

On the break-up of the conference everyone felt that he was carrying away many new techniques, little tricks of the trade and valuable 'know-hows', for there was a very frank exchange of knowledge, even from those who represented large commercial organisations, and who might have been forgiven for hesitating to release trade secrets. There were, in fact, no such hesitations, either from the commercial or government representatives who attended, and, indeed, the liaison between the industrial and academic research workers was all that could be desired.

S. TOLANSKY

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PHYSICAL SOCIETY
ANNUAL MEETING

AT the annual general meeting of the Physical Society, held at the Royal Institution on May 6, the reports of the Council and Treasurer and the accounts and balance sheet for 1948 were presented and adopted, and the officers and Council for 1949-50 were elected as follows: *President*, Prof. S. Chapman; *Re-Presidents* who have filled the office of president, Prof. C. H. Lees, Sir Frank Smith, Sir Owen Richardson, Dr. W. H. Eccles, Prof. A. O. Rankine, Mr. T. Smith, Dr. Allan Ferguson, Sir Charles Darwin, Prof. E. N. da C. Andrade, Prof. D. Brunt, Prof. G. I. Finch; *Vice-Presidents*, Dr. W. D. Wright, Dr. W. Jevons, Mr. C. H. Collie, Prof. R. Peierls; *Honorary Secretaries*, Mr. C. G. Wynne, Dr. H. H. Hopkins; *Honorary Foreign Secretary*, Prof. E. N. da C. Andrade; *Honorary Treasurer*, Dr. H. Shaw; *Honorary Librarian*, Dr. R. W. B. Pearse; *Members of Council*, Dr. D. Roaf, Dr. A. C. G. Menzies, Dr. F. C. Toy, Mr. J. H. Awbery, Prof. L. F. Bates, Dr. R. C. Evans, Prof. L. C. Martin, Dr. C. E. Wynn-Williams, Dr. A. G. Quarrell, Dr. A. B. Wood, Prof. Willis Jackson, Prof. H. S. W. Massey.

The officers for 1949-50 of the four Groups of the Society are as follows: *Colour Group*: Chairman, Dr. W. S. Stiles; *Honorary Secretary*, Mr. R. G. Horner. *Optical Group*: Chairman, Prof. L. C. Martin; *Honorary Secretary*, Mr. G. S. Speak. *Low Temperature Group*: Chairman, Prof. F. E. Simon; *Honorary Secretary*, Dr. G. G. Haselden. *Acoustics Group*: Chairman, Mr. H. L. Kirke; *Honorary Secretaries*, Mr. W. H. Allen and Mr. A. T. Pickles.

During 1948, which the Council report states was a satisfactory year for the Society, there was a net increase in the membership of some six per cent, making the total at the end of the year only a few short of two thousand. Despite the increase in the fellows' annual subscription from two to three guineas, there were very few resignations and lapses. The financial position, though somewhat improved, still gives cause for anxiety.

In addition to the ordinary science meetings, a two-day summer meeting devoted to microwave spectroscopy was held at the Clarendon Laboratory, Oxford, and a full-day meeting at the Research Department of Metropolitan-Vickers Electrical Co., Ltd., Manchester, on surface structure and electrical properties of semiconductors. Prof. E. O. Lawrence was elected an honorary fellow in May, and Prof. R. W. Wood, one of the honorary fellows of the Society, lectured at one of the science meetings on the spontaneous deformation of crystals. The thirty-second Guthrie Lecture was delivered by Sir George

Thomson, who spoke on the growth of crystals, and Profs. S. Tolansky and Y. Rocard were the recipients of the fourth (1948) Charles Vernon Boys Prize, and the third (1948) Holweck Prize of the Physical Society and Holweck Medal of the Société Française de Physique, respectively.

The thirty-second exhibition of scientific instruments and apparatus, held in April, had an attendance of about 9,400 visitors, and was again a great success. The four subject-Groups of the Society, the Colour, Optical, Low Temperature, and Acoustics Groups, have all been active during the year, and brief details of their composition and meetings are listed in the annual report.

