tially being "staked out" by the author. This can deter others from entering the field, since there is the possibility of duplication of work. This procedure can be useful if it is not abused, and it should be understood that material referenced in this way will be submitted for publication within a reasonable amount of time.

I don't mean to imply that any of the above referencing techniques are used, as a rule, in an improper way by researchers but I am urging that the flow of scientific information be unhampered by the use of references in scientific publications to material that is unavailable to others.

RICHARD J. GAYLORD
University of Illinois
Urbana-Champaign, Ill.
6/23/76

Another scientist in Congress

In your otherwise accurate article on scientist-candidates for Congress in the October issue (page 63) you omitted one scientist candidate for reelection, Joseph Fisher (10th District of Virginia), who has, in his first term, and undoubtedly will continue due to his reelection, to leave a major impact on policy issues of interest to scientists, mostly notably energy, the environment, and the economy.

A Harvard PhD economist, Fisher served on the staff of the Council of Economic Advisors before beginning a 15-year period as President of Resources for the Future. Under his leadership RFF became perhaps the leading nonprofit research organization specializing in analysis of resources, environmental and energy issues. RFF research has gained an estimable reputation for quality and credibility both in the academic world and in government.

During his freshman term in Congress Fisher played a key role in the energy-policy area as an exceedingly effective member of the pivotal House Ways and Means Committee.

I hope that PHYSICS TODAY will recognize this outstanding economist-in-Congress as a scientist fully on a par with those whose training has been more oriented toward the physical sciences.

JOEL A. SNOW
McLean, Virginia
11/9/76

Waste info needed

This letter is addressed to scientists and engineers working on radioactive waste disposal.

A panel established by the Committee on Radioactive Waste Management of the National Research Council has been assigned the task of evaluating waste practices at the Hanford Reservation in Washington. Such practices include the partial solidification by evaporation of huge quantities of high-level liquid waste remaining from plutonium production, the separation of radioactive nuclides from the liquid wastes, the discharge of low-level liquid waste to the ground, the trapping of gaseous and particulate waste, and the recovery for safer storage of soil into which waste containing actinite elements had previously been discharged.

The panel is seeking information from all possible sources to guide its study. In particular, reports on recent work dealing with ideas or technological innovations that might be applicable to Hanford practices would be helpful. Many reports of this sort have been published and are readily available, but some may exist in unpublished form. The panel would appreciate knowing about unpublished work, and requests that reports describing it be sent to

Dr John Pomeroy, Executive Secretary
Committee on Radioactive Waste Management
NAS-NRC
2101 Constitution Avenue
Washington, D.C. 20418

KONRAD B. KRAUSKOPF
Chairman, Panel on Hanford Wastes
Stanford University
Stanford, California
8/11/76

Argentinian physicists

In the last few months, we have seen many Argentinian scientists passing through or trying to settle in our country. For this reason we have become acquainted with various aspects of the plight of Argentinian physicists, and perhaps it is of some interest to your readers to know the following facts that we have been able to collect. A nominal list now exists of some sixty physicists, or engineers working in physics, fired from various National Agencies or from Universities in La Plata, Rosario, Cordoba, Tucuman. More serious, however, is the fate of our colleagues—an incomplete list of which is given below (to my knowledge only the first-named has been mentioned so far in your columns).

University of Cordoba: Institute of Mathematics, Astronomy and Physics

- Dr Juan Carlos Gallardo: incommunicado in Cordoba since 4 March 1976. (See PHYSICS TODAY, June 1976).
- Dr Gabriela Carabelli: arrested by plainclothes policemen together with her daughter in February 1976. No news since then.

University of Rosario: Department of Physics

- Miss Julia Huarque: arrested on 3 June 1976. No news since.
- Professor Eduardo Pasquini: arrested together with his spouse Liliane Misraijchi, a psychoanalyst, 10 June 1976. No

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news since. Pasquini has worked for three years in our Laboratory at Saclay, France. Many of their friends fear that they have been assassinated.

