

ACADEMIES AND SOCIETIES

Indian Academy of Sciences:

June 1941. SECTION A.—R. V. SUBRAHMANYAN: *The spectral character of the reflection by a regularly stratified medium: Part I.* For a given number of plates, the bands are more sharply defined for smaller values of the reflecting power, though the intensity of the reflected light is smaller. Some secondary bands begin to appear on the shorter wavelength side, when the reflecting power is sufficiently large. P. G. N. NAYAR: *Luminescence, absorption and scattering of light in diamonds: Part I. Fluorescence.* The spectrum is found to consist of a sharp band at 4156 Å, followed by a set of discrete but rather diffuse bands at 4278, 4387, 4514 and 4643 Å. The effect of temperature on the bands has been studied from -180° to 200° C. The fluorescence disappears at higher temperatures, the band at 4156 falling off in intensity at a more rapid rate than the other bands. K. R. DIXIT: *Effect of admixture of silver on the rectifying properties of Cu-Cu₂O cells.* The rectification is maximum for 7½% Ag when temperature of formation of layer is 800° C. R. R. BAJPAI AND V. I. VAIDHIANATHAN: *On the preparation of quartz ultrasonic oscillators.* L. RAMACHANDRA ROW AND T. R. SESHADRI: *Pyridium salts derived from 4-O-methyl resorcylic aldehyde.* HANSRAJ GUPTA: *Some idiosyncratic numbers of Ramanujan.* N. A. SHASTRI: *Some relations between Bessel functions of third order and confluent hypergeometric functions.* S. S. PILLAI: *On the sum of functions connected with primitive roots.* S. S. PILLAI: *On M consecutive integers—III.* P. G. N. NAYAR: *Luminescence, absorption and scattering of light in diamonds: Part II. Phosphorescence.* True fluorescence lasting for less than 10^{-4} seconds consists of the region of discrete bands alone. The phosphorescence takes a time of the order of a minute, for its full excitation, and several minutes for its decay. S. BHAGAVANTAM: *Raman effect in relation to crystal structure:*

Lattice oscillations. P. BHASKARA RAMA MURTI: *Paper pulp from annual crops. Part II. A note on the yields and characteristics of pulps from different varieties of rice straw.* S. RAJAGOPALAN: *Synthetical experiments in the group of sympathomimetics. Part II. Poly- and hetero-cyclic ring systems.*

SECTION B.—M. DAMODARAN AND T. R. VENKATESAN: *Amide synthesis in plants. I. The succinioxidase system in plants.* KANHAIYALAL MATHUR AND REAYAT KHAN: *The development of the embryo sac in *Vogelia indica*, Lamk.* B. L. KAW: *Studies on the Helminth parasites of Kashmir. Part I. Description of some new species of the genus, *Pomphorhynchus Monticelli* (1905).* MISS C. K. RATHNAVATHY: *The spermatogenesis of *Clibanarius olivaceus*, Henderson.*

Royal Asiatic Society of Bengal:

July 7, 1941.—*Tibetan and Bhotia blood group distributions:* At an ordinary monthly meeting of the Royal Asiatic Society of Bengal, Dr. Eileen W. E. Macfarlane presented a paper on the Tibetan Bhotia blood group distribution.

One hundred and twelve mixed Bhotias were grouped at Darjeeling, North Bengal. They showed less of Group B than of Group A and over 10 per cent. of Group AB. When those born in Tibet were separated from those born in Sikkim or Bengal the former were found to be genetically in equilibrium and the latter to be racially mixed. The Bhotias of Sikkim are known to have interbred with the Lepchas. They show three times as much of Group AB as the Tibetans, and this increase is at the expense of Group A. The blood group distribution in mixed Bhotias is of the same order as that found in the Khasis of Assam. A small sample of bloods was typed and indicates that Type N is scarce among the Bhotias and that the types are distributed as among the Bengalis.