

$4\text{Sm}_2(\text{SO}_4)_3$ ,  $5\text{Na}_2\text{SO}_4$ ,  $8\text{H}_2\text{O}$ . P. PRINCIPI: Observations on the analogies existing between the tertiary deposits of Albania and those of central Italy. A. CAVINATO: Contribution to the knowledge of the petrography of Sardinia. A characteristic Kersantitic vein with prasinitic facies in Sarrabus. A. MIRRI: Diagnosis of *Brucella* in animals: *Brucellina Mirri*. A method is given for obtaining a brucelline preparation which serves as a sensitive means of diagnosing *Brucella* in animals, and has advantages over the agglutination test for this purpose. R. SAVELLI: Observations on some elaborates of the cells of the chlorenchyme. G. AMANTEA: The effects of slow and repeated asphyxia in an enclosed space. D. GIGANTE: Observations on the course of the reconstructive processes in the pigeon.

## VIENNA

Academy of Sciences, November 8. RUDOLF KANITSCHIEDER: Mechanics of the Föhn (south wind). K. W. F. KOHLRAUSCH and F. KÖPPL: The Raman effect. (38) The Raman spectrum of organic substances (isomeric paraffin derivatives). Repetition of previous measurements and examination of a number of new compounds give results which are considered in relation to free rotatability. These results, and also the intensity differences in the spectra of paraffins containing chlorine, bromine or iodine as substituents, are in agreement with the view that the rotation leads to two different, stable space-forms. The spectral transition,  $\text{CCl}_4 \rightarrow \text{CH}_3\text{CCl}_3 \rightarrow (\text{CH}_3)_2\text{CCl}_2 \rightarrow (\text{CH}_3)_3\text{CCl} \rightarrow (\text{CH}_3)_4\text{C}$  is also discussed. K. W. F. KOHLRAUSCH and A. PONGRATZ: The Raman spectrum of polysubstituted benzenes. The vibration spectra of the nucleus-substituted benzenes,  $\text{C}_6\text{H}_4\text{X}$ , where X =  $\text{NH}_2$ , OH, F, CN, Br, or I in the ortho-, meta-, or para-position, are described.

November 14. ERNST BEUTEL and ARTUR KUTZELNIGG: The action of liquid bromine on cellulose. Contrary to previous statements, bromine is able, under suitable conditions, to dissolve cellulose fibres completely, the time required varying from several weeks at the ordinary temperature to a few minutes at  $100^\circ\text{C}$ . JOVAN JURIŠIĆ: The identity of *Bryophyllum cochlearatum*, Lemaire, with *Bryophyllum proliferum*, Bowie, with biological remarks.

November 22. LEOPOLD PORTHEIM, H. STEIDL and F. KÖCK: Orienting investigations on the influence of ultra-short waves on blossoms. LEOPOLD PORTHEIM and O. RIED: Influence of ultra-short waves on salt solutions previously irradiated with ultraviolet light. B. NUSSBAUM and TH. SENEKOVIC: Callus formation in herbaceous plants. ERNST CHWALLA and JOHANNES JAUMANN: The magneto-elastic method for the direct measurement of forces in the iron in ferro-concrete structures. ELISE HOFMANN, WILHELM KÜHNELT and JULIUS PIA: Evergreen oaks in the alluvium of Lower Austria. EUGEN GUTH: The mutual action between rapid electrons and atomic nuclei. ERICH HAJEK: Potentiometric examination of hydroxide precipitation. ANTON SKRABAL and HELLMUT SCHREINER: Velocity of reduction of chloric and bromic acids. The velocity with which chlorates and bromates are reduced by chlorides, bromides and iodides in acid solution is proportional to the concentrations of the oxy-salt and halides and to the square of the acidity. With the bromate-bromide reaction, the velocity is proportional to the square of the concentration of the bromide, if this is high.

## Forthcoming Events

[Meetings marked with an asterisk are open to the public.]

## Sunday, January 27

BRITISH MUSEUM (NATURAL HISTORY), at 3 and 4.30.—M. A. Phillips: "Gem Stones".\*

## Monday, January 28

BRITISH MUSEUM (NATURAL HISTORY), at 11.30.—F. C. Fraser: "Stranded Whales on the British Coast".\*

VICTORIA INSTITUTE, at 4.30.—Dr. K. B. Aikman: "Race Mixture with some Reference to Bible History".

UNIVERSITY OF LEEDS, at 5.15.—Prof. W. J. Tulloch: "The Virus Agents considered as a Problem of General Biology".\*

ROYAL GEOGRAPHICAL SOCIETY, at 5.30.—Miss E. J. Lindgren: "Winter and Summer Travel in the North Manchurian Woods" (Film).

ROYAL SOCIETY OF ARTS, at 8.—Dr. Harriette Chick: "Diet and Climate" (Cantor Lectures. Succeeding lecture on February 4).

UNIVERSITY OF GLASGOW, at 8.30.—Sir Robert Greig: "National Progress in Agriculture".\*

## Tuesday, January 29

ROYAL SOCIETY OF ARTS, at 4.30.—H. C. Sampson: "The Royal Botanic Gardens, Kew, and Empire Agriculture".

## Thursday, January 31

BEDFORD COLLEGE FOR WOMEN, at 5.15.—Dr. J. K. Fotheringham: "Ways of Measuring Time—Ancient Clocks".\*

## Friday, February 1

WESTFIELD COLLEGE, LONDON, at 5.15.—Sir Arthur Eddington: "Cosmic Clouds and Nebulae".\*

ROYAL INSTITUTION, at 9.—Prof. F. Simon: "The Approach to the Absolute Zero of Temperature".

## Official Publications Received

## GREAT BRITAIN AND IRELAND

County Borough of Southport: Meteorological Department. The Fernley Observatory, Southport. Report and Results of Observations for the Year 1933; with an Appendix. By Joseph Baxendell. Pp. 31. (Southport.)

Ministry of Agriculture and Fisheries. Collected Leaflets, No. 3: Diseases of Potatoes. Pp. iv+74+9 plates. (London: H.M. Stationery Office.) 1s. 6d. net.

Board of Education: Science Museum. Rubber Exhibition (November 1934–April 1935). A Brief Account of the History of Rubber from its Source to the Finished Product and a Descriptive Catalogue of the Exhibits. Compiled by the Rubber Growers' Association. Pp. 44+4 plates. (London: H.M. Stationery Office.) 6d. net.

## OTHER COUNTRIES

Commonwealth of Australia: Council for Scientific and Industrial Research. Bulletin No. 83: Natural Pastures: their Response to Superphosphate. By Dr. J. Griffiths Davies, A. E. Scott and K. M. Fraser. Pp. 76. Pamphlet No. 49: Some Important Poison Plants of North Australia. Compiled by the Poison Plants Committee. Pp. 44. (Melbourne: Government Printer.)

Smithsonian Institution: Freer Gallery of Art. Oriental Studies, No. 2: A Descriptive and Illustrated Catalogue of Miniature Paintings of the Jaina Kalpasūtra, as executed in the Early Western Indian Style. By Prof. W. Norman Brown. (Publication 3252). Pp. v+66+45 plates. (Washington, D.C.: Smithsonian Institution.)

Contributions from the Physical Laboratories of Harvard University for the Years 1932 and 1933. Vol. 22. Pp. iv+506. (Cambridge, Mass.: Harvard University.)

Department of Agriculture, Trinidad and Tobago. Vol. 1, Part 6: Flora of Trinidad and Tobago—Myrtales (Pars). By R. O. Williams. Pp. 333–410. (Trinidad: Government Printer.) 3s.

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