each of the other chlorides, and the melting points of the mixtures are intermediate to those of the components, the intervals of crystallisation being so small as to be inappreciable. For the $CoCl_2 - FeCl_2$ mixtures, the angle of the rhombohedron remains unchanged at 60° and the magnitude of the side a varies from 7·05 A. for $CoCl_2$ to 7·155 A. for $FeCl_2$. With the $FeCl_2 - MnCl_2$ mixtures, the angle of the rhombohedron varies from 60° to 61° 25′, the value of a from 7·155 to 7·20, and the ratio $c : a$ from 2·45 to 2·37 in passing from $FeCl_2$ to $MnCl_2$.—**T. G. Levi**: A new class of organic sulphur bases. When an alcoholic solution of aniline is added to a 20 per cent aqueous alcoholic formaldehyde solution into which hydrogen sulphide has previously been passed, heat is generated and 3 : 5-diphenyl - 1 : 3 : 5-dihydrothiazine is formed. Other aromatic amines form similar compounds, and analogous selenium derivatives are obtainable if hydrogen selenide is used in place of hydrogen sulphide.—**Aldo Spirito**: Observations on the regulative processes in relation to the development of the cerebral hemispheres in embryos of Anura (2).—**C. Forti**: Further investigations on the action of certain alkaloids on leucocytes isolated from the organism. Before causing the death of the cell, the hydrochlorides of cocaine, novocaine, and tutocaine give rise to an arrest of its activity, that is, to a suspension of the cellular functions from which recovery is possible. The ease with which these compounds are eliminated or destroyed by the cellular protoplasm varies in degree with the different alkaloids.—**U. Cassinis and L. Bracaloni**: Normal alcoholemia during physical exercise. Experiments on eight individuals fail to furnish evidence that alcohol, even in minimal amount, is formed in the blood as a result of muscular work.—**A. Galamini**: The food value of legumes studied with albino rats. When rats are fed solely on raw beans, their urine becomes first neutral and then alkaline, the animals losing weight and dying more rapidly than when fasting. If the beans are cooked, the rats withstand the diet far better, although they lose in weight.—**S. Goldberger**: The action of pH on striated muscle. Experiments made on the lines of Trendelenburg's perfusion method with frog's muscle show that variation in the pH of the liquid (Ringer's) is not accompanied by modification of the latent time. With change of the pH from 5·8 to 9·0, the threshold value, the optimum stimulus, and the magnitude of the muscle contraction alter very little, any slight variations being only gradual. If the pH of the liquid is below 5·8 or above 9·0, the threshold value changes slightly in the first, and diminishes considerably in the second, half-hour, the degree of the diminution being greater in the alkaline than in the acid liquid. As regards the pH in the liquid after the perfusion, with initial pH values between 3·2 and 10·8, the muscle exhibits perfect equilibrating power, the Ringer's liquid having the pH 6·7 after perfusion, even when the experiment is continued for twenty-four hours. With higher or lower pH values, the liquid remains the same after as before the perfusion.—**R. Margaria**: The alkaline reserve of sea-water. Experiments on the capacity of sea-water to fix carbon dioxide indicate that, although the reaction of the water is markedly alkaline, this is displaced, in the perfusion of surviving organs, towards the acid side solely by the presence of the carbon dioxide produced by the tissues and that, considering the pressure of the dioxide existing in the tissues, such displacement might be sufficient to make the pH value less than that of organic liquids. It cannot, however, be assumed that this phenomenon would actually occur, since the tissues have sufficient regulating power to enable them to confer their characteristic reaction on the perfusion liquids.

Official Publications Received.

BRITISH.

Commonwealth of Australia: Council for Scientific and Industrial Research. Pamphlet No. 12: The Cattle Tick Pest and Methods for its Eradication. Pp. 23. (Melbourne: H. J. Green.)

Indian Journal of Physics, Vol. 3, Part 4, and Proceedings of the Indian Association for the Cultivation of Science, Vol. 12, Part 4. Conducted by Sir C. V. Raman. Pp. 451-536+plates 22-24. (Calcutta.) 3 rupees; 4s.

Flora of the Upper Gangetic Plain, and of the Adjacent Siwalik and Sub-Himalayan Tracts. Vol. 3, Part 3: Palmæ to Cyperaceæ. Pp. ii+285-371. (Calcutta: Government of India Central Publication Branch.) 12 annas; 1s. 3d.

Indian Central Cotton Committee: Technological Laboratory. Technological Bulletin, Series A, No. 13: Technological Report on Samples of Punjab-American and Mollisoni (desi) Cottons grown in different Parts of the Punjab in the Season 1928-29. By A. James Turner. Pp. 10. (Bombay.) 6 annas.

