

In any case, we hope that our suggestions will provoke a wider discussion of the issues involved and of the correct course of behaviour to be followed. We suggest that any scientist who agrees or otherwise with our general position might usefully send a postcard or letter to the Editor of *Nature* to that effect.

Yours faithfully,

F. H. C. CRICK
J. C. KENDREW
M. F. PERUTZ
F. SANGER

Medical Research Council
Laboratory of Molecular Biology,
Cambridge.

JACQUES MONOD
FRANCOIS JACOB

Institut Pasteur,
Paris, France.

ANDRÉ LWOFF

Institut de Recherches Scientifiques
sur le Cancer,
B.P. No. 8,
94, Villejuif, France.

¹ We would also include political or military organizations supported by several governments. The discussion might reasonably be extended to organizations within a country, such as military establishments, commercial firms, and so on, but to avoid complicating the issue we suggest that these cases be left aside for the moment.

² We realize that there are some countries where all such private initiative is controlled and any invitation would have to be considered an official one.

³ It may be difficult in some cases to decide whether the support is "direct". In assessing this it would seem sensible to consider whether there are any strings attached to the granting of the money, or whether the money is allocated on a strictly scientific basis, without any political or military considerations.

⁴ Scientists at the present time appear to be divided on the ethical issue of whether one should accept money from a government of which one disapproves. Some feel strongly that money should not be accepted. Others argue that such financial contributions, though small, will, if anything, weaken the organization which makes them. Because we believe that even after debate there will always be a substantial fraction of scientists who are against accepting such money, we suggest that no useful purpose will be served by publicly debating this particular ethical point in this context.

All Change

SIR,—In your issue of September 20 you published an editorial note, "Biochemical Meeting—All Change" (*Nature*, 223, 1196; 1969) concerning the transfer of the Eighth International Congress of Biochemistry from Rome to Switzerland.

This note implies that the main reason for this transfer is the unrest of the students in Italy's universities, or so it has been suggested by the police force of the city of Rome. This seems to me quite untrue and unfair to the motives behind the behaviour of the Italian students.

The situation of Italy's universities in the last twenty years has progressively deteriorated because of the outdated and antidemocratic system on which it was based, and consequently has now reached breaking-point. The students have recognized their responsibilities and are now trying to force the Italian government to change the situation in their universities, sometimes, it is true, by unorthodox methods. The fact that the reform of the universities is now being discussed by the Italian Senate is due to the pressure of the students and certainly not to any effort on the part of the university "professori" or the government, who had twenty years to modify the situation and took no action. It is the authorities who have to be considered responsible for the present unrest in Italian universities.

I hope that the biochemists will not mind too much commuting between Lucerne, Interlaken and Montreux, and I am sure they will be welcomed in Rome once the Italian government no longer considers the International Biochemical Congresses an unwanted distraction.

Yours faithfully,

RUGGERO MONTESANO

10 Langland Gardens,
London NW3.

Retire Early in Brazil

SIR,—You recently (*Nature*, 222, 909; 1969) invited suggestions for alleviating the serious situation facing many Brazilian scientists who have been forced to resign from their positions in state universities, apparently for political reasons.

This situation seems to be of a type occurring more frequently in recent years. It raises the immense problem of what can be done to prevent government interference with the professional activities that scientists may be commissioned to undertake on behalf of the community for which they work: interference, moreover, that is based exclusively on grounds (political, religious or racial) unrelated to their scientific competence and responsibility.

Assistance can be, and is being, given at an individual level in finding jobs for several of those concerned in other countries. One possibility for the future would be the setting up of some sort of permanent International Scientific Labour Exchange to deal with similar situations in the future. But this, by itself, is not enough.

Scientists, more perhaps than others—by tradition and by the nature of their work—have a responsibility to the community and to themselves that is, first and foremost, international. This obligation cannot be properly fulfilled under conditions of systematic political restraint or exploitation.

Situations analogous to that in Brazil operate in South Africa, Greece, Spain (perhaps to a lesser extent) and more obscurely in some other countries where political considerations impinge critically on scientific freedom. They have impelled some scientists—individually, through ad hoc groups or in organized societies—to consider and sometimes introduce certain measures of boycott, albeit limited, in order both to register disapproval and to avoid serious restrictions on their international activities. Such moves have been opposed by many, sympathetic in principle to these objectives, who are understandably reluctant to support action that (a) might defeat its own purpose by itself restricting international scientific contact and (b) would be difficult to limit to specific countries on any other than rather arbitrary criteria.

These difficulties however, might be overcome by (a) careful formulation, perhaps in consultation with international legal experts, of proposals structured in a manner already found to be meaningful and operationally valid in international agreements and (b) obtaining more accurate information on situations in countries where the application of such sanctions has to be considered.

These tasks would then have to be carried out by an international body representing national associations of those most closely concerned with the promotion of freedom and social responsibility in science. We have in this country a recently inaugurated British Society for Social Responsibility in Science with interests which it may be hoped are sympathetic in principle to the suggestions outlined below. There are analogous societies already functioning, or in process of formation, in other countries. Might it not be possible to constitute some sort of international body with representatives of these (and other) national associations to modify, agree on, and finally to implement, a proposal along these lines?

The relation between such a body and the International Council of Scientific Unions (ICSU) would have to be worked out and promoted in the hope that through ICSU itself these proposals could best be implemented. Indeed, their objects and aims are entirely consistent with ICSU Statutes and in furtherance of the Human Rights Covenant of the United Nations.

