach*			MIT
Philip Morse**			MIT
Thomas L. Neff			MIT
	*	steering o	committee member
	**	chairman	

At the April 27th meeting POPA topics for discussion included receipt of progress reports on APS-sponsored studies of technical issues related to important public issues:

(a) Nuclear Fuel Cycle and Waste Management, headed by L.C. Hebel of Xerox Corporation. The study plan, the roster of participants and funding arrangements are substantially complete;

(b) Physics Manpower: Projections, and their implications for training in Physics, being organized by M.D. Fiske of General Electric. Planning is still underway;

(c) Breeder Reactor Safety, being organized by Richard Werthamer. This study is still in the planning stage; and

(d) Atmospheric Pollution. A POPA subcommittee headed by Frederich Kaufman of the University of Pittsburgh is to develop an outline for several studies in this area.

(continued on page 8)

At the coming meeting of the APS Council the guidelines below will be discussed (see (News of Council, this issue). These guidelines are sufficiently important to merit printing in full. We solicit your opinion. What should the Forum's position be? Write to Forum

GUIDELINES FOR PUBLIC AFFAIRS ACTIVITIES OF THE AMERICAN PHYSICAL SOCIETY

Councillor Earl Callen, Physics Department, American University, Washington, D.C. 20016.

The involvements of the American Physical Society in public affairs has grown to such an extent that it has been found desirable to increase the resources available within the Society to carry out such activities responsibly and effectively. In turn the increase in involvement makes it desirable to establish some guidelines under which the new mechanism shall operate. There is an extremely wide spectrum of public affairs activities of the Society and therefore care must be taken that such guidelines are not unduly constraining to prevent the Society from responding to exigencies of a varying nature. The public affairs activities of the Society might range from the rendering of informal advice to governmental bodies, on the one extreme, to the execution of formal analyses and studies, on the other. The question of establishment of an official position of the Society on critical issues deserves special attention: whenever the Society "takes a position" there must be clear understanding of how such a position was generated and what level of endorsement within the Society it carries.

<u>Council and Officers</u> -- The American Physical Society may initiate, or be requested to take action in the service of the general public. This service may range all the way from the informal provision of technical information or advice to the organization of a group for the study of some problem of public interest in which physics plays an important role or to the presentation of formal testimony to a legislative body. Members or officers of the Society have the right, as members of society, to take part in these actions, but they also have the duty to make clear in what capacity they are acting. In contacts with the press or with public bodies they may indicate they are members or officers of the Society but, unless they are specifically authorized otherwise by the Council of the Society, they must make clear that they are speaking as an individual, not on behalf of the Society or its Council.

The Council, being the legal authority of the APS, has the sole right to authorize an officer or member of the Society to speak on its behalf. Even when it has so authorized, by vote at a Council meeting or by mail ballot, the individual so authorized should make clear that he or she speaks just for the Council of the Society. Only when approved by a mail ballot of the Society members can the statement be made that he or she presents the opinion of the majority of the Society.

Although the President of the Society is the usual spokesman of the Society, he or she must also abide by these general rules. The level of internal endorsement of his or her statement must be clearly specified and should be acquired on as comprehensive a level as is appropriate and feasible. If the President is unable to make the public statement or present the testimony, the Vice President becomes the President's deputy; delegation to any other person requires the approval of the APS Council.

<u>POPA</u> -- The Panel on Public Affairs (POPA) has been set up by the Society to assist the Officers and Council of the Society, and its Executive Committee, in conducting public affairs activites. POPA shall discuss, within itself, questions regarding such activities whether they have been suggested internally in the Panel, by requests from Society officers, by members or by queries, formal or informal, from public bodies or executives. However, communication to the public of its discussions and decisions can only be authorized by vote of the

(continued on page 9)

POPA (continuted from page 6)

Guidelines for formal participation by the APS in public affairs (which would constrain and delineate the roles of officers of the APS, the Council and POPA) were forwarded to the APS Council. A related story in this issues details these guidelines (page 7).

The Panel discussed a draft press statement to be forwarded to APS President Fowler designed to clarify and reiterate the conclusions which accompanied the APS-sponsored 1975 report on light-water reactors safety. Both proponents and opponents of nuclear power have quoted selectively from the report to bolster their respective positions on nuclear power, and the Panel felt that each side needed to be reminded of what the APS study actually said.

It was agreed that a porposal be developed for a short interrogatory letter to be sent to candidates for the Presidency aimed at clarifying their positions on issues of interest to the scientific community. Any such communication would have to be approved by the APS Council and signed by the president of the Society.

