

diazotised aniline. Moreover, nitrosoacetanilide undergoes resinification when left in contact with alkali for some hours, yielding a product which is darker than, but of similar composition to, that derived from aniline. The passage of the nitrosoacetanilide to normal diazo-hydrate possibly takes place by way of an intermediate additive compound.—E. Moltoni: A selection of the birds reported by the Desio mission to the Libyan Desert.—G. Lakhovsky: Cosmic waves and cellular oscillations. The experiments described by Rivera (1930) indicated that the observed excitation of cellular division cannot be ascribed to cosmic waves, which have a slightly depressive influence on germination. The results of these experiments confirm the author's theories, according to which variation in cosmic waves causes oscillatory dis-equilibrium of cells and hence disease and death.

## VIENNA

Academy of Sciences, May 12.—G. Gorbach and H. Pick: Ultra-violet inactivation of sucrase in its dependency on the hydrogen ion concentration and ozone. With the purest possible sucrase solutions, the influence of the prevailing hydrogen ion concentration on inactivation by ultra-violet rays is vanishingly small. This inactivation cannot be ascribed to the ozone formed, but results from direct absorption of the short-wave energy either by the sucrase itself or by substances accompanying it.—G. Gorbach and D. Kimovec: After-inactivation of irradiated sucrase solutions, and the influence of added tryptophane and yeast-gum. Sucrase solutions which have been subjected for at least ten minutes to ultra-violet radiation, afterwards become inactivated; this after-inactivation is accelerated somewhat by addition of tryptophane or yeast-gum after the irradiation. If the sucrase solution is exposed to the rays for less than ten minutes, the enzyme retains part of its activity.—G. Gorbach and H. Güntner: Yeast lipase. Lipase from brewery or pure-cultured beer-yeast exerts its optimum activity at  $pH$  6.6-6.8 and at  $30^{\circ}C$ . In general, pressed yeasts are richer in lipase than beer-yeasts, and pure-cultured yeasts than brewery process yeasts. Artificial fattening of yeasts causes marked increase in their lipase contents.—Richard Weiss and Ernest Knapp: Triphenylmethanes with their benzene nuclei linked together. (7) Methylene-diphenyl-phenyl-methane ketone.—J. Rosenhagen: Observations on the brightness and light-change of the planet Eros. The fact that the phase coefficient, the normal brightness, and the amplitude of the light-change of Eros are subject to wide variations is attributed not so much to physical changes as to a peculiar shape of the planet and to alternation in the position of its axis of rotation with regard to the earth. Other elements, such as precession phenomena, deformation of the body of the planet, etc., also produce secondary effects.—Otto Porsch: An interesting case of convergence of blossom by adaptation.—Emil Heinricher: Further investigations on the descendants of *Primula kewensis*.

May 27.—Ernst Beutel and Arthur Kutzelnigg: Luminescence analysis. (4) Fluorescence of zinc oxide.—Bruno Finzi: Results of a zoological expedition to Morocco in 1930. (5) Ants.—Josef A. Friebisch and Rudolf Steinmaurer: A year's observations of the cosmic ultra-radiation on the Sonnblick peak (3106 metres). Determinations of the ultra-radiation on this peak gave, in a slightly open iron sheath, the value  $8.00 I$  (ion-pairs per second per c.c. of air at 760 mm. and  $18^{\circ}C$ .) and, in the closed sheath,  $6.13 I$ , reduced to 520.5 mm., which is the mean barometric pressure on the Sonnblick. During the winter months low, and during the summer months

high, values for the radiation intensity were observed, the minimum and maximum appearing to correspond respectively with the lowest and highest position of the sun. In the course followed by the variations, and in the yearly deviations (4 per cent), the results are in agreement with those obtained by Steinke in Königsberg. The intensity of the radiation is apparently not related to either the degree of cloudiness, amount of precipitation, or direction of the wind.

## Forthcoming Events

## Congresses

SEPT. 10-18

INTERNATIONAL CONGRESS OF THE HISTORY OF MEDICINE (Ninth Congress). To be held at Bucharest.

SEPT. 12-15

IRON AND STEEL INSTITUTE AND INSTITUTE OF METALS. Joint Autumn Meeting at the Institution of Civil Engineers, Great George Street, S.W.1; and the Institution of Mechanical Engineers, Storey's Gate, S.W.1.