I would therefore suggest that consideration be given to the setting up of an international body representing appropriate national organizations concerned with the promotion of freedom and social responsibility in science, having the task of: (1) Critically surveying the situation in all countries with respect to the fundamental right of

scientists to freedom from interference—on grounds of race, creed, or political beliefs—with scientific inter-communication and personal contact across and within national boundaries. (2) Advising accordingly as follows: (a) Committees sponsoring and/or organizing international scientific meetings, to avoid their being held in any country where such freedom is significantly restricted. (b) Individual scientists, contemplating a personal visit abroad for scientific purposes, to consider avoiding any country where restriction to such freedom may interfere significantly with the object of the visit.

It may also be important to consider other factors, such as the means for resisting exploitation, by governments or other agencies, of scientific meetings and individual visits for (a) purely political propaganda unrelated to their scientific objectives or (b) espionage purposes.

It would be valuable to have some other opinions on these very tentative suggestions.

Yours faithfully,

M. R. POLLOCK

Department of Molecular Biology,
University of Edinburgh,
King's Buildings,
Mayfield Road,
Edinburgh, EH9 3JR.

Appointments

The following have been appointed to the **Medical Research Council** from October 1: **Professor A. S. V. Burgen**, University of Cambridge; **Professor W. S. Peart**, St Mary's Hospital Medical School, London; and **Professor R. E. O. Williams**, St Mary's Hospital Medical School.

Mr J. Aitken has been named chief of the Space Research Facilities Branch of the **National Research Council of Canada**, in succession to Dr R. S. Rettie.

Mr G. Wilson, Royal Institute of Public Health and Hygiene, has been appointed to the new post of secretary to the **Wellcome Institute of the History of Medicine**.

Announcements

Professor H. H. Hopkins, University of Reading, has been elected president of the **International Commission for Optics**, in succession to Professor G. Toraldo di Francia. The ICO is an affiliated commission of the International Union of Pure and Applied Physics.

ERRATUM. In the article by A. N. Bunner *et al.* on "Soft X-ray Background Flux" (*Nature*, **223**, 1222; 1969) the equations on page 1225 should read:

$$I = S_0 \int_0^{\infty} \exp - \left(\frac{r}{z_s \sin b} \right)^2 e^{-\tau} dr$$

$$\tau = \sigma n_0 \int_0^r \exp - \left(\frac{r'}{z_g \sin b} \right)^2 dr'$$

Farther down the same column, $J = (3.4 \pm 0.5) \dots$ should read $J = (1.2 \pm 0.2) \dots$

ERRATUM. In the article "Enzymes controlling Weight?" from our Medical Biochemistry Correspondent (*Nature*, **223**, 1100; 1969), the name of G. L. S. Pawan was unfortunately misspelt Palan.

ERRATUM. In the announcement of the appointment of Professor J. F. Fowler as director of the British Empire Cancer Campaign for Research's Research Unit in Radiobiology (*Nature*, **223**, 1395; 1969), it was stated that Dr O. C. A. Scott would retire on December 30. This should have been September 30.

International Meetings

October 27–29, **Low Cost Waste Treatment**, Nagpur (Director, Central Public Health Engineering Research Institute, Nehru Marg, Nagpur-3, India).

March 11–12, **Welded Process Plant**, London (Miss M. E. Keegan, Conference Publicity Section, The Institution of Mechanical Engineers, 1 Birdeage Walk, Westminster, London SW1).

March 16–18, **6th Annual Meeting of the Solar Energy Society**, Sydney (Mr F. E. Edlin, Executive Secretary, Solar Energy Society, c/o Arizona State University, Tempe, Arizona 85281, USA).

March 16–20, **Fourier Spectroscopy**, Colorado (Dr G. Vanasse, Air Force Cambridge Laboratories, Research Information Office, Bedford, Massachusetts 01730, USA).

March 17–25, **Horticultural Congress**, Tel Aviv (Mrs L. Roman, Ministry of Agriculture, Ha-Qiurya, Tel Aviv, Israel).

March 23–26, **International Aerospace Instrumentation Symposium**, Cranfield (N. O. Matthews, Department of Flight, College of Aeronautics, Cranfield, Bedfordshire, UK).

March 25–27, **World Traffic Safety**, Kyoto (Asahi Broadcasting Corporation, 2-2 Minamai, Oyodo-cho, Oyodo-ku, Osaka, Japan).

March 31–April 2, **Microwave Research**, New York (J. Fox, Polytechnic Institute of Brooklyn, 333 Jay Street, Brooklyn, NY 11201, USA).

March 31–April 3, **Yield Deformation and Fracture of Polymers**, Cambridge, UK (Meetings Officer, The Institute of Physics and the Physical Society, 47 Belgrave Square, London SW1).

April 6–10, **Stress Analysis and its Influence on Design**, Cambridge (Miss M. E. Keegan, Conference Publicity Section, The Institution of Mechanical Engineers, 1 Birdeage Walk, Westminster, London SW1).

April 15–17, **5th International Zootechny Symposium**, Milan (Italian Society for the Advancement of Zootechny, Via Monte Ortigara 35, Milan, Italy).

Sabbatical Itinerants

In the hope of providing some practical assistance in the good cause of mobility between laboratories, *Nature* advertises the needs for housing of families about to take up periods of sabbatical leave. To begin with, no charge will be made for advertisements like this. It is hoped that a period of experiment will show what form these advertisements could most usefully take and whether they are effective.

Wanted: Furnished accommodation in London for American sociologist, wife and infant for 3 month period beginning in May or June 1970. (Can offer a 7 room Manhattan apartment, adjacent to Columbia, in exchange if desired.) Please contact M. Hechter, Department of Sociology, New York University, Bronx, NY 10453, USA.

Wanted: Three-bedroom furnished house or apartment for Canadian professor and family (4 children —10, 8, 7, 6) near University of Oxford from March 15 to August 15, 1970. Please contact W. H. Vanden Born, Department of Botany, University of California, Davis, California 95616, USA.