

Laboratory for Research into Reinforced Concrete Techniques at the University of Ghent; and "Volga-Don Canal", the preliminary to a major Soviet film in colour on the same subject which is shortly to be made available for public distribution. The journal also describes various technical demonstrations at the congress, the use of sound film loops in industrial training, stereoscopic cinematography and a new device for automatic photometry.

#### Experimental Elimination of Chromatophores and Eyespot in *Euglena*

E. G. AND O. PRINGSHEIM (*New Phytol.*, 51, No. 1, 65; 1952) have reported a very interesting case of the permanent elimination of plastids and eyespot in *Euglena gracilis* by exposure to high temperature and also by treatment with streptomycin. When *E. gracilis* was grown for 5-6 days at 34-35° C.—just below the maximum for multiplication—the chromatophores of most strains were caused to disintegrate and permanently apoplastidic strains were obtained. In a few of the strains the eyespot also disappeared permanently. Considerable differences in response to the treatment were observed in different strains, the effect of streptomycin, strain for strain, yielding parallel results. Both the chromatophores and eyespots are independent, self-reproducing cell components, and once destroyed do not reappear. The artificially produced strains apparently retain their heterotrophic nutrition and vigour indefinitely. The differences in the response of different strains of the organism to the experimental treatments are due to inherent, that is, genetical, factors.

#### Integration of Scientific Thought

SOME years ago, the inherent dangers of specialist knowledge—when carried to extremes—were foreseen, and its impact upon Western culture in general led to the formation of the Institute for the Unity of Science as an outgrowth of the American Academy of Arts and Sciences. Prof. P. Frank, in some interesting remarks to a meeting of the Institute, reported in a recent publication entitled "Contributions to the Analysis and Synthesis of Knowledge" (*Proc. Amer. Acad. Arts Sci.*, 80, Part 1; 1951; pp. 112, 2 dollars), pleads for the reinstatement of philosophy as a link between the arts and sciences, while President J. B. Conant (Harvard University) stresses the dynamic nature of science. A threefold scheme is then developed by some of the leading methodologists and semanticists of the United States, namely: science and man; the 'meaning' of scientific statements; and the role of 'abstract objects' in science. As a collection, the contributions are stimulating, and calculated to advance the integration of a wide field of studies.

#### British Astronomical Association: Annual General Meeting

AT the annual general meeting of the British Astronomical Association, held in Burlington House, London, on October 29, the retiring president, Dr. G. Merton, delivered an address in which he dealt first of all with the internal affairs of the Association. It is very satisfactory to know that the membership, which was 856 in 1942, is now well over two thousand and is still increasing, and also that the observing sections continue to flourish with increasing membership as well as with increasing activity when observing conditions are favourable. Dr. Merton took as his

main subject, "Photography and the Amateur Astronomer", in which he gave a historical sketch of the developments in photography, referring to a number of astronomers who had carried out very useful work in this branch. The address was illustrated by a series of lantern slides, and, in concluding it, he pointed out a number of ways in which amateur astronomers could make use of photography. In particular, Dr. Merton referred to the scheme of the new director of the Aurora and Zodiacal Light Section for obtaining co-operative work in parallactic photography with fast cameras. During the evening the Walter Goodacre Medal and Gift were presented to Mr. Frank Maurice Holborn. Dr. Merton gave a short account of Mr. Holborn's work in astronomy in different branches, but more especially on variable stars, and paid a high tribute to his devotion to the work of the Variable Star Section, as well as to his contributions to other sections. The new president of the Association, Mr. E. H. Collinson, who took over from Dr. Merton, is well known for his contributions to astronomy in various branches, especially for his papers on meteors, and his photography of them, a branch on which he has worked for many years.

#### Bibliography of Differential Thermal Analysis

ANY material which undergoes a phase change when heated can be studied by the method of differential thermal analysis, and this method is widely used by geologists, investigators in the fields of ceramics and agriculture, and by chemists, metallurgists and fuel technologists. At the Institute of Science and Technology of the University of Arkansas, Fayetteville, Prof. W. J. Smothers, Y. Chiang and A. Wilson have compiled a "Bibliography of Differential Thermal Analysis" (Research Series No. 24; pp. 44; 1951) which lists 165 papers published between 1887 and 1950 inclusive, and facilitates the identification of relatively unknown substances that are often present in materials subjected to thermal analysis. The bibliography consists of four parts. The first presents a brief description and history of the method; then follows the chronologically arranged list of technical papers; the third is an author index, and the last part is an index of materials analysed by the differential thermal method. The physicist will probably find the short section dealing with equipment of most interest. The best type of thermocouple and its position in the sample, the heating-rate, furnaces with uniform heating-rate and the replacement of photographic by electronic recording, are briefly discussed. As an initial, and quick, reference work, this pamphlet should prove useful.

#### Royal Sanitary Institute: Annual Health Congress

THE annual Health Congress of the Royal Sanitary Institute will be held in Hastings during April 28-May 1, under the presidency of Lord Eustace Percy. The Congress will be divided into eight sections (A-H) and four conferences (1-4) as follows: sections (A) preventive medicine, (B) engineering and architecture, (C) maternal and child health, (D) veterinary hygiene, (E) food and nutrition (in conjunction with the Food Group, Society of Chemical Industry), (F) housing and town planning, (G) tropical hygiene, and (H) occupational health; conferences (1) medical officers of health, (2) engineers and surveyors, (3) sanitary inspectors, and (4) health visitors. It is anticipated that about two thousand five hundred persons will attend the Congress, including repre-