

hearing for constructive criticism, and the consequent lack of responsibility. To remedy this situation, the academy called for clear limits to be set to the competence of anyone in authority and of rank-and-file functionaries.

A comprehensive system, the academy said, must be worked out for the proper functioning of the economy, based on the "broad utilization of all available and permissible self-regulating mechanisms". The authorities, it said, must show they trust the people. One obvious sign of such trust would be freedom of expression and the phasing out of censorship (except for the minimum needs of national security), which constituted a major point in the Gdansk accords.

A prominent speaker on this theme was Dr Jan Kielanowski, a leading nutritionist. He reminded the meeting that he and Dr Edward Lipinski had tried to raise the same issue of academic freedom and the abolition of the censorship at the academy's Annual General Meeting in May 1979 — but on that occasion, the motion was ruled out of order from the chair. Now, however, he observed, when the initiative came not from a couple of members of the academy, but from the broad masses of the Polish workers, the academy was prepared to listen.

The academy, in fact, had not waited until the extraordinary general meeting to take up the issue. Censorship and academic freedom had already been raised at the praesidium of the academy on 30 September. On that occasion, Professor Janusz Groszkowski, a former chairman of the academy, called for a detailed analysis of the situation in Polish research, including the moral and professional scrutiny of those researchers and scientists known to be letting down the intellectual integrity of their profession. Some researchers, said Groszkowski, are guilty of plagiarism, intellectual dishonesty, idleness and ignorance, while young people of genuine talent were given no opportunity to develop freely. "Hence", he concluded, "we have no great names and no great achievements." The academy, he said, must take the initiative in the reform and renewal of the scientific profession, without waiting for a lead; its deliberations should include possible changes in the legislation governing scientific research, the management of scientific institutes and the question of independent, trades unions for scientific research workers.

However, before this last proposal could be put to the general meeting of the academy, Poland's scientists had made their own decision: at the second delegate meeting of the new "Free Trade Union of Scientific, Technical and Educational Workers" (13 October), it was decided to terminate the existence of this body as a separate entity, and to transform it into a branch of the "Solidarity" confederation.

Vera Rich

European community

Research without end

Strasbourg

A meeting called by the European Commission here last week ended with a general air of expectancy among its participants. Next June, the commission will be proposing to the Council of Ministers a new research "enterprise". So far, however, it is not known how much the enterprise will cost, when it will start or even what it will do.

Commission officials nevertheless consider that last week's conference gave them a mandate to do something. And whatever it is, the cost will be added to the commission's present research budget, running at five per cent of the member states' research and development budgets.

The impetus for the initiative is twofold. First, there is a feeling in Brussels that there will be some slack in the EEC budget in the near future. Some think the Common Agricultural Policy will collapse, others that some part of agricultural spending will be put to other uses. All the community's

directorates-general, including that for research, science and education, are eager to pick up the crumbs.

There is also a sense that something must be done to free posts and talent at the universities. As Sir Hermann Bondi put it last week, "the universities have been static for many years while other things are changing fast". He went on to advocate the setting up of research structures parallel to but in touch with the universities.

Most of those at Strasbourg agreed, but failed to provide the political wrapping or the precision that might lead to practical proposals to create scientific jobs or to improve mobility in Europe. In the end, the commission will work out its policy on the basis of background documents* prepared for Strasbourg, particularly those of Guy Denielou, president of the Technical University of Compiègne, Ilya Prigogine of the Free University of Brussels and Freddie Clarke, research director responsible for renewable energy at Harwell. Dr Günter Schuster, who heads the Brussels directorate-general for research, science and education, will now set up a task force to prepare proposals for June. There will be three scenarios, from ambitious to pessimistic, to cater for the unknown political climate nine months hence.

Schuster will rely largely on Denielou's proposals to define the "enterprise". But, says Denielou, the definition should concentrate on structure rather than topics. How the enterprise should function is more important, at this stage, than what it should do. The structure should not be academic, but like a business. It should be flexible, creating and closing teams as needs change. Its administration should be "very light". It should be cheap, probably based on existing laboratories.

A principal objective would be to foster mobility, for scientists are considered less free in Europe than in the United States. Research teams in the enterprise would therefore be drawn from across Europe. He proposes an experiment — three years, 50 teams of 30 scientists each, costs borne largely by the host laboratories.

To determine the subjects to be studied, the enterprise would need what Prigogine calls "an organ of perception" — something like the National Research Council in the United States — which would also select institutions and teams to investigate the chosen topics, using international referees. Brussels would thus be gaining an instrument for a centralized research policy — and a critical question for June will be what relationship such an instrument should have to the council, the supreme body in the community.

Robert Walgate

*"Towards a new undertaking in European research" by Guy Denielou and others; "Science and society in a changing Europe" by Ilya Prigogine; and "Community industrial research priorities for the early 1980s" by F. J. P. Clarke and others. (Commission of the European Communities (DG XII), Brussels.)

China plays profit

Researchers at the Institute of Physics of the Chinese Academy of Sciences have recently been working on a new project — how to sell their results to industry.

It seems that until the recent economic reforms, what is now officially described as "a lack of communications" and "obstacles inherent in the system" prevented new scientific results from being applied to industry. New findings remained inaccessibly locked away in publications and festschrifts. Consequently, scientists had become upset and frustrated, while factories, unaware of new advances, were unable to modernize.

With the fall of the Gang of Four, however, factory managements were able to approach the scientists for advice on new results and how to apply them. So far, the Institute of Physics has worked out three possible cooperation procedures: (1) outright sale of the new technology, with technical assistance provided until the technology goes into production; (2) contracts for technological guidance, involving sending experts to the factories or training workers at the institute; with the onset of production, the institute is repaid on a sliding scale related to the profits from the new technology; for example, 20% in the first year, 10% in the second, 5% in the third; (3) provision of the new technology, for a decreasing percentage of its profits, for example, 5% the first year, 3% the second, and so on.

So far, the institute has signed contracts with 19 factories, many of which are already benefiting financially from such deals.

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