



# XXXI Congress of the International Society of Sugar Cane Technologists

20-23 February 2023 | HICC, Hyderabad, India

## PROGRAM

### Sunday, 19 February 2023

1800-1820	<p><b>Opening of the Trade Expo- Hall No 4,5,6</b></p> <p>-Welcome Address by <b>Mr. Ranjit Puri</b>, Chairman Congress Organizing Committee and Chairman, Isgec Heavy Engineering Ltd.</p> <p>-Address by <b>Dr. Raul Castillo</b>, Chairman ISSCT Council and Executive Committee</p> <p>-Address by Chief Guest <b>Mr. Nitin Gadkari</b>, Hon'ble Transport Minister for Road Transport &amp; Highways, Govt. of India, through Virtual Mode</p> <p>-Vote of Thanks by <b>Mr. Sanjay Awasthi</b>, Congress Executive President and President, STAI</p> <p>-Inauguration of the Exhibition and Visit to Stalls by the Distinguished Dignitaries</p>
1830	Networking Cocktails

### Monday, 20 February 2023

0930-1050	<p><b>Introductory Session – Hall No 3</b></p> <p>-Welcoming and Felicitations of the Dignitaries on the Dais and Lighting of the Lamp</p> <p>-Release of the Publications</p> <p>-Address by <b>Mr. Vivek M Pittie</b>, Congress Vice Chairman and Whole Time Director, Harinagar Sugar Mills</p> <p>-Address by <b>Dr. Jean Claude Autrey</b>, General Secretary, ISSCT</p> <p>-Address by <b>Dr. Suresh Bhosale</b>, Honorary Congress President &amp; Chief Promoter, Jaywant Sugars Ltd.</p> <p>-Address by <b>Mr. Subodh Kumar Singh</b>, Additional Secretary (Sugar), Ministry of Consumer Affairs, Food and Public Distribution, Govt. of India,</p>			
	- Keynote Address by <b>Mr. Ranjit Puri</b> , Chairman, Isgec Heavy Engineering Ltd. on "Transformation of Sugar Industry from Sugar Production to Bio Energy Hub" followed by Q & A			
1050-1130	Coffee/Tea			
1130-1200	<p><b>Inaugural Ceremony-Hall No 3</b></p> <p>-Welcome Address by <b>Mr. Ranjit Puri</b>, Chairman Congress Organizing Committee and Chairman, Isgec Heavy Engineering Ltd.</p> <p>-Address by <b>Dr. Raul Castillo</b>, Chairman ISSCT Council and Executive Committee</p> <p>-Address by <b>Mr Piyush Goel</b>, Hon'ble Minister for Commerce and Industry, Consumer Affairs, Food and Public Distribution, Govt. of India, through Virtual Mode</p> <p>-Vote of Thanks by <b>Mr Sanjay Awasthi</b>, Executive President, Congress Organizing Committee and President, STAI</p>			
1200	Lunch			
	Agriculture - MR 1.01- 1.03	Biology - MR 1.04 - 1.06	Factory - Hall No.1 GF	Co-products - Hall No.2 GF
1400	Singh, et al - Validation of renewable sugar-industry wastes towards a circular bioeconomy for sustainable sugarcane production	D'Hont, et al - Sugarcane genome architecture revealed by chromosome-specific probes, implication for chromosome nomenclature	Chandgude, et al - Sustainability in Indian sugar mills by adopting innovative and viable technologies	Chudasama - All roads lead to diversification
1430	Bhadha, et al - Utilization of bagasse as a soil amendment in sugarcane production on mineral soils in Florida	Perera, et al - Genetic diversity and population structure of <i>Saccharum</i> hybrids	Qureshi, Ghazanfar - The journey towards sustainable business through technological advancement and diversification into the downstream industry: a role model in the Pakistan sugar industry	Lavarack - Adding value to bagasse and sugarcane agricultural residues: one view
1500	Bano - The sugarcane production system in Fiji – implications relating to climate change	Trujillo-Montenegro, et al - A consensus monoploid genome assembly of the sugarcane variety CC 01-1940, a high-yielding Colombian sugarcane hybrid in the Colombian industry	Awasthi, et al -A new sugar complex designed to provide maximum raw material to a paper industry	Mohan - Bio-ethanol – the saviour of the Indian sugar industry
1530	Coffee/tea			
1600	Kaab, et al - Assessment of the life cycle environmental impacts of sugarcane production in Iran	Chaves, et al - Identification of novel SNP alleles linked to brown rust resistance in sugarcane	Wicht, et al - Low-temperature bagasse applications for fuel saving and power export	Mankame, Deshmukh - Low carbon intensity biofuels: the key to a sustainable future
1630	Todoroff, et al - Spatial emission balance of greenhouse gases from land uses and land-use changes at a territorial scale	Budguer, et al - Transgenic sugarcane for the sustainable management of the sugarcane borer <i>Diatraea saccharalis</i>	Raskar, Kshirsagar - Power generation in the Indian sugar industry using segregated urban dry waste as an auxiliary fuel	Muñoz Santacruz, Uribe Osorio - Prospective analysis for the fuel-alcohol business in the Colombian sugar sector - foresight and strategic thinking
1700	Naseri, et al -Evaluation of sugarcane production under different tillage systems in Iran	Sosa, et al - Advances in genome editing of sugarcane using als genes as a model	Foxon - Costing steam and vapour bleeds in a cane sugar factory	Co-products section meeting and posters



