

W. PUGH: Complex fluorides of gallium and some heavy metals.

F. G. CAWSTON: (1) The development of teeth in the radula of fresh water Mollusca. There is a rapid increase in the number of teeth of fresh water Mollusca as soon as the radula is put to use after the animal hatches out. Tricuspid teeth in each row are added to from the marginals whose cusps coalesce as the animal grows. Fresh water species possess broad rows of teeth but not so many as some lagoon and land species. The stoutest teeth are those which are exposed to most use. Some increase in size of individual teeth may be expected during the first few months of the animal's existence. The best illustrations of typical teeth of the various fresh-water molluscs are obtained by preparing camera lucida models. (2) South African larval trematodes with forked tails the life-cycle of which is at present unknown. It is considered important to discover the life-cycle of furcocercous cercariae if the various forms are to be recognized. Difficulty is experienced in the differential staining of cercariae. Notes are given on some South African cercariae.

JOHN HEWITT: Descriptions of new forms of the genus *Acontias* Linn. Five new subspecies are described, preceded by an introductory account dealing with the forms occurring in Africa and their distribution.

W. J. COPENHAGEN: Sulphur as a factor in the corrosion of iron and steel structures in the sea. (2) Sulphides in bottom muds of certain harbours of the world. In a previous paper, reference was made to the occurrence of ferrous sulphide in the corrosion product on the surface of iron and steel vessels and structures when immersed for a period in sea-water. In all cases of bottom muds, except open roadsteads, ferrous sulphide was present in the bottom muds in comparatively higher concentration than that of marine muds on the floor of the ocean. The origin of the ferrous sulphide in bottom muds has been investigated and is of bacterial origin, that is, (a) from decomposition products of waste in harbours, and (b) by the reduction of sulphates in sea-water. Ferrous sulphide under certain conditions is oxidized to ferric oxide and elementary sulphur. The latter rapidly combines with exposed iron (in iron and steel structures) and rapid corrosion of the structures ensues.

Moscow

Academy of Sciences (*C.R.*, 16, No. 3, 1937).

I. M. VINOGRADOV: Some new problems of the theory of primes.

B. SALTUKOV: (1) The solution of the integral equation of N. Moisseiev in the theory of the non-regularized geoid figure. (2) The quasi-Stokes form of the integral equation of N. Moisseiev for the non-regularized geoid.

M. KELDYŠ and M. LAVRENTIEV: The uniqueness of solution of the Neumann problem.

B. FUCHS: The group of analytical movements of invariant geometry with pseudoconformal images.

L. V. KANTOROVICH: The moment problem for a finite interval. (A correction to the note published in *C.R.*, 14, No. 9, p. 531; 1937.)

L. MAGNARADZE: Fundamental problems of the theory of elasticity in two dimensions, for contours with angular points.

I. N. VECOUA: A complex representation of the general solution of equations of the stationary flat problem of the elasticity theory.

V. A. GAVRILENKO: Additional considerations regarding the distribution of velocities in turbulent uniform flow.

V. KUPRADZE: The theory of electromagnetic fluctuations in an even non-homogeneous field.

N. K. MIHAL: The determination of plummet deflections from the anomalies in the horizontal gradient of gravity.

A. I. KURENCOV: Fundamental regularities in the distribution of the dendrophilous lepidopterous fauna (Macrolepidoptera) in the Ussuri province.

B. A. ZENKOVIČ: Weighing whales.

E. ANDREJEVA: Ossification of the skeleton of the extremities in embryos of the Kirghizian fat-tail sheep.

A. A. TERENTJEVA: Development of the hairy covering in the Kirghizian fat-tail sheep.

Forthcoming Events

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

Monday, December 13

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—F. S. Chapman: "Lhasa in 1937".

Wednesday, December 15

GEOLOGICAL SOCIETY OF LONDON.—Prof. R. M. Field: "Geophysical Exploration of Ocean Basins".

Thursday, December 16

ROYAL COLLEGE OF SURGEONS OF ENGLAND, at 5.—Sir Charles Sherrington, F.R.S.: "Jean Fernel and Astrology" (Thomas Vicary Lecture (2)).

INSTITUTION OF ELECTRICAL ENGINEERS, at 6.—General Discussion on "Electrical Engineering Education". Introductory papers by Prof. C. L. Fortescue, Col. H. C. Fraser and F. H. Clough.

Friday, December 17

INSTITUTION OF CHEMICAL ENGINEERS (at the Institution of Civil Engineers), at 6.30.—Dr. R. E. Slade: "The Development of Grass Drying" (Annual Public Lecture).*

Appointments Vacant

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

UNIVERSITY DEMONSTRATOR IN MINERALOGY AND PETROLOGY in the University of Cambridge—Dr. F. C. Phillips, Department of Mineralogy and Petrology, Downing Street, Cambridge (December 14).

SCIENTIFIC OFFICER in the Air Ministry Scientific Research Pool—The Chief Superintendent, Royal Aircraft Establishment, South Farnborough, Hants. (December 17).

LECTURER IN ELECTRICAL ENGINEERING AND MATHEMATICS in the Aston Technical College, Whitehead Road, Birmingham, 6—The Principal (December 18).

LECTURER IN MECHANICAL ENGINEERING in the Oxford School of Technology, Art and Commerce—The Chief Education Officer, City Education Office, Oxford (December 20).

JUNIOR ECONOMISTS to the Ministry of Agriculture and Fisheries, 10 Whitehall Place, S.W.1—The Secretary (January 7).

LECTURER IN CHEMISTRY in the Rotherham College of Technology and Art—The Director of Education, Education Offices, Rotherham.