Astrographic Catalogue 1900·0. Sydney Section, Dec. −51° to −65°, from Photographs taken at the Sydney Observatory, New South Wales, Australia. Vol. 5: R.A. 0h to 6h, Dec. −52° to −54°, Plate Centres Dec. −53°. By J. Nangle. Pp. ii+25. Vol. 6: R.A. 6h to 12h, Dec. −52° to −54°, Plate Centres Dec. −53°. By J. Nangle. Pp. ii+92. (Sydney: Alfred James Kent.)

County Borough of Halifax. Third Annual Report of the Corporation Museums for the Year 1927-8. Pp. 18. (Halifax.)

FOREIGN.

Proceedings of the United States National Museum. Vol. 76, Art. 3: Descriptions of New Species of Foraminifera of the Genus Discocyclina from the Eocene of Mexico. By Thomas Wayland Vaughan. (No. 2800.) Pp. 18+7 plates. Vol. 75, Art. 12: A New Liver Fluke from a Monkey and New Parasitic Roundworms from various African Animals. By J. H. Sandground. (No. 2783.) Pp. 11+2 plates. Vol. 75, Art. 13: Bugs of the Family Miridae of the District of Columbia and Vicinity. By H. H. Knight and W. L. McAtee. (No. 2784.) Pp. 27. Vol. 75, Art. 21: A New Species of Trematode Worms belonging to the Genus Hasstilesia from Rabbits in Texas. By Asa C. Chandler. (No. 2792.) Pp. 5. Vol. 75, Art. 23: A New Species of Mosquito from Montana with Annotated List of the Species known from the State. By Harrison G. Dyar. Pp. 8. (No. 2794.) Vol. 76, Art. 2: A Revision of the Two-winged Flies of the Genus Procecidochares in North America with an Allied New Genus. By J. M. Aldrich. (No. 2799.) Pp. 13. Vol. 75, Art. 26: Two New Species of Polychaetous Annelids from the Argentine Coast. By A. L. Treadwell. (No. 2797.) Pp. 5. Vol. 75, Art. 20: Tapeworms of the Genera Rhabdometra and Paraiterina found in the Quail and Yellow-billed Cuckoo. By Myrna F. Jones. (No. 2791.) Pp. 8+1 plate. Vol. 75, Art. 22: Pagecrinus, a New Crinoid Genus from the American Devonian. By Edwin Kirk. (No. 2793.) Pp. 4+1 plate. (Washington, D.C.: Government Printing Office.)

CATALOGUES.

Bulletin of Development covering the Thirty Months ending December 31st, 1928. Pp. 67. (London: Adam Hilger, Ltd.)

Apparatus for Radiology: High Tension Transformer Units. (Publication No. A/29.) Pp. 16. (London: Newton and Wright, Ltd.)

Heat Treatment Bulletin. No. 42: The Heat Treatment of High Tensile Aluminium Alloys. By A. R. Page. Pp. 8. (London: Wild-Barfield Electric Furnaces, Ltd.)

Diary of Societies.

PUBLIC LECTURE.

FRIDAY, JULY 26.

BRITISH INSTITUTE OF PHILOSOPHICAL STUDIES (Annual General Meeting) (at Royal Society of Arts), at 5.30.—Sir Oliver Lodge: Beyond Physics.

CONGRESSES.

JULY 26 AND 27.

WOMEN'S ENGINEERING SOCIETY (Annual Conference of Women Engineers) (at Bedford College for Women).

Friday, July 26, at 8.—Lady Moir: Presidential Address.

Saturday, July 27, at 2.30.—Miss D. D. Buchanan: Some Modern Bridges: A Brief Description of their Construction (Lantern Lecture).

AUGUST 4 TO 9.

GENEVA INSTITUTE OF INTERNATIONAL RELATIONS.

Monday, Aug. 5, at 10 A.M.—K. Zilliacus: The Structure and Working of the League of Nations.
At 8.30.—E. J. Phelan: The Future of the International Labour Organisation.

Tuesday, Aug. 6, at 10 A.M.—Norman Angell: The Economic Causes of War.
At 8.30.—Henri Rolin: The Peaceful Settlement of all Disputes.

Wednesday, Aug. 7, at 10 A.M.—Prof. J. L. Brierly: The Contribution of Law to Peace.
At 5.30.—H. S. Grimshaw: The Problems of Native Labour.
At 8.30.—The Unreadiness of Public Opinion.

Thursday, Aug. 8, at 10 A.M.—Arnold Forster: The Freedom of the Seas and the Outlawry of War.
At 3.—W. T. Layton: Reparations and Debts.
At 5.30.—G. A. Johnston: Industrial Relations.

Friday, Aug. 9, at 10 A.M.—A. E. Zimmern: The Preparation of Public Opinion.
At 3.—Prof. S. de Madariaga: The Monroe Doctrine and the League of Nations.
At 5.30.—Prof. C. K. Webster: The Far East.