In addition to the *Proceedings*, the publications of the Society during the year included: vol. 11 (1946-47) of *Reports on Progress in Physics*; and special reports such as the "Report on Colour Terminology", the "Strength of Solids", a report of the 1947 Bristol Conference, and "Emission Spectra of the Night Sky and Auroræ". In order to cope with the increased number of papers suitable for publication in the *Proceedings*, and to expedite publication, it was decided that from January 1949 the *Proceedings* should appear monthly in two sections, section *A* covering atomic and sub-atomic physics, including such subjects as crystal structure, quantum mechanics and spectra, and section *B* macroscopic physics, including such subjects as acoustics, optical design and radio. A new feature, introduced in 1948 and now appearing regularly in the *Proceedings*, is "Letters to the Editor", a section similar to that of the same name appearing in *Nature*.

It is to be hoped that the sales of the special reports will improve, so that the decision of the Council to curtail the production of these reports will be rescinded.

S. WEINTROUB

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THE SMITHSONIAN INSTITUTION
REPORT FOR 1947-48

THE report of the Secretary of the Smithsonian Institution for the year ended June 30, 1948*, again emphasizes the handicap placed on the work of the Institution by shortage of staff and of adequate buildings. Additions to the collections of the National Museum during the year numbered 507,000, and field parties from the Museum visited Arnhem Land in Australia, the antarctic continent, the Bikini area in the Pacific, the Persian Gulf, Colombia, Panama, and other parts of the world. The Department of Biology has been divided into those of Zoology and Botany, and the Division of Aeronautics has become the nucleus of the National Air Museum.

The director of the Bureau of American Ethnology conducted archaeological excavations in western Panama in co-operation with the National Geographic Society, discovering a new, very early culture, while the associate director of the Bureau was occupied mainly with the river basin surveys. Surveys made in eighteen States and thirty-eight reservoir areas have led to 250 sites being recommended for excavation to recover archaeological material which might be lost through the construction of dams and river valley reservoirs. An autonomous unit of the

* Report of the Secretary of the Smithsonian Institution and Financial Report of the Executive Committee of the Board of Regents for the Year ended June 30, 1948. (Publication 3952.) Pp. ix+158. (Washington, D.C.: Government Printing Office, 1948.) 55 cents.

Bureau, the Institute of Social Anthropology, gave courses in anthropology and conducted co-operative field work in Brazil, Columbia, Mexico and Peru.

The International Exchange Service made the first shipments of exchange publications to Japan since the War, and now sends consignments to all countries except Roumania. In return for similar material received from other countries, ninety-four sets of United States official publications, seventy-three copies of the Federal Register, and sixty-six copies of the Congressional Record were sent abroad. Visitors to the National Zoological Park increased by more than 300,000, and the collection at the close of the year totalled 2,797 animals representing 690 different species. The Astrophysical Observatory terminated the sun and sky radiation studies at Camp Lee, but similar studies will continue at the Montezuma and Miami stations. Promising sites for a new high-altitude station were located in Mexico, southern California, and the Hawaiian Islands. The Division of Radiation and Organism substantially completed its studies of the respiration of broad-leaf plants, the effects of environmental factors on the germination of lettuce seeds, and the developmental physiology of grass seedlings.

A total of 165,740 copies of Smithsonian publications was distributed during the year, and a complete list of the publications during the year is appended. The Library received 53,129 publications, and 36,701 pieces from its collection of duplicates were selected for destroyed libraries overseas. About half the 915,987 volumes of the Library are housed as the Smithsonian Deposit in the Library of Congress. The financial report of the executive committee of the Board of Regents and the usual departmental reports are appended.

LICHENS OF ANTARCTICA

IN a vegetation devoid of vascular plants, as the Antarctic continent is generally believed to be, the lichens assume a quite unusual importance. The meticulous study of the lichens of Antarctica and the subantarctic islands recently published (B.A.N.Z., Antarctic Research Expedition Report. Vol. 7, Lichens and Lichen Parasites, by C. W. Dodge. Adelaide, 1948) is therefore a very significant contribution to knowledge of these remote and inhospitable regions, incomplete as it must necessarily be.

The material was collected by several different expeditions, the Australian Antarctic Expedition of 1911-14, the British, Australian, New Zealand Expedition of 1929-31, and there is some residual material from the British Antarctic Expedition of 1907-9. Unfortunately, a large part of the collections from the subantarctic islands of the Indian Ocean visited by the 1929-31 expedition was lost during the bombing of London, having accidentally been sent to the British Museum; but it is indeed fortunate that the bulk of the collections had been sent to the Herbarium of the Missouri Botanic Garden, in which the most complete set has been retained, and that Dr. Dodge was free to devote the very considerable amount of skilled attention to them that this publication obviously shows.

