

passing through a range in which the pressure falls rather slowly with change of composition, and finally falling rapidly to the dissociation pressure of Fe₃O₄, which is very low. This in turn dissociates into oxygen and a mixture of oxides the character of which has not yet been determined. The properties of FeO are still practically unknown.

IN the March-April number of the *Bulletin de la Société d'Encouragement pour l'Industrie Nationale* Prof. Ch. Féry gives some particulars of the work of the optical laboratory of the Ecole de Physique et de Chimie Industrielles at Paris. The present laboratory has been available for students for four years. Before and since its erection many important researches have been carried out, and, more particularly, the experiments undertaken so successfully of recent years by Prof. Féry on optical pyrometry. Prof. Féry is probably the most competent authority on this subject, and his methods may be said to be of almost universal application in works practice. Among other recent investigations may be mentioned the following:—Research on the calorific emission of the sun; note on the solar constant and apparent temperature of the sun; researches on radiation; an absorption spectrophotometer; an electric chronometer; a new thermo-electric calorimeter; the principle of a new method of measuring the velocity of light; and the chemical theory of lead-plate accumulators. The laboratory was the birthplace of the Grassot fluxmeter and the now world-famed Méker burner. This list shows that the laboratory has been keenly alive to industrial and scientific research, as well as to instruction. Special dark-rooms are provided in the laboratory for photometric and other optical experiments, while a balcony allows of experiments being conducted in the open air. Further rooms are provided for work on the optical bench, for the metallography of steel and alloys, and for chemical experiments. Special rooms are provided in the basement, built on masonry foundations, for work where absence of vibration is required. All rooms are carefully heated, lighted, and ventilated. The new electrochemical and physical laboratories and that devoted to the investigation of dyes, the mineralogical collections, the central library, and the lecture-rooms, are all built on modern principles, and directed, like the optics laboratory, with due regard to modern teaching and research requirements.

MESSRS. A AND C. BLACK, LTD., announce for immediate publication "An Introduction to the Physiology and Psychology of Sex," by Dr. S. Herbert. The work will direct attention to the important facts respecting sex, mating, and reproduction, from the physiological and psychological points of view.

OUR ASTRONOMICAL COLUMN.

COMET 1917b (SCHAUMASSE).—The following continuation of the ephemeris for Greenwich midnight given in NATURE of May 31 has been received from Copenhagen:—

1917	R.A.	Decl.	Log r	Log Δ	Mag.
	h. m. s.				
June 15	9 25 28	+18 24.8			
17	28 2	17 12.3	9.9829	0.0550	10.6
21	32 8	15 12.5	0.0033	0.1071	10.9
25	35 20	13 36.7	0.0238	0.1528	11.3
29	37 59	12 17.5	0.0442	0.1925	11.6
July 3	40 17	11 10.3	0.0642	0.2276	11.8
7	42 21	10 11.9	0.0837	0.2587	12.1

THE SPECTRUM OF COMET 1917a (MELLISH).—Prof. Frost reports that the spectrum of Mellish's comet, as observed at the Yerkes Observatory on March 21,

showed a close resemblance to that of Morehouse's comet (*Journ. R.A.S. Canada*, vol. xi., p. 196). The cyanogen band 3883 and the blue carbon band, with its red edge at 4741, were strong, and there were other bands at 3914, 4017, and 5075. It may be remarked that the band 3914 was probably the negative band of nitrogen at that wave-length, while 4017 and 5075 would appear to be two of the bands of the low-pressure spectrum of carbon monoxide, these being especially characteristic of the tails of comets.

EFFECTIVE TEMPERATURES OF STARS.—The values of stellar temperatures derived by Rosenberg from comparisons of the intensity at different wave-lengths in photographic spectra have been discussed by Dr. Wilsing (*Astronomische Nachrichten*, No. 4881). A new reduction of Rosenberg's observations has brought the results for stars of early type into much closer accordance with the Potsdam values, as will appear from the examples included in the following table:—

	Type	Rosenberg	Rosenberg corrected	Scheiner and Wilsing
α Andromedæ ...	I.a 2	33,000	13,500	8,800
α Pegasi ...	I.a 2	27,500	12,200	13,600
γ Geminorum ...	I.a 2	16,000	10,000	11,800
α Aquilæ ...	I.a 3	10,500	7,700	7,700
γ Bootis ...	II.a	5,500	4,700	5,200
η Cygni ...	II.a	5,100	4,400	6,000
ε Bootis ...	II.a-III.a	5,300	4,500	4,200
α Bootis ...	II.a-III.a	3,100	2,800	3,600
β Andromedæ ...	II.a-III.a	2,650	2,400	3,000
α Orionis ...	III.a	2,200	2,000	3,000

Scheiner and Wilsing's values were based upon visual observations with a spectrophotometer.

THE FELLOWSHIP OF THE ROYAL SOCIETY.

IN the annual report of the council of the Royal Society, adopted at a special general meeting in November last, certain changes in one of the statutes relating to the election of fellows were submitted. These changes were put forward after detailed deliberation by the council, and were based upon a report prepared by a committee appointed to consider the subject. Statute XII. of the society provides for the special election of persons who "either have rendered conspicuous service to the cause of science, or are such that their election would be of signal benefit to the society, provided that not more than two persons shall be so recommended in any one calendar year, and if two persons be elected in any one year there shall be no election in the following year."

By the new statute proposed by the council and adopted at the special meeting on November 2, 1916, the council could recommend to the society for election "(A) Privy Councillors whose election would assist the society; (B) men distinguished in the scientific or educational service of the State, or by their services to science and its applications, provided that (1) the number of fellows in Class A shall not exceed twenty-five at any time, including the fellows elected as Privy Councillors under the statutes in force before 1903; (2) the number of fellows in Class B shall not exceed twenty-five at any time not more than five being elected in any one year." As in the original statute, any person so recommended for election had to receive the votes of two-thirds of the members of council present, and the number of votes in his favour had to be not fewer than eleven.

In February last a memorial signed by a large number of fellows of the society was presented to the council asking that steps should be taken to consult