ACADEMIES AND SOCIETIES

Indian Academy of Sciences: (*Proceedings*)

December 1940. SECTION A.—P. SURYAPRAKASA RAO, P. PRABHAKARA REDDY AND T. R. SESHADRI: *Methylation of hydroxy flavonols using methyl iodide and potassium carbonate.* This reagent resembles diazomethane in the methylation of the naturally occurring flavonols. V. V. KUMARA SASTRY AND T. R. SESHADRI: *Chemical Investigation of Indian Lichens—Part II. Synthetic uses of some lichen acids.* R. D. DESAI AND W. S. WARAVDEKAR: *Studies in naphthalene series—Part V. The properties of 2-stearyl-, 2-palmityl-, and 2-lauryl-1-naphthols and synthesis of 2-octadecyl-, 2-hexadecyl-, and 2-dodecyl-1-naphthols.* R. K. ASUNDI, S. MUJTABA KARIM AND R. SAMUEL: *On the continuous emission spectra associated with electric discharges through flowing vapours of* $SnCl_2$, $SnCl_4$ *and* $SiCl_4$. P. BHASKARA RAMA MURTI AND T. R. SESHADRI: *Paper pulp from annual crops—Part I. Rice straw.* In a straw having cellulose (Cross and Bevan) 37·5% the yield of paper pulp is about 44%. R. S. VARMA: *An infinite series involving the product of Bessel functions and generalised Laguerre polynomials.*

SECTION B.—RUSTOM JAL VAKIL: *An analysis of one hundred normal electrocardiograms (Boys aged 5 to 15 years).* C. P. ANANTAKRISHNAN and P. R. VENKATARAMAN: *The chemistry of garlic* (Allium sativum *L.*)—*Part I. The nitrogen complex.* C. P. ANANTAKRISHNAN AND P. R. VENKATARAMAN: *The chemistry of garlic* (Allium sativum *L.*)—*Part II. Phosphorus distribution.* S. V. GANAPATI: *On the occurrence of* Microspira aestuarii *in the Buckingham Canal at Madras.*

Indian Chemical Society (Journal)

September 1940.—S. S. BHATNAGAR, P. L. KAPUR AND B. D. KHOSLA: *Mechanism of the polymerisation of thiocyanogen from magnetic standpoint.* SANTI RANJAN PALIT: *Physical chemistry of resin solutions. Part II—Nature of resin solutions in organic solvents.* W. V. BHAGVAT, S. HARMALKAR AND S. S. DESHPANDE: *Mechanism of mutarotation of* d-*oxymethylene-camphor.* V. C. THAKAR, M. R. KAPADIA AND MATA PRASAD: *Determination of the space group of the crystals of* o-, m-, *and* p-*nitrobenzoic acids.* S. RAJAGOPALAN: *Synthetical experiments in the sympathomimetics. Part I—The naphthalene series.* D. K. BANERJEE: *Synthesis of* 3-(p-*hydroxyphenyl*)-*cyclohexanone.* K. S. MURTY: *The amylase activity of sweet cassava* (Mrnihot palmata). V. S. PURI AND G. C. JUNEJA: *The effect of inorganic colloids on the electrodeposition of nickel and copper.* H. N. RAY: *A new process for quantitative estimation of antimony and its separation from Tin and Lead by means of alkali sulphocyanides.*

Indian Botanical Society (Journal)

December 1940.—D. P. MULLAN: *The root-structure of* Chlorophytum tuberosum *Baker.* M. O. P. IYENGAR AND K. R. RAMANATHAN: Cladospongia, *a new member of the craspedomonadaceæ from Madras.* M. S. RANDHAWA: Zygogonium kumaoensis, *a new species of* Zygogonium *from Kumaon.* C. V. KRISHNA IYENGAR: *Structure and development of seed in* Sopubia trifida *Ham.* B. N. SINGH AND S. N. MEHRA: *The significance of anatomical changes accompanying regeneration of x-rayed* Bryophyllum *leaves.* Y. SUNDAR RAO: *Structure and development of the embryosac of* Drimiopsis kirki *Baker and* Allium govanianum Wall. T. S. RAGHAVAN AND V. K. SRINIVASAN: *A contribution to the life-history of* Bergia capensis *Linn.* T. S. RAGHAVAN AND K. R. VENKATASUBBAN: *Studies in the Bignoniaceæ. I.—Chromosome number and epidermal hydathodes in* Spathodea campanulata *Beauv.* R. E. COOPER AND D. V. SOHONEE: *The growth of the rice seedlings* (Oryza sativa *L. Columbia variety, No.* 42) *in salt solutions of different H-ion concentrations.*

December 1940.—I. BANERJI: *A contribution to the life-history of* Costus-speciosus *Smith.* V. K. SRINIVASAN: *Morphological and cytological studies in the scrophulariaceæ. II.—Floral morphology and embryology of* Angelonia grandiflora *C. Morr. and related genera.* P. PARIJA AND P. MALLIK: *Nature of the reserve food in seeds and their resistance to high temperature.* T. EKAMBARAM AND V. K. KAMALAM: *Permeability of the wall of the xylem vessel.*

Tin and Its Uses

Tin and Its Uses.—The seventh issue of this quarterly review of the International Tin Research and Development Council contains an article describing the properties of cold-reduced tinplate, and showing the advantages of the modern product over the old-style pack-rolled tinplate. Further information is given on the applications of electro-deposited tin coatings, which can be of any thickness desired. It is pointed out that articles of intricate shape can be plated in one process, and that electro-tinning is particularly useful for articles with soldered joints, which would disintegrate at the temperatures used in hot-tinning.

The protective film for tinplate, recently evolved in the Institute's Laboratories, has undergone further tests with encouraging results. A description of the process is illustrated by photographs of treated and untreated cans which have been used for meat, soup and peas. The untreated cans show considerable staining, but the treated cans appear as bright as when originally packed.

A new method for tinning copper or brass by a simple chemical process is also described in this issue, and commercial uses for the process are suggested. There are also articles on Tinned Piston Rings, and on the use of solder for correcting faults and producing smooth contours in all-steel automobile bodies. More examples of the Institute's free technical service are given, and special attention is drawn to the importance of research organisations to industry in war conditions.