

and W. Swietosławski (Warsaw). The decision to accept the invitation to hold the twelfth meeting of the Union in Switzerland in 1936 was confirmed.

The chief subject of discussion by the Council concerned future arrangements for organisation concerning chemical nomenclature. The existence of separate committees for organic and biochemical nomenclature has for some years been regarded as unfortunate by many chemists in different countries, and the British Federal Council for Chemistry has been active in trying to have the two committees combined. The tone of the discussion was somewhat heated, and 'Anglo-Saxon' opposition to the existing committee on biochemical nomenclature was referred to in terms which created an atmosphere scarcely suitable for critical consideration of the best policy regarding a question of fundamental importance in chemistry.

The following proposals by Prof. F. Swartz were submitted: "In conformity with the decision of the Union the Committees on nomenclature are dissolved. The Council decides to constitute three new committees on nomenclature, one for inorganic chemistry, one for organic chemistry and

one for biochemistry. These committees are asked to present a scheme of organisation of the future work of the committees on nomenclature to the Union before 31 December, 1935. Their presidents will assure the co-ordination of the work of these committees. The members of the committees will be chosen as far as possible from among the members of the former committees." These proposals were voted on according to countries adhering to the Union and passed by 29 to 28 votes. That there should be five members of each commission was again voted on in the same manner and passed by 31 to 27 votes. It was finally left to the Bureau to choose the members of the committee.

It may be questioned whether decisions of such a nature should be determined by countries having a number of votes based on their population and not by individual votes of representative chemists keenly interested in the matter; but an important advance will be made if, by 1936, the relative positions of organic chemistry and biochemistry on the question of nomenclature common to both are satisfactorily defined. C. S. GIBSON.

Aberdeen Meeting of the British Association

THE preliminary programme of the meeting of the British Association to be held at Aberdeen on September 5-12 has now been issued. In certain respects a university city affords the best and most appropriate setting for a meeting of the Association, and Scottish meetings are anticipated with pleasure, for their standard of organisation has always been high, and they have always attracted a notable measure of public interest.

In Aberdeen, the accommodation for the sessions will be very convenient, for eight of the sections will be housed in Marischal College, and of the rest, four will find rooms within a quarter of a mile of the College. Only the Section of Botany will sacrifice nearness to the centre to the convenience of meeting in the appropriate department of the University, with its fine gardens, at St. Machar. The Reception Room will be in the Music Hall, a building of special historical interest to the Association, for it was opened in 1859, and the first ceremony which took place in it was the inaugural meeting of the Association in that year, when the Prince Consort occupied the chair. He conveyed a message from Queen Victoria to the Association, and delivered an address which is a pronouncement of no little interest in the history of science. His own sympathetic and well-informed attitude toward science is well known, and is clearly defined in this address; and no less clearly is indicated the general position of science in the life of the community at that time.

This point is apposite to the present programme, since particular contacts between science and the life of the community will be more prominent as

subjects of discussion at Aberdeen than they are usually. Such topics are, of course, always to be found in Association programmes; but in recent years, and especially last year at Leicester, it has become clear that lay members and those who follow the proceedings of the meeting in the Press wish to hear more of them. It seems natural and proper that this should be so, and it is obviously within the stated objects of the Association that such a demand ought to be met. It is announced in the preliminary programme that "several Sections are including in their programmes papers or discussions within the scope of the resolution forwarded by General Committee to Council at the Leicester Meeting last year, on the relation between the advance of science and social progress"; and a number of appropriate subjects are already announced. If from some of these there should emerge at Aberdeen applications for the appointment of committees to pursue investigations, this will mean that the Association's machinery is being used for the advancement of science in specific directions of public importance. There will be nothing new in this. The Association's record affords sufficient evidence for that statement. But the giving of "a more systematic direction" to scientific inquiry was one of the charges laid upon the Association by its founders; and here, surely, is a systematic direction which has been rightly pointed out and will be rightly followed.

