

### Vacation Courses in Synoptic Meteorology

For the sixth year in succession, the Royal Meteorological Society, in conjunction with the Council for the Promotion of Field Studies, held in the early autumn a vacation course in elementary synoptic meteorology at the Council's field-centre at Malham Tarn. This year, however, in view of the increasing number of applications, a parallel course for sixth-form pupils was also held at the Juniper Hall Field-Centre. The course at Malham Tarn was attended by thirty-five students, mainly undergraduates, reading for degrees in mathematics, physics and geography, and the Juniper Hall course had an attendance of thirty-two. The instructors at Malham were Mr. C. D. Ovey, lecturer in geography at the University of Cambridge, and Dr. R. S. Scorer, lecturer in meteorology, Imperial College; Mr. E. J. W. Spence dealt with the construction and use of meteorological instruments. At Juniper Hall the instructors were Mr. W. D. S. McCaffery and Mr. C. E. Wallington, both of the Meteorological Office. The visiting lecturers at Malham included Prof. P. R. Crowe, University of Manchester, who discussed "Some Problems of Tropical Weather"; Dr. D. Walker, University of Cambridge, who gave a talk on palaeo-ecology; and Prof. G. Manley, Bedford College, London, whose subject was "The Study of Climatic Variations". At Juniper Hall, Mr. R. E. Lacy, Building Research Station, dealt with meteorological problems in the building industry; Mr. H. Charnock, National Institute of Oceanography, explained the inter-relationship between oceanography and meteorology; Mr. R. A. McCormick, at present visiting Great Britain on an exchange basis between the U.S. Weather Bureau and the Meteorological Office, described the work of the former; Mr. D. H. Lucas, Central Electricity Authority Research Laboratories, spoke on smoke pollution; and Dr. R. M. Goody described research on the upper stratosphere. At Juniper Hall an excursion to the Meteorological Office Radiosonde Station at Crawley was arranged, and a visit was also paid to the Research Laboratories of the Central Electricity Authority at Leatherhead. An important part of the course consisted of observation work and the plotting of synoptic meteorological data. A novel feature at the Malham Tarn course was the use of a specially equipped meteorological van, kindly lent by the Department of Meteorology of the Imperial College of Science and Technology. Simultaneous observations of pilot balloons by two theodolites were made by radio-communication. As in previous years, various education authorities and the Education Department of the R.A.F. made it possible for some of the students to attend the courses, which are approved for grants in suitable cases. Similar courses will be held in 1956 at the Malham Tarn Field-Centre for undergraduates during August 22-29 and at Flatford Mill Field-Centre for sixth-form pupils during September 5-12. Early application is advisable.

### An Abnormal Smoke Belt over London

ABOUT 1 p.m. on Sunday, January 16, 1955, a belt of extreme darkness crossed the London area from north-west to south-east, causing widespread public interest and attention in the press. The belt of smoke and low cloud was about  $1\frac{1}{2}$  miles wide and moved at 6-18 m.p.h., taking 6-10 minutes to cross a given place. The daylight illumination as recorded at Kew

Observatory (normally about 7 kilolux at this time on overcast days in January) dropped at 1.14 p.m. from 7 kilolux to a value barely distinguishable from zero. In the November issue of the *Meteorological Magazine* (p. 342), N. G. Helliwell and M. J. Blackwell describe the physical causes. The essential features were a low inversion of temperature (increase of temperature with height instead of the usual fall) beneath which smoke was trapped, and a change of wind direction associated with the eastward movement of the centre of a depression across London. The smoke was carried north-westwards, first of all by the south wind ahead of the centre to the Chilterns, and concentrated there against a front with north-easterly winds on its northern side. As the depression moved, the wind changed to north-west and brought the smoke belt back across the London area. Trajectories of the smoke are given in the paper. It was possible from observations to trace its further movement south-east to the Sussex coast. The amount of smoke pollution at the Fuel Research Station, Greenwich, increased from 0.36 mgm. m.<sup>-3</sup> between 1 and 1.15 p.m. to 0.7 mgm. m.<sup>-3</sup> during 1.45-2.45 p.m., when the extreme darkness occurred there. At Grosvenor Road the maximum pollution of 1.3 occurred earlier, and the value at the time of darkness was 0.3. During the infamous smoke fog of December 5, 1952, the pollution reached 4.5 mgm. m.<sup>-3</sup> at Greenwich.

### University of London

THE following appointments have been made in the University of London: Dr. B. C. King, senior lecturer in the University of Glasgow, to the University chair of geology tenable at Bedford College; and Dr. K. W. Sykes, senior lecturer in the University College of Swansea, to the University chair of physical chemistry tenable at Queen Mary College. The title of reader in biochemistry in the University of London has been conferred on Dr. A. L. Greenbaum in respect of his post at University College.

### Oversea Service Division, Colonial Office

THE following appointments have recently been made in the Oversea Service Division, Colonial Office: D. C. P. Evans (agricultural officer, Gold Coast), senior agricultural officer, Gold Coast; J. S. Addison, J. S. Smith and M. L. Webber (conservators of forests, Federation of Malaya), conservators of forests, grade A, Federation of Malaya; A. Foggie (conservator of forests, Gold Coast), deputy chief conservator of forests, Gold Coast; F. G. Harper (senior assistant conservator of forests, Gold Coast), conservator of forests, Gold Coast; F. H. Landon (conservator of forests, Federation of Malaya), chief research officer, Federation of Malaya; D. McIntosh (conservator of forests, Northern Region, Nigeria), deputy chief conservator of forests, Northern Region, Nigeria; B. E. Webb (forest engineer, Federation of Malaya), conservator, development and utilization, Federation of Malaya; M. S. Garson (geologist, Nyasaland), geologist, Cyprus; Dr. E. R. N. Cooke (pathologist, Kenya), specialist (pathologist), Kenya; P. B. Cornwall (scientific officer, West African Cocoa Research Institute, Gold Coast), senior scientific officer, West African Cocoa Research Institute, Gold Coast; A. E. Dorman, J. F. Hart and R. W. E. Lewis (veterinary officers, Kenya), provincial veterinary officers, Kenya; K. D. S. MacOwan (deputy director of veterinary services, Kenya), director of