at Ashfield possessed an optical rotation of +2·5° to 3·2° and were free from phellandrene. *E. Macarthuri* gave remarkable yields, varying from 0·5 to 0·74 per cent., as compared with 0·2 per cent. yield from the ordinary native material, whilst the geranyl acetate varied from 62 per cent. to 75 per cent., thus showing the influence of ecological conditions. *E. citriodora* yielded oils from 0·5 per cent. to 1 per cent., containing from 90 to 98 per cent. citronellal, and it would appear as if there were separate races existing within this species.—Miss P. **Nicol**: An investigation of the optical properties of selenium in the conducting form. Methods of preparing mirrors of selenium are described. The method gives values of γ_0 generally correct to within about 3 per cent. and of κ_0 to within 5 per cent. The values obtained vary within fairly wide limits, depending on the method of preparation (casting on glass, polishing, grinding, etc.). The results obtained are:

λ= 6470-4170	ν_0=2·7 -3·36	κ_0=0·45-0·9
λ= 5890-5896	ν_0=2·75-3·06	κ_0=0·77-1·07
λ=21900-8100	ν_0=2·59-3·02	κ_0=0·90-1·18
λ= 4400-4800	ν_0=2·74-3·04	κ_0=1·05-1·27

Some rough measures in the near infra red indicated $\kappa_0<0·1$ and ν_0 about 2·6. There was no definite indication of any relation between the temperature of transformation to the conducting form and the optical properties, nor was there any variation with the length of exposure to light or with the age of the specimen.

VIENNA.

Academy of Sciences, July 1.—F. **Hemmelmayr** and J. **Strehly**: Contributions to our knowledge of skoparin. Apparently this substance contains seven hydroxyl groups, and its formula is $C_{22}H_{22}O_{11}$ rather than $C_{20}H_{20}O_{10}$.—L. **Schmidt** and R. **Stöhr**: Two substances similar to stearine from *Asclepias syriaca*. A monovalent unsaturated alcohol $C_{31}H_{52}O$ and a divalent unsaturated alcohol $C_{45}H_{74}O_2$ have been obtained.—L. **Waldmann**: Petrographic description of the stones collected by L. Kober in the northern Hegas and in the Taurus.

Official Publications Received.

International Hydrographic Bureau. Special Publication No. 12: Investigation of Harmonic Constants, Prediction of Tide and Current, and their Description by Means of these Constants. By Rear-Admiral Phaff. Pp. 80+6 plates. 5 Swiss francs. Supplement to Special Publication No. 12: Tables for the Calculation of Tides by Means of Harmonic Constants. Pp. 136. (Monaco.)

Straits Settlements. Annual Report on the Raffles Museum and Library for the Year 1925. By C. Boden Kloss. Pp. 14. (Singapore: Government Printing Office.)

Union of South Africa: Department of Agriculture. Reprint No. 4, 1925: Weeds of South Africa, Part 3. By K. A. Lansdell. Pp. 34+5 plates. (Pretoria: Government Printing and Stationery Office.) 3*d*.

The National University of Ireland. Calendar for the Year 1926. Pp. viii+329+431+156. (Dublin.)

Department of Scientific and Industrial Research. Summary of Progress of the Geological Survey of Great Britain and the Museum of Practical Geology for the Year 1925; with Report of the Geological Survey Board and Report of the Director. Pp. vi+211+12 plates. (London: H.M. Stationery Office; Southampton: Ordnance Survey Office.) 4*s*. 6*d*. net.

University of Bristol. The Annual Report of the Agricultural and Horticultural Research Station (The National Fruit and Cider Institute), Long Ashton, Bristol, 1925. Pp. 152+11 plates. (Bristol.)

Report of the Imperial Institute of Veterinary Research, Muktesar, for the Year ending 31st March 1925. Pp. ii+59. (Calcutta: Government of India Central Publication Branch.) 1.14 rupees; 3*s*. 3*d*.

Records of the Geological Survey of India. Vol. 59, Part 1: General Report for 1925, by Dr. E. H. Pascoe; The Zonal Distribution and Description of the larger Foraminifera of the Middle and Lower Kirthar Series (Middle Eocene) and parts of Western India, by W. L. F. Nuttall. Pp. 164+8 plates. (Calcutta: Government of India Central Publication Branch.) 2.12 rupees; 5*s*.

Ceylon Journal of Science. Section A: Botany. Annals of the Royal Botanic Gardens, Peradeniya. Edited by A. H. G. Alston. Vol. 10, Part 1, June 15th. Pp. 144+2 plates. (Peradeniya: Director of Agriculture; London: Dulau and Co., Ltd.) 3 rupees.

The Scientific Proceedings of the Royal Dublin Society. Vol. 18 (N.S.), No. 22: The Downy Mildew of Onions (Perenospora Schleideni), with particular reference to the Hibernation of the Parasite. By Dr. Paul A. Murphy and Robert M'Kay. Pp. 237-261+plates 12-15. 4*s*. Vol. 18 (N.S.), No. 23: A simple Method of Temperature Control for use with Refractometers and Polarimeters. By Michael T. Casey. Pp. 263-264. 6*d*. Vol. 18 (N.S.), No. 24: The Dehydration Rates of Conifer Leaves in relation to Pentosan Content. By Joseph Doyle and Phyllis Clinch. Pp. 265-275. 1*s*. (Dublin.)

