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**ACADEMIES AND SOCIETIES**


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**Indian Academy of Sciences:**

December 1939. SECTION A.—B. SANJIVA RAO: *Studies in the Chemical Behaviour of Sulphur Compounds. Part I. The Hydrolysis of Sulphur Chloride.* The hydrolysis has been carried out at the interface between very dilute solutions of  $S_2Cl_2$  in  $CCl_4$  and aqueous alkali in the presence of cadmium hydroxide. The products are free sulphur, sulphide, sulphite and thiosulphite. The results can most satisfactorily be explained on the basis that disulphur oxide is the primary product of hydrolysis. B. D. SAKSENA: *Raman and Infra-red Spectra of Cyclopropane.* Assuming that cyclopropane molecule has a structure in which the carbons form a regular triangle and the hydrogens lie at tetrahedral corners out of the plane of carbon ring (symmetry group  $D_{3h}$ ) the normal modes of vibration and the force constants have been calculated. The results are in good agreement with observations. S. S. BHATNAGAR, P. L. KAPUR AND G. KAUR (MISS): *Photopolymerisation of Anthracene in Benzene Solution from the Magnetic Standpoint.* The value of  $\lambda$ , the constitution correction factor for the bridged four-membered ring, has been determined by a magnetic study of the products of this photo-polymerisation. N. ANANTHANARAYANAN: *Diffraction of Light by a thin Metallic Half-plane.* The Fresnel diffraction patterns obtained with thin uniform metallic films having edges of razor-like sharpness, are characterized by a large number of fringes with high visibility on the darker side of the pattern. The changes in these patterns with increasing thickness of the film and also with wave-length of incident light are described and theoretically accounted for. B. SANJIVA RAO: *Studies in the Chemical Behaviour of Sulphur Compounds. Part II. Disulphur Oxide.* When the products of combustion of sulphur in oxygen under highly reduced pressure are passed into cold carbon tetrachloride, disulphur oxide  $S_2O$  is produced. This exists in the form of a stable complex with  $S_8$ .

December 1939. SECTION B.—G. VENKATARAMAN: *A systematic account of some South Indian Diatoms.* The diatoms described comprise the collections made by several workers—Prof. M. O. P. Iyengar, Dr. T. Ekambaram, Prof. R. Gopala Iyer, Dr. B. Sundararaj and the author. 98 Forms representing 33 genera are described. Of these, 67 are new records for India, 3 are new species, 6 new varieties and 6 new forms. HAMID KHAN: *Study in Diseases of Fish: Fin-Rot—A Bacterial Disease of Fins of Fish.* A rod-shaped bacterium present in large number in the infected tissues, has been incriminated as the causative agent for the fin-rot disease. Copper sulphate solution (1-20,000) bath for 10-15 minutes, has been found to cure

the fry in early stages of the disease. It has not been found possible to cure the fish in advanced stages of the disease.

**Indian Chemical Society:**

October 1939.—JATINDRA CHANDRA PAL AND B. C. GUHA: *Combined ascorbic acid in plant foodstuffs—Part I.* PRATUL NATH SENGUPTA AND B. C. GUHA: *Combined ascorbic acid in plant foodstuffs—Part II.* BAIDYANATH GHOSH AND B. C. GUHA: *Concentration of ascorbigen from cabbage.* K. C. SAHA: *Distribution of free and total ascorbic acid in the liver and muscle of Bengal fresh-water fish.* PHULDEO SAHAY VARMA, K. S. VENKAT RAMAN AND (MISS) K. M. YASHODA: *Condensation of arsenic chloride with dialkyl aromatic amines.* SHARIFUDDIN WARSII AND SALIMUZZAMAN SIDDIQUI: *The constituents of Didymocarpus pedicellata. Part IV. Isolation of two new colouring matters and their relationship to pedicin.* MUHAMMAD QUDRAT-I-KHUDA AND AMALENDU KUMAR RAY: *Chemistry of spiro-compounds. Part I. Preparation of cyclopentane spiro-cyclopentanone and cyclohexane spiro-cyclo-heptanone.* MUHAMMAD QUDRAT-I-KHUDA AND ASUTOSH MUKHERJEE: *Chemistry of spiro-compounds. Part II. Synthesis of cyclopentane spiro-cyclopentanone.* M. S. TELANG AND V. V. NADKARNY: *Kinetics of the reaction between potassium persulphate and the alkyl iodides. Part I. Influence of solvents, acids and salts.* K. P. BASU AND K. GUPTA: *Biological value of the proteins of some species of Bengal fish by the nitrogen balance and growth methods.* PRATUL NATH SEN-GUPTA AND B. C. GUHA: *The estimation of Vitamin C in foodstuffs.* M. P. SHAH AND V. B. THOSAR: *A note on the action on nitrosyl chloride on monobromomalonamides.*

**South Indian Science Association,  
Bangalore:**

August 30, 1939.—K. S. GURURAJA DOSS: *A New method of determining the cross-section of molecules.*

November 21, 1939.—SIR C. V. RAMAN: *Prof. Lawrence and the Cyclotron.*

December 14, 1939.—N. V. RAGHUNATH: *Ceramic Industry in India.*

**Indian Botanical Society:**

November 1939.—EDWARD BARNES: *The species of Geraniaceae occurring on the Travancore High Range including the description of a new Balsam.* B. N. SINGH, S. SAMPATH AND R. K. BANSAL: *A new fixative for plant smears.* P. N. GHATAK AND T. C. ROY: *Studies in the soil fungi of the paddy-fields of Bengal. I. Fungi of an unmaturing paddy-field of the Chinsura Agricultural Farm.* D. CHATTERJEE: *Some dominant plants of India.*