

ACADEMIES AND SOCIETIES.

Indian Academy of Sciences:

September 1937. SECTION A.—S. S. BHATNAGAR, H. LISSHEIM AND M. L. KHANNA: *The Ground State of the Se₂ Molecule*.—It has been sought to decide whether the ground state is $^3\Sigma$ or $^1\Sigma$ from magnetic measurements on the vapour. The vapour of selenium is definitely paramagnetic. B. S. MADHAVA ROW: *Generalised Action-Functions in Born's Electro-Dynamics*. S. R. SAVUR: *The Replication of an Experiment. Part I.—Identical Samples from a Binomial Population*. S. S. PILLAI: *Generalisation of a Theorem of Davenport on the Addition of Residue Classes*. K. C. PANDYA AND T. A. VAHIDY: *The Condensation of Aldehydes with Malonic Acid in the Presence of Organic Bases. Part IX.—The Condensation of β -Hydroxy-naphthaldehyde (2-Hydroxy-1-naphthaldehyde)*.—Unlike the case with salicylaldehyde, the condensation here is effected very readily, even without any organic base. R. D. DESAI AND S. B. HAMID: *Heterocyclic Compounds. Part IV.—Coumarins from Resacetophenone and Ethylacetoacetate and Synthesis of Coumarino- γ -Pyrones*.—Resacetophenone condenses with ethylacetoacetate in the presence of phosphorus oxychloride to give a coumarin from which the coumarin- γ -pyrones can be readily obtained by the Kostanecki Reaction. S. SIDDIQUI AND V. SHARMA: *Studies in the Conessine Series. Part III.—Degradation of Conessine and Iso-Conessine Hydroiodides to a Common Hydrocarbon*. R. L. MOORE: *A Combined Electrometer and Thermionic Voltmeter*.—A design is given for A. C. ranges 0–6, +0–10 volts and D.C. ranges 0–3 and 0–6 volts. S. SIDDIQUI AND V. SHARMA: *Studies in the Conessine Series. Part IV.—Action of Nitric Acid on Conessine and the Reduction of One of its Two Isomeric Mono-Nitro Derivatives to Mono-Oxy and Iso-dioxy-conessine*. R. K. ASUNDI AND Y. P. PARTI: *On the Emission and Absorption Band Spectra of Selenium*. L. SIBAIYA: *Nuclear Spin of Rhodium*.—The isotope Rh 103 has a nuclear spin of $\frac{1}{2}$ with a small positive magnetic moment.

September 1937. SECTION B.—JAI CHAND LUTHERA AND INDER SINGH CHIMA: *Some Studies of Temperature of the Cotton Plant in the Punjab*.—The temperature of the leaves follows closely the temperature of the surrounding air. Soil moisture, however, exercises a marked influence on the temperature of the leaves, the plants of the unirrigated crop showing a higher temperature of 4°–5° C. during September in the afternoon, while that of the irrigated crop was lower by 2°–3° C. A. RAMAKRISHNA REDDY: *The Physiology of Digestion and Absorption in the Crab, Paratelpusa (Oziotelpusa) hydrodromus (Herbst)*.—A detailed account of the digestive process in the common South Indian field crab. J. H. MITTER AND R. N. TANDON: *Fungi of Allahabad, India, Part III*.—The fungi listed include some which have new hosts; some which have not been recorded in *The Fungi of India* by Butler

and Bisby; fifteen species and one genus in the list are described for the first time in *Annales Mycologici-Fungi indici* by the authors.

Indian Chemical Society:

July 1937.—HIRENDRA NATH DAS-GUPTA: *Studies in Organo-arsenic Compounds—Part VI. Synthesis of 1-Chloroarsindole from Cinnamic Acid*. HIRENDRA NATH DAS-GUPTA: *Studies in Organo-arsenic Compounds—Part VII. Synthesis of Arsindole Derivatives*. G. A. DALAL AND K. S. NARGUND: *Condensation of Succinic Anhydride with the Methyl Ethers of Dihydric Phenols*. TEJENDRA NATH GHOSH: *Quinazolines, Part I*. SUSIL KUMAR RAY: *Studies on the Formation of Dyes derived from 8-Oxyquinoline Aldehydes and from 2-Oxyanthraquinone Aldehyde*. NRIPENDRA NATH CHATTERJEE: *Terpene Compounds—Part I. Synthetic Study on the Structure of Azulene*. P. C. MITTER AND SUDHIR CHANDRA RAY: *Synthesis of Substances related to Capsaicin*. J. C. GHOSH, S. K. BHATTACHARYYA AND M. I. NARASIMHA MURTHI: *On the Photobromination of Acetylene Dichloride in the Gaseous Phase*. BALWANT SINGH AND IJAZ ILAHI MAJIK: *Potentiometric Studies in Oxidation-Reduction Reactions. Part III. Reduction with Sodium Sulphite*. BHABES CHANDRA RAY: *On the Constitution of Erdmann's Salt, Part I*.

Indian Association for the Cultivation of Science:

September 1937.—JAGANNATH GUPTA: *Free Rotation in the Oxalate Group and the Resonance Bond of Carboxyl*. B. N. BISWAS: *Derivation of the Latent Heat Equation from the Principles of Dilute Solution*. M. K. SEN: *Spin Doubling in $^2\Sigma$ States of AlO*. S. C. SIRKAR AND J. GUPTA: *On the Crystal Structure of p-Dichlorobenzene at Different Temperatures*. K. PROSAD AND L. M. CHATTERJEE: *Investigations on the Release of Electrical Charges under Moderate Pressure from Photographic Plates and other Materials*.

Society of Biological Chemists, India:

Bangalore, 11th September 1937:—SYMPOSIUM ON "CANE MOLASSES".—RAJAMANTRAPRAVINA MR. N. MADHAVA RAO, B.A., B.L.: *Opening Address*. B. T. NARAYANAN: *Molasses as a Fertilizer and Soil Reclaimant in Agriculture*. T. R. BHASKARAN AND S. C. PILLAI: *Decomposition of Cane Molasses in the Soil and its Bearing on Soil Fertility*. T. R. BHASKARAN AND S. C. PILLAI: *Utilization of Molasses for the Dissolution of Bone and Rock Phosphates*. D. A. HUKERI: *The Application of Molasses to Macadam Surface*. Y. K. RAGHUNATHA RAO: *Glycerine from Fermentation of Waste Cane Molasses*. S. RAJAGOPAL AND A. V. VARADARAJA IYENGAR: *Molasses as a Biological Starter in the Decomposition of Resistant Cellulosic Material*. G. GUNDU RAO AND M. T. N. IYENGAR: *Crystal-Molasses Ratios in Masseccites by a Conductivity Method*. S. RAJAGOPAL: *Manufacture of Yeast from Molasses*.

ERRATUM.

Vol. VI, No. 3, September 1937, pages 101–02, contribution entitled "Sexual Organs of *Pythium arrhenomanes* Drechsler on Artificial Substrata":

For "all" occurring on page 102, column 1, line 18, read "also".