Mr. A. E. Clarence Smith

IT would be difficult to over-estimate the contribution made by the late Capt. Alton Clarence Smith, who died on September 16 at the age of forty-nine years, to the development of the Department of Chemistry at University College, Southampton, during the seventeen years in which he was responsible for the teaching of physical chemistry.

Mr. Clarence Smith was a man of wide culture, interested in biology as well as in physical science. He had also an unusual degree of mechanical skill and a marked taste for architectural design, gifts strikingly shown in the planning and equipment of the laboratories which he designed for the use of his students. His research work lay chiefly in the domain of photomicrography, on which he was an acknowledged authority, and his papers on this subject in the *Journal of the Quekett Club* and similar publications led to his being frequently consulted by biologists and others interested in the use and construction of microscopes.

But Clarence Smith was in the first instance a teacher, and it is as a great teacher of physical chemistry that he will be remembered by the students who in successive years listened to the extraordinarily clear discourses with which he illuminated the difficult field of study embraced in physical chemistry. He took infinite pains in the presentation of his subject; the notes which he prepared for his lectures were models of clear thinking and accurate expression. He

was genial and sympathetic with his students, appreciating fully their difficulties, and he had in full measure their affection and respect. His knowledge, experience and that critical judgment which was one of his outstanding characteristics, were always at the service of his colleagues; the research work of the Chemistry Department at Southampton owes a great debt to him for the interest, the counsel and the generous help which he gave so freely.

The loss which the death of Clarence Smith brings to the teaching strength at University College, Southampton, is very great; but, above all, he will be missed for the charm of his personality, from which there radiated always the virtues of sincerity, courage and goodwill.

D. R. B.

We regret to announce the following deaths:

Mr. Alan Blakeway, director of the British School of Archæology at Athens, on October 9, aged thirty-eight years.

Sir George Buchanan, formerly senior medical officer in the Ministry of Health, on October 11, aged sixty-seven years.

Prof. W. E. Praeger, emeritus professor of biology in Kalamazoo College, Michigan, known for his work in ecology, on August 13, aged seventy-two years.

Prof. Camille Sauvageau, formerly professor of botany in the University of Bordeaux, aged seventyfive years.

News and Views

International Relations promoted by Broadcasting

An international convention on the use of broadcasting in the cause of peace was adopted at a Conference at Geneva on September 23 and signed by representatives of eighteen countries. Russia signed with some reservations, but Hungary did not sign the convention although the Hungarian delegation had taken part in the proceedings throughout. The Italian delegation, which had also followed the proceedings with close interest, had previously been instructed to withdraw from the conference, and left expressing good wishes for its success. The text of the convention does not differ essentially from that prepared by the International Institute of Intellectual Co-operation at the request of the Assembly of the League of Nations. There are fifteen articles, of which six deal with matters of substance. The purpose of the convention is to ensure that broadcasting is never used in a manner prejudicial to good international understanding. A distinction is made between messages in the nature of a direct appeal to the inhabitants of another country and those designed primarily for national listeners. The former are prohibited in so far as they incite to acts incompatible with the internal peace or security of the territory

of another party. States are bound under the convention to prohibit any broadcast likely to prejudice good international understanding by statements the incorrectness of which is, or ought to be, known to those responsible for the broadcast and to ensure that such statements are rectified immediately. Under a special provision, Governments agree, especially in time of crisis, to ensure the accuracy of the information concerning international relations broadcast within their territories. Provision is also made for the exchange of information calculated to promote a better knowledge of civilization and the conditions of life in the countries concerned and also for arbitration and conciliation procedure in the event of a dispute.

Co-operation between Oxford and Cambridge

In Convocation at Oxford on October 7, the Vice-Chancellor announced a scheme for co-operation in academic work which has been discussed by the governing bodies of the Universities of Oxford and Cambridge. It is proposed to promote legislation to allow students, whether undergraduate or post-graduate, from either university to go to the other for special courses of study and to keep residence

while doing so. Facilities available at one of the universities only may thus be made available for common use, and studies of insufficient general interest to make it worth while for each university to have its own department need not be duplicated; it is possible that some existing duplication can be eliminated and the funds thus set free used for urgent needs. At first sight, this proposed innovation seems a great break with the traditions of the older universities; but there is no doubt of its excellence in principle. The college authorities, it is expected, will be less in favour of it than the university, but this is probably all to the good. They will see to it that the proposed freedom to migrate for a term or more will not be abused; that, in fact, only those who will greatly benefit by the change will be encouraged to enjoy it. With respect to facilities for instruction and research in science, it is likely that Oxford students will benefit more than Cambridge from the new proposal, at least at the undergraduate stage. The honours man at Oxford in science has generally but one subject to specialize in and consequently has time to take extra courses elsewhere; at Cambridge he is partly occupied with other subjects: and, of course, at Cambridge facilities for work in science are on a much more generous scale than at Oxford.

