

University of Leeds whereby students of the University or of the college have the use of certain equipment and other facilities at both institutions. Students remaining for a fourth year may take up advanced studies or research in a large number of branches of technological science. The associateship of the college, which confers several privileges, is awarded to certain students who, holding the college diploma, have attained their majority, had a year's practical experience with a firm engaged in their trade or profession subsequent to obtaining the diploma, and have submitted an approved original thesis.

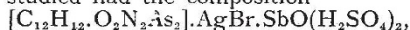
THE calendar for the forthcoming session—the one hundred and nineteenth—of the Royal Technical College, Glasgow, is now available. It will be remembered that in 1913 the college became affiliated to the University of Glasgow. A university advisory joint-committee has been established, and a joint-board of studies in applied science and joint-boards of examiners in the same department representative of the university and the college, have been constituted. Candidates for the degree of B.Sc. in applied science may attend the necessary qualifying courses either in the university or in the college or in both, provided that the fees paid for graduating courses in the college are not less than those payable for corresponding courses in the university. The courses of study provided by the college in civil, mechanical, electrical, and mining engineering include the classes necessary for graduation in applied science. The University of Edinburgh has recognised the day classes of the college as qualifying for its degree of B.Sc., under certain regulations. Among other interesting arrangements explained in the calendar that may be mentioned by which a large number of engineering firms have expressed their willingness to allow a selected number of their apprentices facilities for carrying out a scheme of college study conjoined with practical work. The courses of study in engineering are held during the winter session of the college, and thus student-apprentices are left free to spend the intervening summers in works. The college provides practical instruction in all branches of technology, and the calendar gives full particulars of all for the use of intending students.

SOCIETIES AND ACADEMIES.

PARIS.

Academy of Sciences, August 24.—M. P. Appell in the chair.—B. Baillaud: Observations of the eclipse of the sun of August 21 made at the observatories of Algiers and Paris. At Algiers the eclipse was observed under good conditions. Thirty photographs were obtained, times of contact measured, and the ionisation studied. At Paris measurements were made of times of contact and four negatives were taken, but clouds interfered with the observations.—H. Deslandres and A. Perot: A second series of attempts to obtain a maximum magnetic field. The use of water with a new mode of cooling. The authors have aimed at the use of intense currents and large quantities of electrical energy rather than applying enormous masses of iron. The essential difficulty is the cooling of the bobbins carrying the high current, and an apparatus for effecting this with a current of water is described and illustrated. The maximum field obtained was 63,700 gauss, 22,900 of which was due to the iron core. The current used was 5000 amperes. A field of 50,000 gauss was obtained without an iron core (energy 340 kilowatts). The possibility of obtaining still higher fields by this method of winding and cooling is discussed.—M. Bezssonoff: The pigments of Fusarium. Two pigments are present: one yellow,

belonging to the anthocyanic group; the other red, identified with carotene, described by Wildstätter.—E. Maurié: The nutritive value of ossein. The nitrogenous material contained in bones is of considerable nutritive value. Details of the mode of extraction are given.—J. Danysz: The treatment of trypanosomiasis by arsenical compounds, combined with salts of silver and antimony (products 88² and 102¹). The compound specially studied had the composition



and showed marked improvement in therapeutic properties against *Tr. surra* and *Tr. gambiense* as compared with compounds previously tried. In the case of the mice used for the experiments the fatal dose (per 20 grams) was 5 mgr., the tolerated dose 0.4 mgr. The ratio between the tolerated dose and the curative dose was 80:1 for *surra* and 100:1 for *Tr. gambiense*. Confirmative experiments were carried out on rabbits.—J. M. Barbosa: The bronchial sphincters in *Delphinus delphis*.

BOOKS RECEIVED.

Rendiconto dell' Accademia delle Scienze Fisiche e Matematiche. Serie 3^a. Vol. xix. Fasc. 6-10; 11-12. Serie 3^a. Vol. xx. Fasc. 1-4; 5-6. Serie Seconda. Vol. xv. (Napoli: Scienze Fisiche e Matematiche.)

The Standard Cyclopaedia of Horticulture. By L. H. Bailey. Vol. ii. Pp. 603-1200. (London: Macmillan and Co., Ltd.) 25s. net.

City of Bradford Technical College. Calendar for the Thirty-third Session, 1914-15. (Bradford.)

Contributions from Walker Museum. Vol. i., No. 8. The Osteology of Some American Permian Vertebrates. By S.W. Williston. Pp. 107-162. Chicago. University of Chicago Press; London: Cambridge University Press.) 1s. net.

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