SCIENCE COURT

Earl Callen, American University Mike Casper, Carleton College

The idea of a Science Court -- an adversary proceedings before a panel of judges when there are mutually contradictory claims in matters of social import -- has been championed by Arthur Kantrowitz⁽¹⁾ of the Avco Everett Research Laboratory and reportedly enthusiastically backed by Vice President Nelson Rockefeller.⁽²⁾ A group headed by Simon Ramo advising the President on science policy has organized a subcommittee with Kantrowitz and others to set up a Science Court.⁽³⁾

At the Washington APS meeting the Forum organized a session on the Science Court. Kantrowitz presented the case pro, followed by arguments anti by Harold Green of George Washington University Law Center, and a panel discussion by Jeremy Stone, Eugene Skolnikoff, Lawrence Kushner and Barry Casper.

Kantrowitz argues that there are some important questions of pure scientific fact, devoid of value judgement, which are essential components of controversial technology policy issues. These questions can best be reslved by confrontation of expert adversaries, before a panel of disinterested judges. As examples of appropriate problems Kantrowitz cites atmospheric ozone depletion by the SST, feasibility of clandestine, small scale laser isotope enrichment by subnational groups, and relative carcinogenicity of red dye #2 and red dye #40. At the Forum session Kantrowitz suggested that when a regulatory agency, for example, has such a value-free PAGE 9

GUIDELINES (continued from page 7)

Panel, or, in more important cases as hereinafter noted, by vote of the APS Council.

Though each member of the Panel has the right of individual action, the fact that the Panel is concerned with public affairs makes it imperative that the member make very clear that his individual actions have no more backing than has been authorized by vote of the Panel or by the APS Council.

In general, it is expected that questions concerning public affairs activities will be referred to POPA. Requests for POPA assistance, from the Officers or Council or any member of the Society should come to the Panel in writing and should be acted on by POPA as expeditiously as possible. The usual result of Panel deliberations will be recommendations to the President or the Council of the APS. If the recommendation is not followed by the Officers or Council, the Panel should be told in writing the reasons for the nonaction, so that a documented record of precendents and further guidelines can be built up. Conversely, if POPA decides not to act on a request from Council or Officers, it should present in writing its reasons for nonaction. If then the APS Council votes to continue its proposed action, it may utilize such other means it deems appropriate.

The Chairman of POPA is the Panel's spokesman, reporting to the APS Officers and Council, and attending Council and Executive Committee meetings as Council Advisor. The POPA Chairman consults, depending on time limitations, either by telephone, mail or meeting with the Panel or with its elected subgroup, the POPA Steering Committee, which meets more frequently than the full Panel. Assisting the Chairman is the staff Director, selected by the Chairman and approved by the APS Council, who is responsible for the daily coordination of Panel activities.

Types of Activity -- An important duty of the POPA Chairman, guided by the Panel members, is to decide on the degree of importance of each question under consideration by the Society and on the nature of the action to be taken in responding. This action may be by a simple referral to other sources of information or assistance; by informal assistance by a specified member of members of the Panel; by a written analysis prepared by individuals or groups requested to do so, to be presented to the requestor either without endorsement by POPA or with a recommendation for Council endorsement, as the importance of the question is judged; by a sponsored Study (guidelines for the conduct os such Studies have already been approvied by Council and have been published in the APS Bulletin, September, 1975); or by a position or policy statement to Congress or to a governmental agency, to be made by the President of APS, after endorsement at appropriate level (by POPA or by APS Council or by the Society as a whole). This choice of the Chairman of POPA, between these various levels of action, after consultation with POPA members, to the degree allowed by the constraints of time, is to be included in the formal recommendation in writing made by the Chairman of POPA to the APS President or Council. In case of disagreement as to this recommendation of level, the APS Council, being the legal authority of the Society, has the final say.

<u>Recapitulation</u> -- POPA is a standing committee intended to advise the Council and the Officers of APS; the President of the APS is the official spokesman for the Society. Therefore official communications external to the Society on issues with substantial policy content are issues only by the President, endorsed by the Executive Committee or Council as is feasible or appropriate. POPA action is advisory, made in writing by the Chairman of POPA. Any direct communications by POPA with governmental bodies are necessarily of an informal character. This distinction must be made clear in all such contacts, and care should be taken that such contacts do not prejudice future official interactions between the Society and other bodies. These Guidelines, together with the Guidelines for APS Studies published in the September, 1975 Bulletin, shall guide the public affairs activities of the Society until they are cancelled or amended by action of the APS Council. SCIENCE COURT (continued from page 8)

problems surrounded by scientific controversy, contracts be let to qualified case managers on the two sides of the issues. It would be the duty of the case managers to resolve which facts and propositions are stipulated and which are in controversy, to present arguments, to rebut arguments by the other side, to respond to questions raises by the judges, and in general to provides the tribunal with the materials needed so that the court can make an informed and unbiased finding of fact and, if need be, can suggest whatever further experiments are required to resolve the issues.