Research in Social Studies

THE Vice-Chancellor also spoke encouragingly of the scheme for research in social studies at Oxford made possible by the five-year grant from the Rockefeller Foundation which has now been in operation for a year. An institute of statistics has been started, several research lecturers have been appointed, and promising schemes of combined research in Colonial Government, in politics, in social services, and in economics have been begun. The first year of the experiment has been a great success. Research activity in other humane studies is also increasing remarkably. Since 1931 the number of those working for research degrees in the humane faculties has risen from 145 to 256.

Rhodes Memorial Lectures: Dr. E. Hubble

THE Rhodes Memorial Lectures at Oxford will be delivered during the Michaelmas Term by Dr. Edwin Hubble, of the Mount Wilson Observatory. They will be given at 5 p.m. on October 29, November 12 and November 26 in the Milner Hall of Rhodes House, Oxford. The lectures will bear the general title of "The Observational Approach to Cosmology", and will deal in turn with the observational characteristics of that region of the universe accessible to telescopes now in operation, secondly with empirical tests of the physical nature of the spectroscopic 'red-shift', and finally in the third lecture with the possible models of the universe which follow from the previously established interpretation of 'red-shift'. Dr. Hubble, who is himself a former Rhodes scholar, is well known in England. As a result of his discovery of Cepheid variables in the extra galactic nebulæ, and his determination of their periods, nebulæ such as those in Andromeda were first definitely revealed as systems of stars comparable in dimensions with the huge galactic system of which our sun is a part. Working out from the nearer of these objects, and using his own determinations of their apparent luminosities, Hubble was enabled by statistical methods to find the distances of these objects in a volume of space of 300 million light years radius; from these distances and the velocity determinations of Slipher and Humason, he first established in 1929 the existence of a linear relation between distance and velocity (assuming the observed spectroscopic 'red-shift' to be due to Doppler effect).

Hubble's law, it need scarcely be added, is basic to all discussions of the expanding universe, whether in the relativistic form of Lemaître, Eddington and de Sitter, or in the kinematic form of Milne. As clearly set out in his Halley Lecture at Oxford in 1934, Hubble himself, however, has been led to seek whether there do not exist observational methods of determining whether this 'red-shift' is due to a velocity of recession, or to some other, as yet unspecified, physical cause. There will, therefore, be a widespread interest in his Rhodes Memorial Lectures, not only because they will reveal the conclusions which he has reached in this matter, but also because they may be expected to show the results of the furthermost exploration of the universe which can be carried out with the existing instrumental equipment.

Radcliffe Travelling Fellowship in Astronomy

THE Board of Visitors of the University Observatory, Oxford, is inviting applications for the Radcliffe travelling fellowship in astronomy. This new fellowship in observational astrophysics, open to all suitably qualified astronomers irrespective of nationality, carries an annual salary not in excess of £700, the exact amount of which is fixed by the Board. The fellow will divide his time approximately equally between the new Radcliffe Observatory in Pretoria with its 74-inch reflecting telescope, and the University Observatory, Oxford, with its new solar equipment, and will work on problems of his own choosing in observational astrophysics. The tenure of the fellowship is normally three years, but this period may be extended (or shortened) if this seems desirable in the case of a successful candidate. The fellowship therefore represents a stage in restoring the balance between observational and theoretical astronomy in England, now overweighted in favour of the latter, and at the same time marks the beginning of a new period of friendly and close collaboration between the two observatories concerned. The fellowship is being financed by the Radcliffe trustees, as an earnest of their interest in the study of astronomy in Oxford, while the nomination to and the emoluments of the fellowship are in the hands of the University.

The Harvard Tercentenary Celebrations

ELSEWHERE in this issue (p. 667) we print an account of the impressive functions by which the tercentenary of the foundation of Harvard University