

With the exception of uranium salts, none of the fluorescent and radio-active bodies used had any accelerating effect on photochemical reactions. The accelerating effect of uranium salts is limited to a special class of reactions, those which are produced spontaneously in ultra-violet light. The photocatalyst enables the reaction to proceed in ordinary light.—A. **Damiens**: The products of incomplete reduction of cerium oxide. By the action of a limited quantity of carbon on ceric oxide Sterba obtained a substance described by him as cerium oxycarbide. The reduction of ceric oxide is now shown to give a mixture of  $Ce_2O_3$ ,  $CeC_3$ , and  $CeC_2$ ; there is no confirmation of the existence of a definite oxycarbide.—F. **Jadin** and A. **Astruc**: Manganese in drinking water and mineral water. The results of a series of determinations of manganese in the drinking water of eight towns and nine mineral springs. All the latter showed appreciable amounts of manganese varying from 0.09 to 0.20 milligram per litre.—Charles **Nicolle** and E. **Conseil**: An attempt at the experimental reproduction of mumps in the ape.—H. **Pottevin** and H. **Violle**: Experimental cholera in the lower apes.—Jacques **Mawas**: The structure and morphological signification of the comb (*peigne*) of the eye of birds.—M. **Arabu**: The Neogene of the north of the Sea of Marmora.

## GÖTTINGEN.

**Royal Society of Sciences.**—The *Nachrichten* (physico-mathematical series), parts 1 and 2 for 1913, contain the following memoirs communicated to the society:—

December 21, 1912.—F. **Bernstein**: Contributions to mathematical statistics. I., The method of treating incomplete material.—G. **Tamman**: The phase-diagram of water.

January 11, 1913.—A. **Peter**: The diatomaceous flora of southern Hanover, including the Harz, and its distribution in the waters of the region.

January 25.—R. **Wedekind**: Further contributions to the zonal partition of the Upper Devonian.—E. **Perna**: The relations of the Upper Devonian of the Eastern Ural and that of Westphalia and Silesia.

February 8.—G. **Tamman**: The relation of the volume-surface to the polymorphism of water.—B. **Dürken**: The transplantation of young osteoblasts into the orbit of the larval frog.—O. **Wallach**: Researches from the Göttingen University Chemical Laboratory. XXVI., The behaviour of carboxime and of eucarboxime towards free hydrogen in the presence of colloidal palladium.

February 22.—M. **Planck**, P. **Debye**, W. **Nernst**, M. von **Smolukowski**, A. **Sommerfeld**, and H. A. **Lorentz**: Preliminary report on the course of lectures on the kinetic theory of matter instituted by the committee of the Wolfkehl foundation.—P. **Hertz**: The statistical mechanics of the spatial "aggregate," and the probability of a given "complexion" (kinetic theory of gases).—H. **Bolza**, M. **Born**, and Th. von **Kármán**: Molecular streams and discontinuity of temperature.—P. **Koebé**: Boundary adaptation in conformal representation.

March 8.—W. **Voigt**: Electric and magnetic double-refraction.—R. **Trümpler**: Determination of fundamental star-places from altitude-transit observations.

## BOOKS RECEIVED.

The Official Guide to the Norwich Castle Museum. By the late T. Southwell. Fifth edition, by F. Leney. Pp. 182+plates. (London: Jarrold and Sons.)

Brief Sketch of the Natural History Museum of the University of St. Andrews. By Prof. McIntosh. Pp. 63+xvii plates. (St. Andrews.)

NO. 2285, VOL. 91]

Handbuch der vergleichenden Physiologie. Edited by H. Winterstein. 35 Lief. (Jena: G. Fischer.) 5 marks.

A Text-book of Physics. Edited by A. W. Duff. Third edition, revised. Pp. xvi+686. (London: J. and A. Churchill.) 10s. 6d. net.

The Volatile Oils. By E. Gildemeister and F. Hoffmann. Second edition, by E. Gildemeister. Translated by E. Kremers. First volume. Pp. xiii+677+2 maps. (London: Longmans and Co.) 20s. net.

A Systematic Course of Practical Science for Secondary and other Schools. By A. W. Mason. Book II. Experimental Heat. Pp. vii+162. (London: Rivingtons.) 2s. 6d. net.

Jahrbuch der Kaiserlich-Königlichen Geologischen Reichsanstalt. Jahrg. 1913. lxiii. Band, 1 Heft. Pp. 206+vii plates. (Vienna: R. Lechner.)

Light, Radiation, and Illumination. Translated from the German of Paul Högner by J. Eck. Pp. xii+88. (London: The Electrician Printing and Publishing Co., Ltd.) 6s. net.

Brazil in 1912. By J. C. Oakenfull. Pp. viii+498+plates. (London: R. Atkinson.) 5s.

The Place of Climatology in Medicine. By Dr. W. Gordon. Pp. 62. (London: H. K. Lewis.) 3s. 6d. net.

Common British Moths. By A. M. Stewart. Pp. viii+88+15 plates. (London: A. and C. Black.) 1s. 6d. net.

## CONTENTS.

|   | PAGE |
|---|------|
| Mathematics in China and Japan. By G. B. M.                                     | 603  |
| Technological Chemistry. By Dr. J. W. Mellor                                    | 604  |
| Climatology. By E. G.   | 604  |
| The Habitability of the Planets   | 605  |
| Our Bookshelf   | 606  |
| Letters to the Editor:—   |      |
| Variation of Mean Sea-Level. (With Diagram.)—<br>Prof. D'Arcy W. Thompson, C.B. | 607  |
| On the Transmission of X-Rays through Metals.—<br>H. B. Keene                   | 607  |
| A Red-water Phenomenon due to Euglena.—Charles<br>E. Benham                     | 607  |
| The Ribbon-Fish.—F. J. Cole   | 607  |
| The International Medical Congress. By Dr. C. W.<br>Saleeby                     | 608  |
| The Continuation of Milne's Work in Seismology.<br>By J. W. J.                  | 610  |
| The Ultima Thule of Polynesia. By Sidney H. Ray                                 | 610  |
| The South African National Botanic Garden                                       | 611  |
| Wireless Time Signals. By W. W. B.  | 612  |
| Notes   | 613  |
| Our Astronomical Column:—   |      |
| Radial Velocity of 915 Stars  | 617  |
| Stellar Parallaxes  | 618  |
| The Birmingham Meeting of the British Association                               | 618  |
| Bonaparte Research Fund Grants  | 618  |
| The Education of Europeans and Eurasians in<br>India                            | 619  |
| The Mount Wilson Solar Observatory. (Illustrated.)                              | 619  |
| Chemo-therapy. By Prof. Paul Ehrlich  | 620  |
| University and Educational Intelligence   | 626  |
| Societies and Academies   | 627  |
| Books Received  | 628  |

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