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# Everest Expedition.

MOUNT Everest, the world's highest peak, has once more defied man's attempt to climb its summit. The early advent of the monsoon and the heavy fall of snow rendered all heroic efforts unsuccessful and a retreat of the adventurous expedition has been officially announced, but

this unsuccessful attempt has yielded much valuable information. The party under the leadership of Mr. Ruttledge have discovered a new point of attack which would be of great value on a future occasion.

# Academies and Societies.

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May 1936. SECTION A.—SH. NAWAZISH ALL AND R. SAMUEL: Absorption Spectra of Tetra-Alkyl Ammonium Salts. Contributions to the Theory of Co-ordinate Linkage IX. Some molecules of tetra-alkyl ammonium indide possessing a true covalent N-1 bond exist in equilibrium with the dissociated molecules of the salt. This indicates that nitrogen under favourable conditions can be penta-covalent in agreement with a pair-bond theory of valency. K. C. Subramaniam: Magnetic Susceptibilities of Some Organic Compounds in Different Physical States.—The changes in magnetic anisotropy on melting and solution can be attributed to the break-up of polymers present in the solid state. P. S. VARADACHARI AND K. C. SUBRAMANIAM: Magnetic Studies of Sulphur and Some Sulphur Compounds .---Solutions of sulphur in carbon disulphide and sulphur monochloride have been studied by the Curie method. There is no evidence to indicate the presence of  $S_2$  in sulphur monochloride solutions. B. R. SETH: Vortex Motion in Rectangular Cylinders. S. PARTHASARATHY: Diffraction of Light by Ultrasonic Waves.—A detailed relation between the angle of inclination of the oscillating quartz, and the diffraction spectra produced by it at these angles, is given. N. S. NAGENDRA NATH: Neutrinos and Light Quanta.—It is found necessary to introduce the spin of the neutrino in the neutrino theory of light in order to obtain two photon operators for each energy state of photons and derive the Planck formula. C. V. RAMAN AND N. S. NAGENDRA NATH: The Diffraction of Light by High Frequency Sound Waves: Part V. General Considerations—Oblique Incidence and Amplitude Changes.—The intensity distribution will not be symmetrical in general. R. K. ASUNDI AND R. SAMUEL: Electronic Configuration and Bond Energy.—The method of molecular orbitals can be satisfactorily interpreted as an electron pair-bond theory of valency. S. PARTHA-Ultrasonic Velocities in Organic SARATHY: Part III.—Esters Ethers. Liquids. andMOHD. ISRARUL HAQ AND R. SAMUEL: On the Absorption Spectra and Linkage of Inorganic Nitrates and Sulphates in the Vapour Stale.—The bond between the metal and the oxygen atom in the nitrates and sulphates for the vapour state is of the covalent type.

May 1936. SECTION B.—A. C. Joshi and J. VENKATESWARLU: Embryological Studies in the Lythracece III.—A study of the structure and development of the ovule and the embryo-sac in Ammania, Neswa and Woodfordia and the development of pollen, male gametophyte, endosperm, embryo and seed in the family. M. S. RANDHAWA: Marked Periodicity in Reproduction of the Panjab Freshwater Alga.—Observations extending over two years have shown that in hot summer months, when nearly all ponds and tanks dry up, the Oedogonium is found in perennial streams only. In the rainy season very few alge with thickwalled oospores are seen. In the autumn the Spirogyra become fertile. The Rhodophycea show a luxuriant growth in cold freshwater stream during winter. In the months of spring—March, April and May—nearly all algae with thick-walled cospores and zygospores are in a ripe condition. M. S. RANDHAWA: Genus 'Anabænothrix' and Parallelism in Evolution in Freshwater Alga.—A detailed description of three species of Anabænalike blue-green algæ is given. M. A. H. Qadri: Studies on the Mouth-Parts of Mallophaga Infesting North-Indian Birds.—A comparative study of a large number of forms from simpler to specialised ones.

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May 1936.—D. N. MOGHE AND R. V. SASTRY: The Field of a Non-Static Spherical Condensation.— A generalisation of Schwarzschild's internal solution for an incompressible fluid sphere is given. V. V. NARLIKAR AND D. N. MOGHE: A Note on a General Line-Element. N. R. DHAR AND E. V. SESHACHARYULU: Nitrogen Fixation and Azotobacter Count on the Application of Molasses and Sugars to the Soil in Fields—Part I. N. K. SAHA: On the Reconstruction of the Mass-Defect Curve and the Stability of Beryllium Isotope  $Be_4^s$ .—The mass-defect curve for the nuclei He<sup>4</sup>, Be<sup>8</sup>, C<sup>12</sup> Si<sup>23</sup> forming the series  $X_{2n}^{4n}$  is constructed on the new "mass-scale" with the help of transmutation data and the few new mass-data of Bethe. M. N. SAHA AND L. S. MATHUR: A Critical Review of the Present Theories of the Active Modification of Nitrogen.—All the existing theories regarding the phenomenon of active nitrogen have been criticised. It is concluded that atomic nitrogen has nothing to do with the active modification and the experiments which establish its presence are not correctly interpreted. It is shown that the long life of the afterglow which is about 5½ hours according to the recent experiments of Lord Rayleigh throws a new complexion on the phenomenon. It is thought that in active nitrogen the molecule is raised to some state composed of two 2D atoms and probably located at 9.77 volts. JAGRAJ BEHARI LAL: A Note on the Colouring Matter of the Flowers of Lantana camera Linn.—The anthocyanin colouring matter has been isolated. N. L. PAL: Hydrogen Ion Concentration and Titratable Acidity at Different Stages of Fruit Ripening.—There is no direct relationship between the pH and titratable acidity. N. R. Dhar and S. K. Mukerji: Alkali Soils and Their Reclamation—Part I. N. K. CHATTERIL: Studies in the Respiration of Mango Leaves (Mangifera Indica).—The Ontogenic drift of Mangifera leaves in relation to  $CO_2/O_2$  activity has been traced out. G. R. Toshniwal, B. D. PANT, R. R. BAJPAI AND B. K. VERMA: Study of Ionosphere at Allahabad.—Observations for November and December, 1935, show that 75 meter waves are usually reflected from the F-region. Sporadic E reflections, however, have been observed on several nights. HAR DAYAL SRI-VASTAVA: New Hemiurids (Trematoda) from Indian Marine Fishes.—Part I.—A New Parasite of the sub-family Prosorchinæ Yamaguti, 1934.--A new species of the genus from the intestine of the fish Seriolicthys bipinnulatus from Puri, Bay of Bengal, is described. HAR DAYAL SRIVASTAVA: New Allocreadids (Trematoda) from Indian Marine Fishes,—Part I.—New Parasites of the Genus Helicometrina Linton, 1910.—Two new species of the genus Helicometrina Linton obtained from marine fishes at Puri, Bay of Bengal, are described.