

# PHYSICS and SOCIETY

## The NEWSLETTER of the FORUM on PHYSICS and SOCIETY

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### 1977 FORUM ON PHYSICS AND SOCIETY AWARD CITATION

TO

JOEL PRIMACK AND FRANK VON HIPPEL

(Awarded on April 26, 1977 at the Washington Meeting of the APS.)

The Forum on Physics and Society Award recognizes outstanding achievement in promoting public understanding of significant issues relating physics to society. This year we honor two young physicists, Dr. Joel Primack of the University of California at Santa Cruz and Dr. Frank von Hippel of Princeton University. Through their writings, most notably their remarkable book, *ADVICE AND DISSENT: SCIENTISTS IN THE PUBLIC ARENA*, and through their personal actions, these two men have effectively promoted the concept of "public interest science".

Both elementary particle theorists of exceptional promise, they met at Stanford University while Primack was a graduate student and von Hippel a post-doctoral fellow. In 1969, they joined in leading a workshop for Stanford students on "Scientists and Decision-Making in Washington," which produced the report *THE POLITICS OF TECHNOLOGY*. This was the beginning of a highly successful collaboration, often by long-distance telephone, that culminated in their book in 1974.

*ADVICE AND DISSENT: SCIENTISTS IN THE POLITICAL ARENA* is surely the most important and influential contribution to the literature of scientists and public policy of recent times. It describes how scientists have influenced the course of technology policy on several significant issues, including the ABM, the SST, DDT, and nuclear power. These case studies all have a common thread. In the words of Primack and von Hippel:

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### EDITORIAL --

#### "TAKING CARE OF OUR YOUNG"

MARTIN L. PERL

As this issue of *PHYSICS AND SOCIETY* is being distributed the Penn State Conference on Changing Career Opportunities for Physicists is taking place. This Conference will concentrate on careers for physicists in government and industry; particularly in the newer areas of energy research, environmental problems, technological public policy, and interdisciplinary fields. A thorough discussion of such topics is certainly needed, and the Conference is doing just that. However, there is a deeper question which cannot be dealt with in such a specialized Conference; and indeed can only be dealt with by the entire American physics community. That question is: What is the responsibility of the physics community to the young physicist? Is our responsibility simply to educate young physicists; or do we also have a responsibility to make sure that they can use that physics education in their careers?

This question, which is an old one, came back to me with a jolt when a young theorist friend told me he was leaving physics to go to medical school. He had held several post-docs but could not find a permanent job in physics. He is an anti-establishment fellow and his politics are left-wing. I asked him how he could go into medicine when the medical community was so establishment. He answered "At least they take care of their young". What he meant was that once given an education in medicine you are assured a career in medicine. You may be in private practice, or do medical research, or teach in medical school, or work for a drug company. Yet whatever you do you will be able to earn a decent living (often a more than decent living) using your medical education.

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## PHYSICS AND SOCIETY

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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 given 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 item should be sent to the Editor.

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

## TAKING CARE OF OUR YOUNG (continued from page 1)

Of course we all know how the medical community does this -- they limit the number of medical students. Obviously the physics community could do the same thing -- limit the number of physics graduate students. One method of doing this would use a system of accreditation of physics department based partially on the physics graduate student/faculty ratio. This method proposed by W. Silvert (Physics Today, Dec. 1975) would also improve the quality of physics graduate education. But all such proposals are either ignored or denounced by much of the physics community. There are three classes of argument against such proposals.

First there is a one-article, physics education bill of rights: everyone has a right to physics education thru the doctorate. Second is an argument which is rarely put forth publicly: if the number of physics graduate students is limited, then physics faculties will decrease in size. Third there is the argument: the country needs many more physicists to work on energy, environmental problems and so forth; although at present the country is not willing to support them or their research. The logical content of this third argument is "If wishes were horses, beggars would ride". I will say no more about it, but will take up the first two serious arguments in reverse order.

