

small intrusions is usually attributed to the lateral displacement of wall-rock.

A. BOLLIGER: Chemistry of Jaffe's reaction for creatinine. Jaffe's reaction, that is, the interaction of creatinine and picric acid in an alkaline medium, was studied. If this reaction is executed in alcohol, an orange-red crystalline compound can be obtained which consists of one molecule of creatinine, one of picric acid, and two of sodium. This substance may be responsible for the red colour obtained in Jaffe's reaction. The chemical constitution of this compound has been considered to be that of an organic molecular complex between sodium picrate and 'sodium creatinine'. On treatment with acid it furnishes a red isomer of creatinine picrate.

E. H. BOOTH: Some observations of zonal discordance in diurnal magnetic variations. Sets of readings have been (and are being) taken at the station "Hills and Dales", Mittagong, a district where the magnetic variations from point to point are small, for comparison with concurrent readings at the magnetic station of the Victorian Government at Toolangi. "Hills and Dales" is on the side of the magnetic mass of the "Gib", a syenite hill rising 800 feet above the surrounding country; so that it is both on a magnetized body and on a prominence. The results, after full correction, show that though there is generally fair co-ordination with Toolangi readings, the "Hills and Dales" readings are often swinging in a direction opposite to those of the Victorian station, and sometimes show magnetic fluctuations twice as great as those occurring at the same time at Toolangi even when atmospheric conditions are not abnormal. The conclusion is drawn that it is not safe to accept the variations at an established magnetic station to apply as corrections to a survey over magnetic prominences.

M. D. GARRETTY: Geological notes on the country between the Yass and Shoalhaven Rivers. The regional geology of about 1,600 square miles of country on the southern tablelands of New South Wales is briefly described. Probable representatives of the Upper Ordovician, Lower and Upper Silurian, Middle and Upper Devonian, Kamilaroi and Tertiary systems occur. Granites of epi-Silurian and epi-Devonian age cover considerable areas, and associated with them are examples of differentiated and hybrid rocks. The general structure of the region is discussed.

### Vienna

Academy of Sciences, December 3.

E. DITTLER and A. HOFMANN: Substitution of the group (Mg<sub>2</sub>) by (LiAl) in magnesium silicates.

W. J. MÜLLER: Local current theory of metal potentials (2). Metal potentials in oxidizing solutions.

J. LINDNER, W. WIRTH and B. ZAUNBAUER: Aromatic halogen phosphine and its suitability for gravimetric analysis of water.

O. KRATKY and G. GIACOMELLO: Crystal structure of paraffin carboxylic choleic acid.

H. DOSTAL: Fundamentals of the kinetics of mixed polymerizations.

HANS SEELMEIER: Upper Silurian graptolites of the Gugel (Carnic Alps).

OTMAR M. FRIEDRICH: Mineralization of the Noek region.

KARL PRZIBRAM: Red fluorescence band of divalent samarium. The red fluorescence, observed in many fluorites after irradiation with radium, is shown to be due to traces of samarium.

LEONORE BRECHER: Coloration of the chrysalides of the cabbage white butterfly, *Pieris brassicae* L., and of the vanessæ, *Vanessa io* L. and *V. urticae* L. The effect of severing various nerves on the adaptation of the colour of the chrysalis to its surroundings is studied.

MARTHA GEIRINGER: Adrenalin as a synergist of thyroxin in the metamorphosis of toads (*Bufo vulgaris* Laur.).

JOSEF GLASER: Innervation of one or two legs grafted on *Dixippus morosus* Br. and Redt.

December 10.

ERWIN KAMPTNER: Coccolites of the south-west coast of Istria.

F. BUKATSCH: Influence of salts on the production of light by bacteria. Addition of salts increases the production of light, not by increasing the number of cells, but by increasing the light production of the individual cell.

## Forthcoming Events

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

Monday, March 22

VICTORIA INSTITUTE, at 4.30.—Rev. T. E. R. Phillips: "Some Recent Views of the Universe and their Reactions on present-day Thought".

ENGINEERS' STUDY GROUP, at 7.30—(at 23, Grosvenor Place, S.W.1).—Prof. R. A. Fisher, F.R.S.: "Family Allowances".\*

Tuesday, March 23

HOUSE OF INDUSTRY LEAGUE, at 8.15—(Essex Hall, Essex Street, Strand, W.C.1).—Dr. V. Cofman: "The Scientist's Task in the New Order".\*

Wednesday, March 24

INSTITUTION OF CHEMICAL ENGINEERS, at 6—(at the Chemical Society, Burlington House, W.1).—Dr. D. Hunter: "Prevention of Disease in Industry".

## Appointments Vacant

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

SCIENTIFIC OFFICERS (radio and line communication), JUNIOR SCIENTIFIC OFFICERS (radio and line communication) and ASSISTANTS (Grades II and III—physics or electrical engineering) at the Bawdsey Research Station, Bawdsey Manor, Woodbridge, Suffolk—The Superintendent, Bawdsey Research Station, Bawdsey Manor, Woodbridge, Suffolk (March 22).

JUNIOR ASSISTANT ENTOMOLOGIST (sugar beet pests) in the School of Agriculture, Cambridge—The Secretary (March 30).

PRINCIPAL of the Huddersfield Technical College—The Director of Education, Education Offices, Peel Street, Huddersfield (March 31).

LECTURER IN MATHEMATICS in the Sir John Cass Technical Institute, Jewry Street, Aldgate, E.C.3—The Principal (April 3).

HEAD OF THE MECHANICAL ENGINEERING DEPARTMENT in the Rutherford Technical College—The Director of Education, City Education Office, Northumberland Road, Newcastle-upon-Tyne (April 7).

LECTURER IN CHARGE OF THE DEPARTMENT OF BOTANY in University College, Leicester—The Registrar (April 10).

PRINCIPAL AND HEADMASTER of the Gravesend Technical Institute and Junior Technical School—W. A. Clench, Bank Chambers, Windmill Street, Gravesend (April 10).

LECTURER IN GEOLOGY in the University of Birmingham—The Secretary (April 10).

CURATOR of the Nottingham Natural History Museum—The Town Clerk, The Guildhall, Nottingham (April 12).

ASSISTANT KEEPERS OF ZOOLOGY AND MINERALOGY in the British Museum (National History), S.W.7—The Secretary (May 1).

ASSISTANT CHEMIST for the Colne Valley Water Company—The Chief Engineer, Colne Valley Water Co., Aldenham Road, Watford, Herts.