Forestry Commission. Sixth Annual Report of the Forestry Commissioners, Year ending September 30th, 1925. Pp. 32. (London: H.M. Stationery Office.) 9*d*. net.

Jamaica. Annual Report of the Department of Agriculture for the Year ended 31st December 1925. Pp. 23. (Jamaica, B.W.I.)

Diary of Societies.

SATURDAY, AUGUST 21.

NORTH OF ENGLAND INSTITUTE OF MINING AND MECHANICAL ENGINEERS (Annual Meeting) (at Newcastle-upon-Tyne), at 2.30.

CONGRESSES.

AUGUST 27 AND 28.

IRON AND STEEL INSTITUTE (Autumn Meeting) (at Stockholm).—F. Adcock: The Effect of Nitrogen on Chromium and some Iron Chromium Alloys (Alloys of Iron Research, Part IV.).—J. H. Andrew and H. A. Dickie: A Physical Investigation into the Cause of Temper Brittleness.—Prof. C. Benedicks, H. Bäckström, and P. Sederholm: Anomalies in Heat Conduction, with some Determinations of Thermal Conductivity in Iron and Carbon Steels.—Prof. C. Benedicks and R. Sundberg: Electrochemical Potentials of Carbon and Chromium Steels.—G. F. Comstock: The Treatment of Steel with Ferro Carbon-Titanium.—G. A. Hankins, D. Hanson, and Miss G. W. Ford: The Mechanical Properties of Four Heat-Treated Spring Steels.—Prof. K. Honda: Is the Direct Change from Austenite to Troostite Possible?—A. Johansson and R. Von Seth: The Carburisation and Decarburisation of Iron and Some Investigations on the Surface Decarburisation of Steel.—A. Johansson and A. Wahlberg: The Development of the Swedish Iron and Steel Industry during the last thirty years.—E. Kinander: Notes on Jernkontoret.—A. Lundgren: The Testing of Hardened Steel.—W. Petersson: Notes on the Development of the Swedish Mining Industry during the last twenty-five years.—G. Phragmen: The Constitution of the Iron-Silicon Alloys.

AUGUST 29 TO SEPTEMBER 1.

SOCIÉTÉ HELVÉTIQUE DES SCIENCES NATURELLES (at Fribourg).—In Sections devoted to Mathematics, Physics, Geophysics, Meteorology and Astronomy, Chemistry, Geology, Mineralogy and Petrography, General Botany, Special Botany and Geographical Botany, Zoology, Entomology, Anthropology and Ethnology, Palæontology, Medical Biology, History of Medicine and Natural Science.

AUGUST 31 TO SEPTEMBER 8.

WORLD POWER CONFERENCE (at Basle), Technical Programme of Sectional Meeting:

Utilisation of Water Power, and Inland Navigation.
Exchange of Electrical Energy between Countries.
The Economic Relation between Electrical Energy Produced Hydraulically and Electrical Energy Produced Thermally: Conditions under which the two systems can work together with advantage.
Electricity in Agriculture.
Railway Electrification.

SEPTEMBER 1 TO 4.

INSTITUTE OF METALS (Autumn Meeting) (at Liége) (September 1, at 8.—Dr. W. Rosenhain: Ancient Industries and Modern Metallurgy) (Autumn Lecture).—Dr. C. J. Smithells, H. P. Rooksby, and W. R. Pitkin: The Deformation of Tungsten Crystals.—Prof. K. Honda: A Comparison of Static and Dynamic Tensile and Notched-Bar Tests.—C. H. M. Jenkins: The Constitution and the Physical Properties of the Alloys of Cadmium and Zinc.—H. J. Gough, S. J. Wright, and Dr. D. Hanson: Some Further Experiments on the Behaviour of Single Crystals of Aluminium under Reversed Torsional Stresses.—B. Ôtani: Silumin and its Structure.—G. B. Phillips: The Primitive Copper Industry of America. Part II.—Kathleen E. Bingham: The Constitution and Age-Hardening of Some Ternary and Quaternary Alloys of Aluminium containing Nickel.—Dr. A. G. C. Gwyer and H. W. L. Phillips: The Constitution and Structure of the Commercial Aluminium-Silicon Alloys. With an Appendix upon The Properties of the Modified Aluminium-Silicon Alloys, by Dr. D. Stockdale and I. Wilkinson.—J. D. Grogan: Some Mechanical Properties of Silicon-Aluminium Alloys.—Dr. C. S. Smith and Prof. C. R. Hayward: The Action of Hydrogen on Hot Solid Copper.—Capt. F. R. Barton: The Development of the Use of Nickel in Coinage.—A. Pinkerton and W. H. Tait: Season-Cracking in Arsenical Copper Tubes.—Prof. P. Chevenard: Thermal Anomalies of Certain Solid Solutions.—W. T. Cook and W. R. D. Jones: Preliminary Experiments on the Copper-Magnesium Alloys.—F. W. Rowe: Bronze Worm Gear Blanks produced by Centrifugal Casting.—L. Boscheron: An Account of the Non-Ferrous Metals Industry in the Liége District.

SEPTEMBER 6 TO 11.

AMERICAN CHEMICAL SOCIETY (at Philadelphia).—In eighteen Divisional Gatherings, dealing with various branches of Pure and Applied Chemistry.

SEPTEMBER 13 TO 17.

INTERNATIONAL CONGRESS OF PHILOSOPHY (at Harvard University, Cambridge, Mass.).

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