As was pointed out by Grodzins and others at the first Penn State Conference in 1974 (Newsletter of the Forum on Physics and Society, Vol. 4, No. 1 (1975)) the total size of physics faculties in the United States has not increased since 1968. And no increase is foreseen for the next 10 to 20 years. (The 1977 Penn State Conference is considering these projections in great detail.) Therefore, the second argument is correct in principle. Given the general economic pressure on higher education to limit costs, universities will certainly be tempted to reduce the size of physics faculties if these faculties limit their number of graduate students. However I believe for two reasons that in practice there will be little or no decrease in physics faculties if physics graduate student enrollments are limited. First, the total number of undergraduates in all fields is still increasing; therefore the need for teaching service physics and cultural physics courses is increasing. Second, only a small decrease is required in the number of physics graduate students in order to balance the rate of education of new physics Ph.D.s with the rate of employment in physics. At the 1974 Penn State Conference it was estimated that about 700 to 800 physics career opportunities open up in the United States each year. This includes the replacement of physicists who retire, die, or voluntarily leave physics. The A.I.P. Physics Manpower Report R-151.12 projects that 930 physics Ph.D.s will be granted per year in the United States in the 1978 to 1980 period. Therefore, only a 20% reduction is required in the number of physics graduate students. (The 1977 Penn State Conference will provide better statistics.) This 20% reduction although small, is crucial. It changes the employment situation from one in which Ph.D. physicists seriously interested in physics are forced to leave physics, to a situation in which every serious physics Ph.D. student can look forward to a career in physics. The psychological environment for the physics graduate student will be immensely better. We can expect better students to enter physics, and happier students to learn more and be more creative.

The most difficult argument against limiting physics graduate student enrollment is the first one I gave. It is an ethical or moral argument that everyone who wants a physics education (and has the ability) has the right to get one. The only way to counter an ethical argument is to present another one. There is another one: the general principle that a community has the right to look after the health and well-being of its members even if they don't want to be looked after. Wage and hour laws prevent a factory worker from destroying his health by overwork even if he wants to overwork. Zoning ordinances require a person to keep a sanitary residence even if he wants to live in filth. And closest to the subject under discussion, immigration laws limit entrance to this country even though it would be wonderful if we could take in the poor of the world as we did before 1920. The well-being of the members of the physics community and of the physics community as a whole require that we control immigration into physics.

PRIMACK AND VON HIPPEL (continued from page 1)

"...We were shocked to find that in every case much of the most important technical advice had been ignored -- or worse, publicly misrepresented -- by government officials. We were also surprised to find that the final outcome of these controversies was in each case much more influenced by the publicly available information and the public activities of scientists than by the confidential advice given to government officials."

In this way the book carries a simple but powerful message to scientists who would seek to affect public policy. Primack and von Hippel state this message explicitly in their preface:

"Writing advisory reports for government agencies is important, but not enough. You must be willing to carry your message to the public -- by allying yourself with concerned citizens groups if necessary and using political and legal pressure to compel government and industry to behave responsibly."

This they term public interest science.

The book has already had a direct and measurable impact. It has led to a million-dollar Federal program to fund scientists to do public interest science. NSF's new "Science for Citizens" program can be traced directly to the writings of Primack and von Hippel and to their persuasive testimony on its behalf before the Congress.

At the same time Primack and von Hippel have each personally been active participants in the public policy process. The thrust of their contributions is just what they have prescribed for other scientists -- to promote public understanding of policy options. For example, Primack was instrumental in prompting the American Physical Society to undertake its 1974 summer studies of nuclear reactor safety and efficient energy use; he has also worked with the Sierra Club in developing its position on nuclear power. Von Hippel was a key participant in the APS reactor safety study; more recently he has assisted the House Interior Committee in organizing its public hearings on nuclear power issues.

These two physicists have demonstrated how scientists can become involved in a constructive way in the formation of public policy. By their writing and by their example, Joel Primack and Frank von Hippel have shown what public interest science means. For this we honor them here tonight.

## NEW HAZARDS IN BIOLOGICAL RESEARCH -- RECOMBINANT DNA

A SUMMARY OF THE FORUM SYMPOSIUM AT  
THE WASHINGTON MEETING

(Prepared by I.R. Lapidus)

- I. Richard Lapidus, Stevens Institute of Technology, presiding  
Roy Curtiss III, University of Alabama, Birmingham  
 "The Biological Containment of Recombinant DNA"  
Jane K. Setlow, Brookhaven National Laboratory  
 "Is Recombinant DNA Research Dangerous?"  
Kostin Bergman, Northeastern University  
 "Recombinant DNA and Public Decision Making"  
George Wald, Harvard University  
 "Recombinant DNA: Promise and Threat"

The four panelists presented opposite sides in the recombinant DNA Controversy. Dr. Curtiss, an early supporter of limits to this research, now supports its continuation. He is an important researcher in this field and has recently developed a "self-destructing *Echerichia Coli* which he believes can safely be used for these studies. Dr. Curtiss was a member of the NIH Committee which developed guidelines for recombinant DNA research.