National Institute of Industrial Technology

▸ Dr Maximo Victoria, Chief of the Material Science Department. Detained since March 1976.

▸ Dr Antonio Misetich, Chief of the Refractory Material Section, is a well known physicist who has collaborated with various solid-state groups in Grenoble, France and at the Bell Labs in New Jersey. He was arrested by people dressed as military officers on 19 March 1976. Some of his friends in your country have already alerted US officials including Senators Brooke and Kennedy, and House Representative Thomas O'Neill, to intervene in his favor. It is to be noted in this respect that, despite the assurances said to be given by Argentinian officials to the US administration, all requests from his family, including queries about Misetich's health have been consistently turned down since last July.

For all these people it is not only a matter of being able to carry on their scientific work, it is indeed a matter of life and death. You may contribute by letting it be known, that the whole scientific community takes the physical integrity of Gallardo, Carabelli, Huarque, Pasquini, Victoria and Misetich under its protection, and thus perhaps induce those who retain power to take some action in their favor.

Note added in proof (1/11/77) As of early January we learn that Maximo Victoria has been let out of jail and is now in Europe.

Newly detained are: Frederico and Hilda Alvarez-Rojas, physicists working in metallurgy with CNEA at Buenos Aires, disappeared by mid October; Roberto Ardito, engineer-physicist working at CNEA cyclotron at Buenos Aires disappeared by mid October; Frederico Ludden, solid-state physicist at LaPlata University, disappeared by mid December.

C. DE DOMINICIS
Président de la Société Française de Physique
Service de Physique Théorique
11/9/76 *CEN-Saclay, France*

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Since the publication of our letter in November (page 13) we have new information about Dr Antonio Misetich. The Police and the Army recently denied arresting him and knowing his whereabouts. We believe that he may have been murdered.

Misetich, known to many American physicists since the years in which he worked at the National Magnet Laboratory, has been arrested, according to the "Correo de la Semana" (Buenos Aires, 29 June, 1976) but the Police and the Army have denied his arrest. Rumors that he was in prison turned out to be untrue.

We are seriously worried by this situation that can only cause further damage to the development of scientific and cultural activities in Argentina. We call upon our colleagues to demand from the Argentine government that measures be taken so that Misetich's fate be clarified; that our imprisoned colleagues be freed; and that those dismissed be given back their jobs, as a first step towards the re-establishment of a climate favorable to the development of science and culture.

FELICIANO SÁNCHEZ SINENCIO
EDGARDO CALVA-TÉLLEZ
CARLOS FERNANDEZ TOMÁS
Centro de Investigacion y de Estudios Avanzados
del Instituto Politecnico Nacional
10/26/76 *Mexico City, Mexico*

Validity of modern theory

Many people have commented on the apparent difficulty in which modern physics finds itself. This difficulty was pointed out by Heisenberg in his comments in the March issue (page 32). His objections stem from an almost ineffable feeling of incorrectness which he pinned to a lack of understanding of the dynamics of the high energy particle situation. I would like humbly to add my comments to those of Heisenberg on this general subject.

The problem in physics is not simply in high energy physics or even physics. The problem seems to rest in the very roots of life. It rests upon a duality, namely nature and the mapping of nature onto the collective consciousness of the scientific community and more particularly the individual. If the mapping is faithful, harmony exists. The inner eye of those people sensitive to nature, and there are such people, is not offended by any discontinuities between the mapping and the object.

The difficulty arises when the mapping is not faithful. One cause of a non-faithful mapping is multivaluedness. For any event in nature there can exist an infinite number of explanations. Presumably, given a holomorphic view of the rest of the cosmos, only one explanation fits best in the total model. This is the only criterion of acceptance of an explanation of an event: it fits with the rest of the map which we assume (hope) is faithful.

It appears that in modern science, particularly physics, the tendency is to shotgun theories, for whatever reason. We immediately develop a multivalued mapping because of the multiplicity of the theories for a given set of events. Before the theories have a chance to compete with each other for a slot in the whole