Sir James Jeans, who has succeeded the late Sir William Hardy as president of the Association, announces the title of his address as "The New World-Picture of Modern Physics". It is stated

that one of the usual evening discourses will be given as a Sir William Hardy memorial lecture, and will deal with the preservation of meat, fish and fruit, a subject peculiarly appropriate to Aberdeen, where the work of the Torry Research Station is very well known. The name of the lecturer is not yet announced. The other evening discourse will be given by Prof. W. L. Bragg on "The Exploration of the Mineral World by X-Rays". Reverting to the subject of science and the community, the programme states tentatively that an evening symposium on the general relations of these may be arranged. The sectional programmes, so far as can be judged from the short summaries furnished in this preliminary announcement, are certainly no less wide-ranging than usual. An ambitious series of excursions is under consideration, and inasmuch as the occasion of a

meeting in a centre commanding this part of Scotland must needs be rare, the opportunity should be taken.

This programme is accompanied by a circular addressed to those who are not life-members of the Association, which in effect asks them to pay regular subscriptions to the Association by signing a banker's order form, whether they attend the meetings regularly or not. The hope is to assure a more stable income for the Association, and thus "alleviate the difficulty of allocating grants in aid of important research", for which the applications "habitually exceed the sums available". The Association's support of research, and the preparation of "reports on the state of science", which began in 1834 and has never since been intermitted, sufficiently justifies this appeal.

Obituary

DR. WALTER ROSENHAIN, F.R.S.

IT is a grief and a shock to me, on returning from a holiday abroad, to read of the death of Walter Rosenhain. I have had many pupils, but none more gifted with the imaginative insight of the discoverer, more discriminating in criticism, or more skilful in the technique of the experimentalist. He came to me, in the late 'nineties, with a research scholarship from the University of Melbourne, when I was professor of mechanism at Cambridge, and asked me to suggest a piece of research which he might undertake in my laboratory. At that time Roberts-Austen, Arnold, J. E. Stead, Osmond and others were applying to metallurgical analysis the microscopic methods which had been initiated by Sorby in his earlier study of metals, and it was beginning to be recognised, somewhat vaguely, that the irregular grains which a polished metal revealed in the microscope were crystals the boundaries of which had interfered with one another in the process of crystal growth. I suggested to Rosenhain that this opened up a good field, and that it would be interesting to see what happened when a plastic metal was overstrained. The supposed crystal grains must alter their form, but how?

Rosenhain had already begun in Melbourne a research on steam-jets which he was anxious to finish first, and we arranged that as soon as he had completed that he should take up the metallurgical inquiry. This was done, and I recall very vividly how, after he had acquired some skill in polishing and etching metallic surfaces so as to bring out the granular structure, we put a plastic strip one day under the microscope, fixed in a straining stage so that it could be stretched while one watched the surface of the grains. As the straining proceeded we saw lines appear, sharply defined parallel lines which were black in the reflected illumination, becoming more numerous the more the specimen was stretched, and tending

to develop criss-cross patterns. The laboratory was closing for the day, so we went our several ways, each brooding on what these curious lines might mean. That evening I saw the interpretation: the lines must mean finite slips, taking place on parallel layers within the grain. Consequently the grains were definite crystals, and remained crystals after the deformation: they gave way, when the straining passed the elastic limit, by the sliding of bands or layers on a group of parallel planes, much as a pack of cards might be sheared. Slips of this kind in three directions inclined to one another within each grain would allow the grain to assume a new form consistent with the plastic straining of the piece as a whole. Next day we met again, and I found that Rosenhain had, quite independently, come to the same conclusion. That was the discovery of 'slip-bands' which we published jointly in a preliminary notice to the Royal Society in March 1899 (*Proceedings*, vol. 65), and later (along with much more) in the Bakerian Lecture of that year (*Phil. Trans.*, A, vol. 193, p. 353).

We pursued the research hotly together. It was a happy as well as a fruitful association. To work with such a pupil was, for the professor, a rare delight and a constant stimulus. It turned out that metallurgy did offer to Rosenhain the most congenial field that could have been chosen. Looking back now, I feel a natural pride in having guided him to it. Afterwards, when the days of pupillage were past, I had the continued pleasure of watching him go on from strength to strength and receive growing recognition, of visiting him from time to time at the National Physical Laboratory where he made a position worthy of his powers, and of listening to his admirably lucid expositions, public or private. An old man, such as I am, must reckon with the loss of his contemporaries, but it was far too early for us to lose Walter Rosenhain.

J. A. EWING.