Dr. Setlow, the current president of the Biological Society, also was a member of the NIH guidelines Committee. She also agreed that recombinant DNA research is safe and does not present hazards which are any greater than those encountered in more conventional biological research.

Dr. Bergman, a member of Science for the People, argued that it is not possible to anticipate all the hazards and that the technical workers and the public as well as scientists should be involved in the decisions to carry out this research.

Dr. Wald, a Nobel Laureate in Physiology and Medicine, also argued against the continuation of this research until the potential hazards involved in tampering with billions of years of evolution were more fully assessed.

The sessions were attended by approximately 250 persons. The 20-minute presentations were followed by a number of questions from the audience and an opportunity for the participants to answer points made by other speakers.

A news conference for the participants was held the following morning. The strong interest of the reporters present was in part due to pending legislation in Congress to monitor and/or control this type of research.

EDITOR'S NOTE: PHYSICS AND SOCIETY plans to continue to publish summaries of Forum Sessions like the one presented here. We need volunteers to summarize these sessions.

REPORT FROM THE FORUM COUNCILLOR. THE APS  
COUNCIL MEETING AT WASHINGTON, APRIL, 1977

Earl Callen  
American University

At the April Meeting of the APS Council, President George Pake reported he had sent a letter to President Carter and Vice-President Mondale, offering the services of POPA for appropriate studies. Pake also reported he had testified on behalf of the APS before the Senate Committee on Government Affairs (This was the Ervin Committee. It is now chaired by Senator Ribicoff.) on reorganization of the on-coming Department of Energy. Pake urged a separate Assistant Secretary for Research, so that research does not get squished under the pressure for development. The present plan is for there to be two Under Secretaries and about eight Assistant Secretaries, with research under the Assistant Secretary for Technology. Senator Jackson, Congressman Flowers and other Congressmen with important energy committees are said to favor a single joint secretariat for research, development and demonstration. James Schlesinger is slated to head the new Department of Energy.

The APS has written to the USSR Academy of Sciences on behalf of the Moscow Seminar, which is not receiving journals sent by the APS. In response, A.P. Alexandrov, President of the Soviet Academy has cabled that "Mark Azbel, mentioned in your cable and letter, does not work in the Academy of Sciences of the USSR. I have no information of the so-called Seminar of Mark Azbel."

The APS, National Academy of Sciences, and American Association for the Advancement of Sciences, are submitting information of violations of human rights of scientists in Argentina, to the Commission on Human Rights of the Organization of American States. There are tentative plans for an OAS Conference on human rights. (Scientific organizations should be pressing for on-site investigation of alleged violations by a neutral international committee of scientists and jurists. There is support for such initiatives in the Carter administration.)

The Council voted (overwhelmingly, but not unanimously -- Callen opposed) to accept the POPA Report on Nuclear Fuel Cycles and Waste Management.

REPORT FROM THE FORUM COUNCILLOR: THE APS COUNCIL MEETING  
AT CHICAGO, FEBRUARY, 1977

Earl Callen  
American University

Physical Reviews and Physical Review Letters sent by the APS to the Moscow Seminar, care of Mark Azbel are being returned marked "Address Unknown." The Society is making efforts to have them delivered through various alterations in addressee, and by appeals to US and Soviet authorities.

Outgoing APS President William Fowler wrote to Soviet Academy President A.P. Alexandrov on behalf of Mark Azbel and the refusniks. No response has been received. The APS Subcommittee on International Freedom of Scientists has urged Fowler to visit the USSR in

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## REPORT FROM THE FORUM COUNCILLOR (continued from page 6)

person, speak to the academicians about the plight of the refusniks, and attend the Moscow Seminar. Fowler declined going because in his opinion he could not visit both of these groups on the same trip without compromising the positions of the academicians and damaging our relations with them.

Fowler also wrote to Pres. Jorge Videla of Argentina on behalf of 5 Argentine physicists jailed after the April putsch. No response has been received. (Editor's note: One of these, Antonio Missetich, is now feared to have been murdered in prison. The Junta first wrote that Missetich was held prisoner, but now claims that report to have been in error. It is hoped that an official APS emissary can visit Argentina to meet with prison officials and with Dr. Missetich if that is any longer possible.)

The Affirmation of Freedom of Inquiry and Expression (National Academy of Sciences statement), printed in the Bulletin and distributed with the ballot, has been signed by 5800 APS members. The Academy has been notified of this massive endorsement.