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### Tuesday, 21 February 2023

	Agriculture - MR 1.01- 1.03	Biology - MR 1.04 - 1.06	Factory - Hall No.1 GF	Management - Hall No.2 GF
0830	Shinde - Micro-irrigation systems for efficient water management in sugarcane	Wilson - Advances in the management of sugarcane stem borers in Louisiana, USA	Thaval - Modelling the extraction performance of a diffuser station	Solomon et al - Contributions of the Indian sugar industry to sustainable development - Agenda 2030: a case study of Dalmia Bharat Sugar and Industries Limited
0900	Neissi - SEBAL or TSEB - which remote-sensing algorithm is more appropriate for estimating sugarcane evapotranspiration?	Achadian, et al - Current and future actions for integrated management of sugarcane stem borers in Indonesia: a case study of <i>Chilo sacchariphagus</i>	Sakhardande, et al -Influence of two-roller mills in enhancing the efficiency of conventional milling tandems	Van Antwerpen et al - Promoting adoption of soil-health-related regenerative agriculture practices amongst small-scale sugarcane grower communities in South Africa
0930	Adendorff, et al - Adoption of irrigation scheduling in the South African sugarcane industry: the use of a demonstration trial to bring about change	Malinga - A novel approach to the Sterile Insect Technique (SIT) for the management of <i>Eldana saccharina</i> in South Africa	Calpa Pantoja, et al - Implementation of a first-mill cane-feeding control strategy based on a cane-harvest system	Castillo, et al - Long-term sustainability in sugarcane production in Ecuador driven by research results
1000	Agriculture Commission sections meeting	Carmona-Giraldo, et al - Morphological and molecular identification of <i>Trichogramma</i> spp. in sugarcane in Colombia	Muñoz, et al -Effect of imbibition water temperature on tandem mill extraction	Management Commission meeting
1030	Coffee/tea			
1100	Plenary – Hall No 3 <i>Sugar and health told differently</i> Denny - Sugars and health: what does the latest evidence tell us? Cooper - The challenge of sugar reformulation – some examples from the UK Eggleston - The case for natural, nutritious, and functional sweeteners from sugarcane that meet new consumer demands			
1230	Lunch			
1330	Panel Discussion - Present Challenges in the Global Sugar Industry – Hall No 3			
1430	Fandos, et al - Comparative analysis of the production levels in the traditional and expanding sugarcane areas in Tucumán Province, Argentina	Beuzelin, et al - Evaluation of a neonicotinoid alternative to phorate for the management of soil insects in Florida sugarcane	Kimmenauer, Szymkiewicz - Experiences with low-temperature dryers in the cane sugar industry	Daruich, et al - Implementation of the 6S method at the Chacra Experimental Agrícola Santa Rosa
1500	van Heerden, et al - Advancing cane-quality management in the South African smallholder-farmer sector through participatory on-farm demonstration and knowledge exchange	Putra, et al - Efficacy of extraction waste of cashew nutshell and neem seed, and compatibility with <i>Metarhizium anisopliae</i> against larvae of <i>Lepidiotia stigma</i> under laboratory conditions	Verma, et al - An innovative hybrid dryer for bagasse incorporating waste-heat recovery and flue-gas cleaning	Sawhney, Kohli - Importance of on-the-job training for productivity enhancement in the Indian sugar industry  Tamak, et al - A sustainable business model for sugar production
1530	Coffee/tea			
1600	Noori - Effect of lodging on yield and quality of sugarcane cultivars	Goebel, et al - Progress towards an IPM support tool for the yellow sugarcane aphid, <i>Sipha flava</i> , in Tanzanian sugarcane	Rackemann, Marasinghege - Understanding and minimising the impacts of non-sucrose constituents of sugarcane juice on juice degradation during evaporation	Nicholson, Kadwa - Sugar tax in South Africa: estimating the financial impact on sugarcane growers
1630	Lin-Kwong-Chon, et al -Multi-level deep-based classification of land use and land cover: a case study on Réunion	Dumont, et al - Genetic variability of sugarcane varieties for resistance to <i>Sipha flava</i>	Rackemann, Marasinghege - Optimisation of pH for minimising juice degradation during evaporation	Kadwa - Comparison of the former Sucrose Base Payment versus the present Recoverable Value cane-payment system in South Africa
1700	Poster presentations	Nikpay, Cheraghi - Integrated strategies for managing the sugarcane mite, <i>Oligonychus sacchari</i> , in sugarcane agroecosystems in Iran	Imbachi-Ordonez - Impact of scale composition in evaporator cleaning efficiency	



