

Kendall, professor of chemistry in the University of Edinburgh, in delivering the twenty-fifth Bedson lecture in Newcastle-upon-Tyne on March 2. He pointed out that there have been four great periods of chemical discovery, corresponding quaintly with the four 'elements' of the Greeks, fire, air, earth, and water. The first was the phlogistic period, ending with Lavoisier; the second, the great period of research on gases; the third, the gradual rounding off of the chemistry of the rare earths; and the last opened up by the discovery of heavy water. It was mentioned that there should be nine kinds of water, and more than a hundred varieties of ethyl alcohol "some perhaps more exhilarating". Of great interest was the account of a research just concluded in the Edinburgh laboratories in which calcium from a mineral rich in potassium has been shown to have a slightly higher atomic weight owing to the isotope derived from the radioactive isotope of potassium, K^{41} . This has been confirmed by Allison in the United States, using his magneto-optic method. Two pegmatites of very different ages, but of which the younger contains much less calcium than the older, have indicated a half life period of 9×10^{11} years for potassium in agreement with one of two measurements by direct physical methods. The lecture was enlivened by numerous amusing reminiscences and suggestions, especially concerning the new element D (or, according to Prof. H. E. Armstrong, Ww !).

Institute of Chemistry

At the fifty-sixth annual general meeting of the Institute of Chemistry held on March 1, the president, Prof. Jocelyn Thorpe, in moving the adoption of the annual report of Council, said that the register of the Institute contains the names of 6,176 fellows and associates, and more than 750 students. The number of members known to be disengaged is not more than 3 per cent, so that the profession does not appear to be seriously overcrowded. Rather than endeavouring to restrict entrance to the professions generally, he believes in insistence on a high standard of entrance examinations to the universities and colleges in order to eliminate those who are not likely to make really good professional material. The Legal and Parliamentary Committee, under the chairmanship of Sir Christopher Clayton, has rendered useful assistance in matters of public importance in which the profession was concerned. The new Pharmacy and Poisons Act has placed beyond doubt the right of those who practise chemistry, as well as those who practise pharmacy, to use the title 'chemist'. The examinations for National Certificates in Chemistry, conducted jointly by the Institute and the Board of Education and the Scottish Education Department respectively, are having a beneficial effect on the training in science afforded in technical institutions throughout the country. Lately, the Council has discussed the place of chemistry in general education. It seems that in some places chemistry is regarded as too difficult a subject for boys less than sixteen years of age, and that physics and biology should be given the preference as school subjects; the Council proposes to publish the

discussion and to invite members to express their views thereon. Prof. Thorpe was re-elected president of the Institute.

Associated Learned Societies of Liverpool and District

AN important stage in the history of amateur scientific circles on Merseyside was a reception at the University of Liverpool on March 3 of the Associated Learned Societies of Liverpool and District, which represents some twenty amateur societies with a membership of about 4,000. The Vice-Chancellor of the University, Dr. H. J. W. Hetherington, who is also president of the Associated Societies, welcomed the gathering, while the Pro-Chancellor of the University, Mr. C. Sydney Jones, said the University is always to be looked upon as a friend and encourager of the amateur scientific bodies of Liverpool. The chairman of the Associated Societies, Mr. W. Mansbridge, in passing a vote of thanks, told how in the past the co-operation of amateur and professional scientific workers that existed in the societies has been to the benefit of each, and the societies have often been of help to the research workers at the University. A tour was then made of the various departments, where exhibits and demonstrations had been arranged. The Associated Learned Societies of Liverpool and District was formed in 1922 to promote co-operative undertakings between the various learned societies, to stimulate the interchange of ideas to the benefit of the societies or of knowledge, and to promote cordial relations between them and the University, the local education authorities and the municipal institutions. The committee has, in the past, arranged a number of joint soirées and scientific exhibitions, lectures and excursions to places of scientific interest.

The Autodial for Telephones

TELEPHONE subscribers connected to automatic exchanges who use their instruments frequently will soon be able to obviate in many cases the necessity of making the dialling operations. On the London automatic exchanges, the ordinary number of operations to be carried out is seven. By means of the new autodial, these operations can be reduced to two. The device is contained in a small box on the face of which there is an index of the names of the subscribers most frequently called. When anyone whose name is on this index has to be called, all that has to be done is to set the pointer of the instrument opposite the name required and depress a lever. There is no change-over switch and the instrument does not in the least interfere with the normal use of the telephone. Any number not on the index can be called by the usual method of dialling. The index names correspond with toothed discs, the teeth of which are cut away to form a transmitting code of impulses corresponding to the number selected. The discs clip on to a rotating cylinder so that the combination can be easily changed when necessary. The depression of the lever winds the cylinder sufficiently for one revolution and this is sufficient to generate the train of impulses necessary for completing the call. We understand that subscribers will