It is not profitable to summarize the purely taxonomic side of the work which will only concern the specialist, but no plant geographer can afford to

ignore the implications of geographical distribution outlined in the introduction. Three totally distinct floras are discerned, that of Antarctica itself, which is still very imperfectly known, that of Macquarie Island, which seems wholly unrelated to it though with some affinities with both New Zealand and Tasmania, and thirdly "Kerguelia", which is the name used to cover Kerguelen Island, Heard Island, the Crozets and Prince Edward Island groups.

The lichen flora of Kerguelia is remarkable for the very high proportion of endemism in it, possibly all, and certainly 118 out of the total of 124 known species, being in this category. This can only mean very prolonged isolation. The generic affinities, many of which are also endemics, are, however, of even greater interest since they seem to imply remote physical connexions of some kind over immense distances in the most diverse directions, which include Fuegia, the Auckland Islands, South Africa and the Andes. Evidence of this kind, though insufficient in itself to establish major hypotheses such as that of continental drift, is nevertheless closely cognate to any discussion of such problems. This is perhaps the most important aspect of the study of lichen distribution in the southern hemisphere, since lichens, more perhaps than any other form of plant life, have special limitations in their mode of distribution over long distances. It is therefore greatly to be hoped that further contributions will in due course be made to this very promising, though hitherto much neglected and difficult, field of inquiry.

FORTHCOMING EVENTS

Tuesday, June 7

BRITISH SOCIETY FOR THE HISTORY OF SCIENCE (in the Lecture Theatre, Science Museum, Exhibition Road, London, S.W.7), at 5 p.m.—Dr. A. C. Crombie: "Theory and Experiment in the Science of Robert Grosseteste"; Mr. H. C. King: "The Optical Work of Charles Tillyer".

ROYAL ANTHROPOLOGICAL INSTITUTE (at 21 Bedford Square, London, W.C.1), at 5 p.m.—Dr. Ake Campbell: "The Colonization of Lapland and Culture Contacts between Farmers and Nomads".

Wednesday, June 8

GEOLOGICAL SOCIETY OF LONDON (at Burlington House, Piccadilly, London, W.1), at 5 p.m.—Scientific Papers.

INSTITUTE OF PETROLEUM (at Manson House, 26 Portland Place, London, W.1), at 5.30 p.m.—Symposium on "Combustion of Hydrocarbons".

Thursday, June 9

ROYAL STATISTICAL SOCIETY, RESEARCH SECTION (at the E.L.M.A. Lighting Service Bureau, 2 Savoy Hill, London, W.C.2), at 2.30 p.m.—Symposium on "Stochastic Processes".

RESEARCH DEFENCE SOCIETY (at Manson House, Royal Society of Tropical Medicine and Hygiene, 26 Portland Place, London, W.1), at 3.15 p.m.—Annual General Meeting; Prof. C. Lovatt Evans, F.R.S.: "Physiological Research and the Vivisection Act" (Eighteenth Stephen Paget Memorial Lecture).

Friday, June 10

PHYSICAL SOCIETY (at the Science Museum, Exhibition Road, London, S.W.7), at 5 p.m.—Mr. T. Smith, F.R.S.: "The Contributions of Thomas Young to Geometrical Optics, and their Application to Present-day Questions" (Thomas Young Oration). (Members of the Optical Group are invited.)

GEOLOGISTS' ASSOCIATION (at the Geological Society, Burlington House, Piccadilly, London, W.1), at 6 p.m.—Prof. S. W. Wooldridge: "The Structure and Morphology of the Country around Fernhurst, Sussex".

APPOINTMENTS VACANT

APPLICATIONS invited for the following appointments on or before the dates mentioned:

LECTURER IN CHEMISTRY—The Secretary, Northampton Polytechnic, St. John Street, London, E.C.1 (June 11).

LECTURERS IN BIOLOGICAL SUBJECTS (Botany and Zoology)—The Principal, Central Technical College, Suffolk Street, Birmingham 1 (June 11).