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### Wednesday, 22 February 2023

	Agriculture - MR 1.01- 1.03	Biology - MR 1.04 - 1.06	Factory - Hall No.1 GF	Biology - Hall No.2 GF
0830	Sandhu, Coto - Row-spacing and cultivar effects on sugarcane growth and yields in Florida histosols	Viswanathan - Management of sugarcane diseases in India: the role of disease resistance and healthy seed cane	Narendranath, Arles Silva -Use of lamella clarifiers for juice and syrup clarification at a direct-white cane-sugar plant	Hemaprabha, et al - Trends in genetic improvement for sugar-yield traits of Coimbatore canes over generations of sugarcane breeding in India
0900	Madala, et al - Effects of planting method and fungicide seed-application on sugarcane growth and yield	Bertani, et al - Reaction of commercial sugarcane varieties against smut disease in Tucumán, Argentina during the 2020/2021 and 2021/2022 seasons	Liu, et al - Ceramic membrane filtration of sugarcane juice for high-quality sugar production: a review	Alarmelu, et al - Estimation of genetic progress for yield and quality in sugarcane from advanced cycles of reciprocal recurrent selection using BLUPs
0930	Bolonhezi, et al - Pre-sprouted sugarcane seedlings transplanted with different soil-management practices after a green-manure legume	Rincón, et al - Finding novel sources of resistance to orange rust and brown rust in the Colombian sugarcane breeding program	Kesarwani, et al - Evaluation of rotary vacuum filter (RVF) and decanter-based mud-filter technologies	Santchurn, et al - A method for improving the efficiency of the proven-cross and proven-parent system in Mauritius
1000	Khanakornsuksan, et al - Development of a device for measuring sugarcane-billet length	Bertani, et al - Association between virulence factors and genetic groups in <i>Acidovorax avenae</i> subsp. <i>avenae</i> isolates, the causal agent of sugarcane red stripe disease	Factory Processing and Engineering Sections meeting	Zhou - Exploiting heterosis in breeding for sugarcane yield
1030	Coffee/tea			
1100	Plenary – Hall No 3 <i>Growing sugarcane differently</i> van Antwerpen, et al - Soil regenerative agriculture in the South African sugarcane industry Dart – Producing organically certified sugar - an Australian cane grower’s perspective Christina, et al - Modeled impact of climate change on sugarcane yield in Réunion, a tropical island			
1230	Lunch			
1330	Panel Discussion - Sustainability of the Sugar Industry – Hall No 3			
1430	Odero, Negrisola - Effect of asulam and trifloxysulfuron on seed production of fall panicum ( <i>Panicum dichotomiflorum</i> )	Prasanth, et al - Dynamics and varying pathogenicity of the red rot pathogen <i>Colletotrichum falcatum</i> during its interaction with sugarcane	Lewinski, et al - Application of a hydrostatic transmission in cooling crystallisers	Hoarau, Dumont - Benefits of mixed models and its BLUP methodology in sugarcane breeding
1500	Baucum, et al - Herbicidal control of seedling johnsongrass in newly transplanted sugarcane seedlings in Louisiana	Malathi, Kaverinathan, Ramesh Sundar, Viswanathan - Application of omics tools to identify potential target sites for the management of red rot pathogen <i>Colletotrichum falcatum</i> in sugarcane	Horner, et al - Degradation modelling of and optimising the timing of replacements for batch vacuum pans	Ostengo, et al - BLUP methodology in the selection of advanced sugarcane clones according to their maturity profile
1530	Coffee/tea			
1600	Rodriguez, et al - Effect of dew and spray volume on the efficacy of control of asulam on fall panicum ( <i>Panicum dichotomiflorum</i> )	Daugrois, et al - An update on the old, new, and emerging viruses infecting sugarcane	Thaval - Engineering concept for combined refinery operations with cane sugar milling	Jones, Singels - Can crop simulation modelling guide sugarcane crop improvement?
1630	Chetty, et al - Micro-mechanization to manage weeds in sugarcane	Sood, et al - Effect of sugarcane yellow leaf virus in the second clonal stage of the Canal Point Cultivar Development Program	Awasthi, et al - State-of-the-art technologies in a standalone sugar refinery - Durrah Advanced Development Company, Saudi Arabia	Aybar Guchea, et al - Test environments study for the selection of sugarcane clones in Tucumán, Argentina
1700	Fabre Ferber, et al - Predicting sugarcane weed infestations in Réunion using multi-label learning algorithm	Bertani, et al - Status of <i>Sugarcane yellow leaf virus</i> in Tucumán, the main sugarcane-producing area in Argentina	Panda, et al - Treatment of spray-pond water by solid waste generated from an electrostatic precipitator/wet scrubber to minimize the raw water addition in spray ponds and reduce the effluent load at a sugar-mill effluent-treatment plant	Koonjah, et al - Data mining through an innovative cloud platform for climate, sugarcane research and crop monitoring in Mauritius



