## Society for Water Treatment and Examination

At a meeting at the Royal Institute of Chemistry on March 15, attended by some thirty chemists or microbiologists engaged in water treatment and examination, whether for public supply or industrial purposes, it was unanimously decided to form a Society for Water Treatment and Examination. The following officers were elected: *Chairman*, G. U. Houghton; *Hon. Secretary*, A. W. H. McCanlis (c/o Sutton District Water Company, 41 Carshalton Road, Sutton, Surrey); *Hon. Treasurer*, A. G. Knight; *Committee*, H. G. Cheeseworth, J. D. Joseph, W. S. Holden and L. Allen.

It was decided that there should be no entrance fee and that the annual subscription be  $\pounds 1$  1s. 0d. It was also decided that the Society should meet at least twice per annum, once in London for the annual general meeting and the second time, if possible, outside London. The Society is open to all *bona fide* chemists or microbiologists who are engaged in the treatment or examination of waters. The aims of the Society are to assist its members by the reading of technical papers and the informal discussion of subjects relating to the treatment or examination of waters at the meetings of the Society. It is also proposed to organize and arrange visits by members to works and laboratories engaged in water treatment or examination, so that members should have an opportunity of seeing for themselves methods or techniques which may be new to them. It is also hoped that the Society will be invited to confer with government departments, committees and other interested bodies on matters relating to water treatment and examination, including training, qualifications, and duties of personnel.

# Council for the Promotion of Field Studies

FOLLOWING a series of articles on the field study and research centres maintained by the Council for the Promotion of Field Studies, an article commending the Council's work and inviting support for it was published in Nature of June 30, 1951. It is now announced that Imperial Chemical Industries, Ltd., has decided to enter into a deed of covenant in favour of the Council, for £750 per annum, for the seven years 1952–58. The annual Treasury maintenance grant which the Council receives through the Ministry of Education has recently been much reduced, and it is hoped that the present donation from Imperial Chemical Industries, Ltd., may set an example which other industrial bodies will wish to follow. The Council is also endeavouring to build up a bursary fund to assist deserving students who would otherwise be unable to work at the fieldcentres. Unfortunately, these are now very numerous owing to a widespread curtailment of grants for field-work by local education authorities.

#### Radar Echoes from Lightning Discharges

CONSIDERABLE interest has been recently aroused by the observation of radar echoes from lightning discharges; such observations would seem to offer a new method of investigating conditions in the discharge channel. The earliest observations of this type were described, in 1944, by J. L. Pawsey (Radiophys. Lab. Rep., RP.49.2; C.S.I.R.O., Australia, 1944), who was working on a wave-length of 150 cm. Hisao Shôno, Institute of Science and Technology, University of Tokyo, writes to direct attention to Japanese observations on a wave-length of 400 cm. (Kagaku, 17, 367 (1947); 18, 458 (1948). Rep. Inst. Sci. Tech., 1, 184 (1947); 2, 20 (1948)). More recently, lightning echoes have been observed on considerably shorter wave-lengths (10 cm.) by M. G. H. Ligda in the United States (*Bull. Amer. Met.* Soc., 31, 279 (1950)), and by I. C. Browne (wave-length  $3 \cdot 2$  cm.) working in England (*Nature*, 167, 438 (1951)). Some of the features which emerge from these observations are summarized in the following table; the variation of apparent duration of the echo with wavelength is interesting and suggestive.

Date	Observer	Wave-length	Estimated duration of echo	Remarks
1944 1947–48 1950 1951	Pawsey Shôno Ligda Browne	$ \begin{array}{c} 150 \text{ cm.} \\ 460 \\ 10 \\ 3 \cdot 2 \end{array} $	200 (m.sec.) 20 2	Intensity estimate Intensity estimate

## Museums Association : Revised Grades of Membership

THE Museums Association has adopted new Articles of Association which came into effect as from April 1 and establish seven classes of membership, as follows : honorary fellows, fellows, associates, ordinary professional members, non-professional members, student members and institutional members. Existing members of the Association have been classified into the new grades in accordance with their known qualifications, achievements and experience. In future, however, admittance to the grade of associateship will be dependent on passing the Association's diploma examinations, while elections to fellowship will be restricted to associates, of not less than five years standing, who have made outstanding contributions to the direction or literature of museums and art galleries; these professional qualifications will be indicated by the letters A.M.A. and F.M.A. respectively. Institutional membership is an arrangement whereby museums and similar bodies may join the Association corporately. The remaining classes of membership exist for those who do not wish to take or do not pass the qualifying examinations or who, though interested, are not professionally engaged in museum or art gallery work, and for students working for the diploma examinations. The Association on April 1 consisted of 383 institutional members and 558 individual members of various grades; the new lists of these are being published in the April issue of the Museums Journal (obtainable from the Museums Association, Meteorological Buildings, Exhibition Road, London, S.W.7).

# Reindeer Council of the United Kingdom

THE Reindeer Council of the United Kingdom, Annesley House, 1a Union Road, Cambridge, announces that it has received the approval of the Scottish Department of Agriculture for the use of 300 acres offered by Lieut.-Colonel J. P. Grant, of Rothiemurchus, for the first phase of an experiment with reindeer in Scotland. Work on the fence around the Rothiemurchus Forest Reindeer Reserve began in January. Mr. Mikel Utsi, a Swedish reindeer owner who is technical adviser to the Council, is sending a first consignment of eight reindeer from Narvik. The Royal Zoological Society of Scotland has offered quarantine accommodation in its park at Edinburgh, where the reindeer will remain 28 days. The Reindeer Co., Ltd., registered in Edinburgh on February 12, will carry out the practical detail of the experiment.