Royal Society Year

THE Royal Society's continuing interest in education is well illustrated by the Annual Report of the Council, delivered to the Anniversary Meeting on December 1. This shows that, during the past year, the society has discussed in-service teacher training with the Department of Education and Science, studied the shortage of science and mathematics teachers with the Council of Engineering Institutions, produced reports on post-graduate training and set up a new committee on mathematical education. Moreover, Lord Blackett, the society's president, chose the British PhD degree as the subject for his anniversary address.

The society has also been active in promoting cultural exchanges with overseas scientists, and has continued its programmes of research abroad. The report records the successful completion of a two-year study of the geography and environment of central Brazil and the construction of the first buildings for the research station on the atoll of Aldabra in the Indian Ocean (towards which the US National Academy of Sciences has contributed $12,000). The Royal Society's European Programme has awarded seventy-seven grants to enable British scientists to visit Western Europe, and forty-five study visitors received grants to visit Britain last year. The society also made grants towards the expenses of seven conferences.

The parliamentary grant of £871,000 for 1969–70 represents an increase of nearly £70,000 over that of the previous year. £315,000 is being spent on international relations and international fellowships, and scientific investigations and research professorships will account for most of what is left. The society has also accepted Professor J. D. Bernal's offer of £2,000 to endow a triennial lecture on some aspect of the social function of science.

Lord Blackett prefaced his own views on the PhD system with a discussion of the more common criticisms of the system. In particular, he pointed out that many American scientists allege that British postgraduate students are too narrowly educated and fall short, in this respect, of the output of the best American post-graduate schools. Moreover, many British industrialists criticize the system for concentrating too much on basic science and therefore failing to equip students for careers in industry. Lord Blackett also drew attention to the Swann Report which urged that "there should be a change of emphasis towards shorter periods of postgraduate studies and the trend from research towards advanced course work should be accelerated".

No easy solution to the problem of reshaping the PhD is available, however. Lord Blackett pointed out that "it is vitally important to maintain, and if possible strengthen, the present outstanding position of British basic science". A strong and efficient PhD system must play an integral part in this, and it must also fulfil the needs of industry. Reconciling these two objectives is indeed a difficult proposition, but Lord Blackett could see "no case for any drastic alteration of the PhD system from the point of view of the future leaders of the basic science". He saw the problem as one of attitude rather than of organization, suggesting that industry will only get the people it wants if the jobs they offer are attractive to the students.

Something can, however, be done from the university end. Lord Blackett held that it is up to the teaching staff to make clear to PhD students that they must not all expect careers in universities or research institutes. They must also "convince the students that the prosperity of the country mainly depends on the technological efficiency of British manufacturing industry, and that this depends on the efficiency of its managers, its technologists and its scientists". One way to stimulate interest in industry is to make the research content of the PhD more closely related to the needs of industry, but Lord Blackett suggested that the present tradition of choosing a research project mainly on the basis of its scientific interest is still generally valid. He thought that an intellectually demanding curiosity-directed problem provides a better general education than a less exciting problem of direct industrial interest.

To obviate some of the criticisms of the PhD system Lord Blackett suggested a broader education by lecture courses to supplement the narrow field of the students' own research work. Students should also have two supervisors instead of one, and there must be more ruthless selection at entry and more readiness to fail weak candidates.

Anniversary Dinner

THE Anniversary Dinner of the Royal Society on December 1 was a European occasion, with speeches from Dr H. B. Casimir and Professor P. Aigrain. Lord Blackett, who pointed out that he would have relinquished the presidency before the next anniversary dinner, spoke vigorously for an expansion of the system of European exchange fellowships. He said that he would like to see the scheme grow to the point at which 1,000 people a year were being moved from one country to another at a cost of roughly £2 million a year spread over the fourteen countries at present taking part in the scheme.

Sir Bernard Katz defined the Sixth Law of Thermodynamics as the proposition that the world will turn into paper, deplored the growth of the scientific journals and the practice among scientists of "overfeeding" them. In a reference to *Nature*, he said: "Look at the state of our most venerable semi-scientific journal. We are clearly overfeeding it to tell from its frequent editorial grumbles."

Distribution of Government Grants

	1969–70 £	1968–69 £
Scientific Investigations	190,000	168,000
Scientific Publications	7,500	6,000
Libraries Assistance	6,000	4,000
Research Professorships	105,500	99,600
Study Groups	3,000	2,000
Science/Technology relations	5,000	
Rent, etc., for Carlton House Terrace	43,250	43,250
International Relations	205,350	241,050
International Biological Programme	98,400	97,100
Rating Assistance	40,000	35,000
Scientific Information Fellowships	5,000	6,000
Aldabra Research Station	52,000	
International Fellowships	110,000	100,000
	£871,000	£802,000