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### Thursday, 23 February 2023

	Agriculture - MR 1.01- 1.03	Biology - MR 1.04 - 1.06	Factory - Hall No.1 GF	Coproducts - Hall No.2 GF
0830	Février, et al - Modelling the apparent nitrogen-recovery efficiency of exogenous organic matter: a comparison of three decision-support tools	Moazzen Rezamahalleh, et al - Identification of ice-nucleating bacteria from commercial cultivars of sugarcane in Khuzestan Province, Iran	Imbachi-Ordóñez, et al - How a clarification aid can affect polarimetric analysis of sugarcane juices	Awasthi, et al - Changes to the design of incineration boilers with a changing scenario of ethanol production
0900	Chevalier, et al - Sugarcane responds to nitrogen fertilization by reducing root biomass without modifying root N accumulation	Rao - Sugarcane grassy shoot and sugarcane white leaf diseases in Asia: progress to date	Shi, et al - A new approach to measuring the fibre content of sugarcane	Dani, et al - Clarification of B heavy molasses for better keeping quality and to minimize distillery scaling problems
0930	Rossetto, et al - Controlled-release urea for use in sugarcane ratoons	Almeida, et al - Photosynthetic responses to light in <i>Saccharum</i> spp.: revealing the genotypic variation and the heritability of photosynthetic traits	Montes et al - Implementation of a test to predict cane fiber characteristics during the milling process	Lorenzo, et al - Influence of added nutrients used in ethanol fermentation of molasses on the residual vinasse
1000	Ehsanipour, et al - Effect of inoculation of biofertilizers on sugarcane-legume intercropping	Biology sections meeting	Rivière, et al - In-house C massecuite reheater: a successful development for Le Gol sugar factory	Ketsub, et al - Integrated production of biomethane and hydrochar from sugarcane trash for various applications
1030	Coffee/tea			
1100	Plenary – Hall No 3 <i>Diversification done differently</i> Mohan, Kanodia - Importance of diversification and integration in the Indian sugar industry Muir - Co-products in the beet sugar industry Autrey, et al - Characteristics of specialty and physiologically-enhanced refined sugars produced in Mauritius favourable for good health			
1230	Lunch			
1330	Poster session			
1400	Nobile, et al - Sugarcane response to phosphorus fertilization in the highly diversified pedological contexts of Réunion Island	Racedo, et al - Genomic selection for traits of interest in the EEAO sugarcane breeding program	Verma - Evaporation and concentration at low temperatures using plate-type evaporators based on a mechanical vapour-recompression system	Mohan, et al - A biorefinery method for production of chloromethylfurfural (CMF) and vanillin from sugarcane bagasse with simultaneous fractionation of pentose syrup and lignin
1430	Remaining poster presentations	Saavedra-Díaz, et al - Molecular markers, a roadmap to higher sucrose accumulation in sugarcane ( <i>Saccharum</i> spp.)	Broadfoot, Rackemann - Limiting the effects of the Maillard reaction during evaporative and cooling crystallisation of C massecuites	Wu-Tiu-Yen, Eve - Potassium extraction from methanization effluent by ion-exchange chromatography as an alternative fertilizer
1500		Biology poster presentations	Lehnberger, Thaval - An improved understanding of the operation of falling-film evaporators in cane sugar factories	Yepez, et al - Xylose production from sugarcane harvesting residues: an alternative towards a biorefinery
1530	Coffee/tea			
1600	Karami Chenesi Nezhad, et al - Effect of electrical conductivity of irrigation water on the yield of different sugarcane cultivars in the south of Khuzestan province, Iran	Easdale, et al - RNAi confers resistance to mosaic virus in sugarcane in the field	Honkanen, et al - Automatic pan microscope measurement of sugar crystals and its utilization in real-time crystallization control	Eggleston, et al - How sugarcane vinegars compare to other commercial vinegars: composition and health benefits
1630	Habibian, et al - Different forms of iron in sugarcane soils with different cropping histories in Iran	Joshi, et al - Gene flow from commercial sugarcane hybrids to compatible wild relatives	Singh Bola, et al - Experience with online optical crystal monitoring from the first two modern batch-pan automation projects in India	Cavailles, et al - Influence of molding conditions on the properties of bio-based materials produced by thermo-compression from sugarcane bagasse