Monday, Sept. 12.

Dr. H. J. Gough: "Corrosion Fatigue in Metals" (Annual Autumn Lecture), at 8 P.M.

SEPT. 12-15

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN (Annual Conference). To be held at Aberdeen. Chairman's Address on Sept. 13, at 10 A.M.

## Official Publications Received

## BRITISH

- Transactions of the Institute of Marine Engineers, Incorporated. Session 1932, Vol. 44, No. 6, July. Pp. 271-322+xxxiv. (London.)
- Bulletin of the Department of Zoology, Panjab University. Vol. 1: Fauna of Lahore. 3: Preliminary Notes on the Life-History of the Firefly *Luciola gorhami* Rits. and Cytology of the Light Organs. By Dev Raj Mehta. Pp. 101-118+plates 9-10. (Lahore.) 1.8 rupees.
- Survey of India. Geodetic Triangulation. By Capt. G. Bomford. Pp. viii+109+37 plates. (Dehra Dun.) 2.8 rupees; 4s. 6d.
- Jamaica. Annual Report of the Department of Agriculture for the Year ended 31st December 1931. Pp. 86+3 plates. (Jamaica: Government Printing Office.)
- Journal of the Chemical Society. July. Pp. iv+1965-2088+x. (London: Chemical Society.)
- Ceylon. Part 4: Education, Science and Art (F). Administration Report of the Director of the Colombo Museum for 1931. By Dr. Joseph Pearson. Pp. F16+4 plates. (Colombo: Government Record Office.) 30 cents.
- Transactions of the Optical Society. Vol. 33, 1931-32, No. 4. Pp. ii+137-138. (London.) 10s.
- Journal of the Indian Institute of Science. Vol. 15A, Part 5: Bhadravarti Wood-Tar and its Utilization. By Y. K. Raghunatha Rao, B. Sanjiva Rao and H. E. Watson. Pp. 41-58. (Bangalore.) 1 rupee.
- The International Union for the Scientific Investigation of Population Problems: its Foundation, Work, Statutes and Regulations. Pp. 28. (London: c/o Royal Geographical Society.)

## FOREIGN

- Memorias del Consejo Oceanográfico Ibero-Americano. Número 8: La corriente del Peru y sus límites nortefios en condiciones normales y anormales. Por Prof. Gerhard Schott. Pp. 57+3 laminas. Número 9: El Instituto Español de Oceanografía y la labor que ha realizado. Por Prof. Rafael de Buen. Pp. 72+10 laminas. Número 10: Nuevas investigaciones gravimétricas sobre los mares. Por Guillermo Sans Huélin. Pp. 14+2 laminas. Número 11: Cooperación española a la Oceanografía. Por Prof. Rafael de Buen. Pp. 32. (Madrid.)
- Egyptian University: Faculty of Science. Publication No. 1: The Food of Protozoa; a Reference Book for use in Studies of the Physiology, Ecology and Behaviour of the Protozoa. By H. Sandon. Pp. iii+187. (Cairo.) 20 piastres.
- Proceedings of the Imperial Academy. Vol. 3, No. 6, June. Pp. xvii-xviii+217-273. (Tokyo.)
- Préhistoire. Tome 1, Fascicule 1. Pp. iv+123+5 planches. (Paris: Ernst Leroux.) 125 francs.
- U.S. Department of Agriculture. Miscellaneous Publication No. 120: A Digest of the Literature of Derris (*Deguelia*) Species used as Insecticides, 1747-1931. By R. C. Roark. Pp. 86. (Washington, D.C.: Government Printing Office.) 15 cents.
- Koninklijk Magnetisch en Meteorologisch Observatorium te Batavia Jaarverslag 1931. Pp. 14. (Batavia.)
- Department of Agriculture: Straits Settlements and Federated Malay States. General Series, No. 9: The Cultivation and Manufacture of Tea in Ceylon and India. By E. A. Curtler. Pp. iii+94+5 plates. 1 dollar.
- Circular No. 3: The Cultivation of Allotments by Tamil Labourers. By J. N. Milsum. Pp. 12. 10 cents. (Kuala Lumpur.)