Speaking against the Science Court, Green argued that in a court of law findings of fact and conclusions of law are inextricably co-mingled, each shaping the other, and both shaped by each of the adversaries to substantiate a finding for that rule of law favorable to its side of a controversy. It is a real controversy, with each side holding a serious interest in its outcome. Furthermore, Green points out, the adversary process is not designed to establish objective fact, but to decide which side shall prevail. In an adversary proceedings one side or the other triumphs. While clear, one-sided resolution is suitable to a court of law, Green argues that truth, the goal of the Science Court, may lie somewhere in between or off in a different direction altogether.

Questions that concerned the panel and the audience at the Forum session were the exclusivity of the proceedings, both as to the case managers and the selection of judges, the impossibility of segregating questions of fact (which facts?) and of values, and the stifling of public debate by pronouncements of authority.

Meanwhile the Science Court is going forward. Present plans of the subgroup of the Ramo committee are perhaps to seek NSF funding to test the concept, possibly with the Environmental Protection Agency, or to perform an experiment in cooperation with the Consumer Product Safety Commission of the Commerce Department.

- ¹ Arthur A. Kantrowitz, American Scientist, 505-509 Sept.-Oct. 1975.
- ² Science 191, 448 (February 1976).
- ³ "Plan for a Science Court on US Issues Pressed," New York Times, Friday January 16, p. 26.
- * Include name, affiliation, mailing address and telephone number
- ** Capsule description should:
 - (a) run to no more than 250 words;
 - (b) provide a statement of purpose, the background and the rationale for the session; and
 - (c) indicate briefly the nature and relevance of the background of each speaker chosen. Please supply abstracts where possible.

ARRANGEMENTS FOR FORUM SESSIONS OF INVITED PAPERS

The Forum on Physics and Society has scheduled the following general interest and contributed paper sessions at APS meetings in 1977;

MEETING	SESSIONS
Chicago (February, 1977)	2 general interest l contributed papers
San Diego (March, 1977)	2 general interest
Washington (April, 1977)	3 general interest 1 contributed papers
Miami (November, 1977)	2 general interest

The Forum Executive Committee would like to invite the suggestions of members with regard to these general interest (invited paper) sessions and also issue a call for the submission to the Executive Committee of proposals to arrange such sessions. Arrangers and their programs for the general interest sessions will be selected by the Executive Committee on the recommendation of the Forum Vice Chairman. The arrangers of the programs chosen for the meetings will be primarily responsible for the organization, logistics and management of their session.

Forum members wishing to organize such a session of invited papers should submit an application by September 1976 in the format indicated below to: Dr. Benjamin S. Cooper, Vice-Chairman, Forum on Physics and Society, c/o Senate Interior Committee, 3106 Dirksen Senate Office Bldg., Washington, D.C. 20510.

	m on Physics an for a Session (
APS Meeting:		 ······································	<u></u>		
Date Desired			;;	am	pm
Session Title		 			
Arranger(s)*					
Moderator*					
Speakers* and Tentative Title	es: l	2			•
3	4.	5·			
Capsule Description of Sessio	on**				

CALL FOR CONTRIBUTED PAPERS FOR SESSIONS SPONSORED BY THE FORUM

The Executive Committee of the Forum on Physics and Society has notified the APS of its intention to hold one or more sessions of contributed papers at both the Chicago meeting and the Washington meeting in 1977. It is hoped that the response to this call for such papers will provide an accurate indication of the interest in the Society in using sessions at APS meetings as a mechanism to discuss science and society issues and other questions within the purview of the Forum.

It is the present plan of the Forum executive committee to hold a session of contributed papers on issues related to the energy problem at the February, 1977 meeting in Chicago, and a session at the April, 1977 Washington meeting organized around themes related to problems of physicists as physicists: job scarc r imbalances, funding difficulties, organizational problems in colleges, universit. Laboratories, etc.

Suggestions concerning the viability, methodology and organization of these sessions and copies of the abstracts of all papers submitted to the APS which may fall within such sessions should be sent to

> Dr. Benjamin S. Cooper Vice-Chairman, Forum on Physics and Society c/o Senate Interior Committee 3106 Dirksen Senate Office Building Washington, D.C. 20510

2	S AND SOCIETY sletter of the ysics and Society of the Fhysical Society	June, 1976	The American Physical Society 335 East 45th Street New York, New York 10017	Non-Profit Org. U. S. POSTAGE PAID New York, N. Y. Permit No. 2937
	PHYSICS AND So The Newsletter Forum on Physics an of the American Physica	Vol. 5, No. 2	ARTHUR Z RUSEN PHYSICS DEPARTMENT CAL POLY STATE UNIVERSITY SAN LUIS OBISPO CA 93407	·