CONTENTS

PLENARY SESSION


   - by S. T. Hodgar & R. K. Padalkar

3. Abstracts of Papers Presented During XXXIIrd ISSCT Congress held at New Delhi in Feb. '99 16 – 81

AGRICULTURE SECTION


2. Studies on Nitrogen Economy through Intercropping of Pulses in Sugarcane -
   by R. D. N. Verma, S. B. Singh, Jagdish Singh and R. C. Gupta 10 – 17

3. Performance of Different Sugarcane Varieties in Nahar Mill Area in Punjab -
   by R. S. Kanwar, Manoj Shrivastava & Thakur Jaipal Singh 18 – 23


5. Performance of Pre-Release Sugarcane Genotypes at R.A.R.S., Anakapalle -

6. COS 97264 - an excellent mid season maturing variety of sugarcane -
   by P.S. Verma, R.S. Singh, D.N. Singh and G.P. Singh 43 – 46

8. Spatial Distribution of Egg Masses of Scirpopaga Excerptalis Walker on Leaves of Sugarcane Crop - by Suchita Singh, Anil Dixit & D.N. Singh 50 – 55


10. Recent Bio - Technological Achievements in Sugarcane Breeding - by Dr. P. N. R. Rao 65 – 68

11. New Horizons in sugarcane varietal testing in U.P - by Dr. M.R.Gupta, P.R.Singh, A.K Chauhan 69 – 68


13. Comparative Quality of Cane and Natural Sugar of Cane Growth with Organic and Chemical Base - by Krishna Reddiar Perumal 88 – 93


15. Yield targeting in Sugarcane in Maharashtra : Problems and Solutions - by Dr. J.R. Kadam & Dr. N.D.Patil. 102 – 109


18. Evaluation of Five Different Fungicides on the Control of Smut in Iran - by Q. Kazemi 125 – 129


22. Research Imperatives for the Indian Sugar Industry Beyond 2000 - by H. N. Shahi 166 – 177

MANUFACTURING SECTION


3. Study of Mud Problem in Flood Effected Cane - by M. S. Shukla & N. P. Rana 14 – 22


5. Invert Syrup - A Liquid Sweetener for Mass Consumption - by Mahendra Prasad, R. P. Shukla & S. Bhatt


7. Kinetics of Crystallasation of Sugar in Pure Solution - "Effect of Variation of Super Saturation Coefficient" - by Dr. G. M. Jenekar, Dr. P. D. Jadhav & Mr P. G. Jadhav 50 – 55

8. Quality of Plantation White Sugar a Perspective in View of the Demanding Standards of User Industries - by Dr. (Mrs.) V.S. Keskar 56 – 64


(iii)
| 10. | Simulation Study of Fuzzy Logic Based Pan Control - | 75 – 87 |
|     | by Dr. P. Kapur & N. V. Rajeev |
| 14. | Some Experiences in C-Massecuite Curing and More Regular Effectiveness of Sugar Size - J Graders - by Dr. Rajeev Kumar Sharma | 119 – 122 |
| 15. | Configurable PC Based Controller for Pan Boiling Operations - by Agri-Electronics Group. - (Dr. P. Kapur & Others) | 123 – 136 |
| 16. | Use of Sugar Enhancer for Bagasse Treatmnt, A Case Study - by R. N. Phatak, I. C. Gorewara & S. Srivastava | 137 – 142 |
| 18. | Poly Aluminium Chloride (PAC) as a Clarifying Agent Inplace of Lead Sub Acetate for Pol Analysis - One Week Trial at Daurala Sugar Works, Daurala - by A. K. Gupta & R. Mishra | 149 – 160 |
| 19. | pH-Metric & Conductometric Technique for Controlling Supply of Stalecane - by Dr. M. Prasad, L. P. Tiwari & Sudhanshu Mohan | 161 – 166 |

**ENGINEERING SECTION**

| 2. | New Concept In Cane Feed Control - by M. K. Biswas & Sanjay Tripathi | 30 – 36 |
3. **Comparative Design Aspects in Relation to Pan Performance** - by Chhote Lal, P.R. Singh and Km. Bharti Shukla
   
   
   
6. **Erection & Commissioning of Boilers** - by M. Ramesh Babu and V. Sivaram
   
   
8. **Stainless Steel for Sugar Plant Applications** - by K. R. Ananthanarayanan
   
9. **Electrical Energy Audit of Hydrostatic Mill Drive Case Studies** - S.D. Borude, A.P. Lad
   

**CO-PRODUCT SECTION**

1. **Production of Poorman's LPG from Pressmud** - by P. Thangamuthu
   
   
3. **A Novel process for Invert Sugar and High Fructose Syrup from Sugarcane** - by J.K. Gehlawat
   
4. **Environmental Pollution Control in Sugar Mill** - by Amitabh P.C.S., N.K. Sharma & A.S. Poras
   

7. Management Functions, Behaviour and Decision-Making in a Sugar Factory and Their Effects on Sugar Industry as a whole, Technical Concepts for Top, Middle and Operating Management Levels - by Dr. Rajeev Kumar Sharma

8. Operation and Maintenance of Sugar Mill Effluent Treatment Plant - by N. Gunasekaran, J. Gurugovind and Dr. S. Arockiasamy


10. Fermentative Production of Alcohol from Deteriorated Sugar - by Santosh Kumar & P. K. Agrawal


12. Bagasse Cogeneration Without Fossil Fuels What Needs to be Done - by K. Ramakrishnan