Of the 7 APS Congressional Fellows who have so far completed their tours, 5 have remained with the Congress (one has returned to his former job, and one is now chairman of the New York State Energy Authority).

A new program of Industrial Fellowships to place 2 post doc. physicists in companies which have not employed physicists in significant numbers in the past, was authorized. (Salary - \$18,000 plus \$2,000 travel expenses - half from APS, half from industry.)

Are you a Fellow of the American Physical Society? You are a member of an endangered species. A committee under George Vineyard concluded that the distinction between Fellows and Members no longer has much meaning. Dues are the same. Standards are ill-defined and selection is arbitrary, varying from Division to Division and from time to time. Fellowship often means nothing more than that the recipient pushed to be made a Fellow, or his company campaigned for him. Vineyard's committee recommended that Fellowship be dropped, which will require a Constitutional Amendment, (2/3 majority) and Council resolved that an Amendment be prepared and submitted to the membership.

Off dead center on professional concerns, thanks to Norman Ramsey, the Professional Concerns Committee and you. Remember the Guidelines on Professional Employment -- and how the APS Executive Committee put out a contract on them? Well, things are looking up, since your letters encouraged sweet reason to prevail. A Council negotiating team under Norman Ramsey met with Esther Conwell, Brian Schwartz, and David Wetstone, and a way was found out of the impasse. Now we are aiming toward a Member Assistance Program to meet with, counsel and aid physicists having employment problems such as constraints on free speech, limitations on publications and on the dissemination of research findings, and job termination (not the problem of finding a job -- other APS committees are supposed to be dealing with that.) Thanks to Ramsey's shuttle diplomacy, Council finally voted to allow the Professional Concerns Committee to collect information (not to counsel -- only to investigate the need in this first phase). That leaves the Guidelines in limbo, but the ultimate purpose of guidelines is to aid physicists in employer -- employee relations anyway. If the Member Assistance Program proves worthwhile, we'll be back with the Guidelines too.

If you are facing a career obstacle, or know a physicist who is, why don't you, or they, write to the Committee on Professional Concerns, APS, 335 East 45th St., New York 10017. Right now we need data, and in time we may be able to help. All communications will be confidential. For those who prefer to meet in person, we conducted private interviews at the March meeting in San Diego, and again at the April meeting in Washington.

## FORUM BUSINESS MEETING MINUTES

WASHINGTON, APRIL 27, 1977

Thomas Sheahen  
Forum Secretary-Treasurer

These minutes are printed for the convenience of those who could not attend the Washington Meeting. If, in reading through them, you find something you would have commented on, please jot down your thoughts and send them to Forum Chairman Ben Cooper, Senate Energy Committee, 3106 Dirksen Senate Office Building, Washington, D.C. 20501.

The annual business meeting of the Forum was called to order by Chairman Ben Cooper at 12:10 p.m. in the Park Ballroom of the Sheraton-Park Hotel.

Treasurer Tom Sheahen reported on Forum finances and membership during the past year: membership has remained stationary near 2000, giving us an income of \$4000 per year. Of this, approximately \$2000 went into printing and mailing the newsletter, another \$500 was given out as Forum prizes, mailing the annual ballot cost \$400, and various other expenses (APS charges in New York, cost of making plaques for the Forum awards, mailing and telephone costs, etc.) accumulated to \$600. This left the Forum with a gain for the year of \$500. However, earlier in the week the Forum Executive Committee had agreed to the request of the Conference on Changing Career Opportunities for Physicists to give support to the Conference in the amount of \$500. The net result was a break-even year. In the meantime, the fund-raising drive to endow the Forum awards has accumulated \$1000. Vernon Ehlers of Calvin College suggested repeating the fund raising drive for several more years until the endowment reaches \$10000, the income from which would then completely cover the prizes. The Executive Committee will consider this suggestion. In the meantime, contributions of any amount are still very much appreciated, and may be sent to the Treasurer, Tom Sheahen at the National Bureau of Standards, Washington, D.C. 20234.

Chairman Ben Cooper discussed the problem of getting graduate students active in Forum affairs, and raised the possibility of making one member of the Forum Executive Committee a graduate student. One obstacle is that graduate students often do not join APS until very near the conclusion of their degree, and no one can join the Forum without first joining the APS. Paul Horwitz of Avco Everett suggested giving graduate students free membership in the Forum for the first year in the APS. Vernon Ehlers added that this would help to overcome the inertia that keeps people away from Forum activities at the outset of their professional careers.

Cooper also stated that anyone wishing to nominate someone for either the Szilard Award or the Forum on Physics and Society Award must get the name of their nominee in to George Seidel, Chairman of the Awards Nominations Committee, at the Physics Department of Brown University, Providence, Rhode Island 02912. The selection procedure is being moved up this year; July 15 is the last possible day for such nominations.

Similarly, those interested in taking a more active role in the Forum including running for Executive Committee, need only make their interest known by writing to Benjamin S. Cooper, 3106 Dirksen Senate Office Building, Washington, D.C. 20510.

The newsletter is always in need of good articles. Particularly valuable would be summaries of Forum-sponsored sessions at APS meetings, or summaries of other conferences that deal with topics related to public interest science. A summary that runs two pages in the newsletter is about the right size. In the past, summaries that have appeared did so



## FORUM BUSINESS MEETING MINUTES continued

because some individual thought the session was important enough to write up. Chairman Ben Cooper told the meeting that newsletter contributions should be sent directly to Martin Perl, Bin 61, SLAC, Stanford, California 94305.

One idea that was discussed was that of sending a free copy of the Forum newsletter to the entire APS, in order to attract new members. The Forum Executive Committee was asked to consider this.

Steven Shafroth of University of North Carolina suggested having a Forum poster session at a future APS meeting, especially for post-deadline contributed papers that deal with timely public-interest issues.

Leo Sartori of University of Nebraska reported on the efforts of a sub-committee that is looking into the possibility of publishing a Forum Journal. The idea is to put out a serious technical journal, with papers refereed, etc. Sartori's group will mock up a few issues to show what the journal would look like, and then see how much interest there is in the idea.

Joe Martinez of ERDA's Division of Physical Research expressed his interest in communicating to the physics community the details of ERDA's program in support of atomic physics. This idea fits nicely with the Forum's plan to sponsor sessions in March or April 1978 (both meetings are in Washington, D.C.) at which representatives of government agencies would describe their relationship to and degree of interest in physics research. Paul Horwitz pointed out that a lot of legislation is in progress right now, much of which bears on physics. Some mode of advance circulation is needed here, so that people can be aware of this legislation early enough to comment on it. Paul suggested using the newsletter for this purpose. Tom Sheahen pointed out that recent Post Office treatment of bulk mail has caused most of our newsletters to arrive at Forum members' homes two months after being delivered to the New York Post Office; which prevents the newsletter from being a channel for high-speed communications.

The meeting adjourned at 12:50 p.m. The next regular business meeting of the Forum will be held during the Washington, D.C. meeting of the APS in April 1978.

## LETTER TO THE EDITOR

Robert J. Yaes  
Memorial Univ. of Newfoundland

It is reassuring to learn\* that "A subpanel of the High Energy Physics Advisory Panel (HEPAP) is currently looking into the complex issues of unemployment and career opportunities in high energy physics". However, any high energy physicist who has actually been seeking employment has known that "career opportunities in high energy physics" have been non-existent since 1969. There is no point in waiting until 8 years after the Titanic has gone down to appoint a subpanel to debate whether to send out ships to look for survivors. One should note that much of the employment problem is due to policies implemented at the recommendation of HEPAP. One would not appoint Idi Amin to investigate rumors of human rights violations in Uganda.

\*PHYSICS AND SOCIETY, Vol. 6, No. 2 (1977).

CHALLENGE AND REBUTTAL: A PROPOSAL FOR  
THE DISCUSSION OF SCIENTIFIC PUBLIC POLICY ISSUES

Bernard L. Cohen  
University of Pittsburgh

(The following summary was prepared by Bernard Cohen from a paper presented by him at the 1977 Washington APS Meeting.)

When the American public is confronted with issues which have important scientific components, it looks to its scientific community for advice. Unfortunately, this advice has been presented in a manner that contributes more heat than light, confuses the public, and tends to destroy scientific credibility. In an effort to improve upon this situation I offer the following proposal for Forum action.

Any time a scientist makes a public statement or publishes material involving scientific judgements or information, any member of APS with the endorsement of three other members may issue a challenge through the Forum. If the Forum considers the issue of significant importance and interest, it will promptly arrange an APS judgement by the following procedure:

It will ask the challenger and the person who published the material or made the statement to prepare papers supporting their positions with proper citations to the scientific literature and other sources of information, to be completed within 2 weeks. Each side will be given an opportunity to see the other side's statement and prepare a rebuttal within two weeks. This process will be repeated for one counter-rebuttal.

The subject and participants will be announced in Bulletin of APS and members will be invited to purchase copies of these statements and a ballot for \$1.50, with 50 cents going to each side to defray their publications costs, and 50 cents going to APS to cover mailing and handling. Where more than one member plans to use a set of position papers, the group may order up to 5 additional ballots for 25 cents each provided the original order contains a signed statement by each that he plans to read the position papers being ordered. Each ballot will contain a statement that the voter is a member of APS and has carefully read at least 20 double spaced typewritten pages of the papers submitted by each side; this statement must be signed to validate the ballot. He may then vote in one of five ways -- strongly supporting either side, mostly favoring either side, or neutral. Ballots must be returned within one month after the material is sent out. They will be promptly counted and the results announced to the press.

If the person who made the original statement refuses to accept the challenge, this fact will be announced in Bulletin of APS and released to the press, along with a statement of his reasons and a reply by the challenger. The same shall apply if either side withdraws at any point in the process, or if the Forum Executive Committee decides that either side is inexcusably tardy in its participation. Less overt dilatory tactics may also be reported by the Forum Executive Committee at its discretion.

APS will invite other Scientific Societies to participate in this process, with challenges and position papers to be shared by all, but with votes to be counted separately.

I recognize that this plan is far from perfect, but it would clearly be a vast improvement over the current situation, and would be an important service to the public and to the physics community.

Some articles of the types mentioned now appear in such diverse journals as J.A.P., Science, Physics Today, Scientific American, and the Bulletin of the Atomic Scientists. But it felt that none of these fills the role envisaged for the new journal.

The Committee feels strongly that the journal must be refereed, to ensure that articles are carefully researched and written. This does not preclude the publication of unconventional or even radical views. We recognize that refereeing some of the papers submitted to the journal will be a very difficult task. But this is a problem that must be faced.

Rather than ask the membership abstractly, "Do you favor the creation of this journal?", the Committee proposes to put together a couple of dummy issues, composed of:

- i) papers that have appeared in other places, but that would have been submitted to the journal if it existed
- ii) titles (with abstracts if possible) of papers that people would contemplate submitting in the near future.

We ask your help in this task. Make a list of papers that might qualify under i), and of potential authors who should be approached under ii). Your own name can of course appear on either list. Please send your list as soon as possible to Leo Sartori, Behlen Lab of Physics, University of Nebraska, Lincoln, Nebraska 68588. General comments and suggestions (including names of potential editorial board members) are also welcome.

#### REFEREES FOR PHYSICS PROGRAMS

Roger M. Herman  
 Chairman: APS Committee on Education  
 Pennsylvania State University

Some time ago, Eugen Merzbacher, who was then serving as chairman of the Committee on Education contacted each of the Divisions asking for recommendations from each for individuals within the divisions who might be capable, interested and available to serve as external referees for physics programs at American colleges and universities. Periodically, the APS receives requests for suggestions of such individuals from whom they (i.e., those requesting suggestions) could then make a choice, and these requests have been passed on to the Committee on Education. We, in turn, would be able to make much more informed suggestions if we could obtain a list of qualified individuals as viewed by the Divisional leadership. Our plan is then to periodically contact each individual suggested, making sure that he would have an interest in doing this type of activity, would have sufficient flexibility in his schedule to allow conscientious performance of these duties, etc. We would also request a brief outline of biographical information (age, institution, administrative experience, career outline, special honors, etc.) when we contacted each individual.

If you are interested please write the APS Committee on Education.

## JOURNAL OF PHYSICS AND SOCIETY: A PROPOSAL

Leo Sartori  
University of Nebraska

The idea of starting a Forum-sponsored Journal of Physics and Society has been revived and a Forum Committee is looking into the possibilities. Among the types of articles that have been suggested for the new journal are the following:

- i) Presentation of a technological problem whose solution would have a measurable societal impact, preferably with ~~suggestions for research that would bear on the~~ problem. Actual research papers presenting results of such research would likewise be welcome.
- ii) Reviews of progress in areas encompassed under i.
- iii) Reports of APS-sponsored studies, together with critiques of these reports, minority views, etc.
- iv) Debates presenting alternative views of controversial issues, including criticism and rebuttal statements whenever possible.
- v) Essays on matters relating to national science policy, to the structure of the physics community, and its relationship to other professional societies, to government, and to society at large.
- vi) Proceedings of conferences such as Penn State I and II.

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PHYSICS AND SOCIETY

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