



STAI e-News Letter

Quarterly News Letter

Volume 7, Issue 21, 5th April 2021

From the Desk of President

Dear Members,

Greetings!

I am happy to share my thoughts with you through the 21st edition of STAI e-Newsletter. The Indian sugar industry will be completing a successful sugar crushing season 2020-21 in next couple of weeks. India's sugar production is set to increase 10.2% YoY to around 30.2 MT led by a sharp rebound in the sugar production in Maharashtra and Karnataka. This is after excluding sugar diversion of about 2 MT towards ethanol production.

The industry is also on the threshold to exporting 6 MT of sugar taking advantage of the rally in global sugar prices and export subsidy which makes overseas sales lucrative. With good exports and an increased diversion of sugar to ethanol, the closing stocks are set to moderate to 8.8 MT at the end of the sugar season 2020-21.

Encouraged by the success of the ethanol blending programme, the Government has pre-poned 20% blending target to 2025 from the year 2030. The Govt. has also notified and amended the Motor Spirit High-Speed Diesel Order 2005 in March 2021 al-

lowing oil marketing companies to sell bioethanol (E100). To further enhance ethanol distillation capacity, the Govt. has permitted production of 1st Generation (1G) ethanol from feed stocks such as rejected cereals (rice, wheat, barley, corn), cane juice, etc.

To achieve 20% blending and meet the requirement of chemical and other sectors about 12000 million liters of alcohol/ethanol will be required; out of which 9000 million liters would be required to achieve 20% blending. About 6 MT of surplus sugar can be diverted to produce 7000 million liters of fuel ethanol and this **itself will solve the problem of excess sugar production in the country**. It is high time that the industry ramps up its capacities and take advantage of the Govt. policies towards a viable and sustainable sugar industry.

STAI started its activities for the year calendar year 2021 by holding one webinar in Jan 2021 and one Virtual Workshop in March 2021. The detailed update on the same is given on the following pages. We are also holding another Webinar on 28th of April 2021 on "Setting up Bio CNG Projects for the Financial Health of Sugar Factories" and request the members to participate in large numbers.

Shortly the STAI Council will be deciding on the future course of activities/annual convention keep-



Mr Sanjay Awasthi , President, STAI

ing in view the COVID 19 situation and safety of the members. In the meantime, I would request the members to please stay safe by taking necessary precautions, maintain social distance for the safety of your near and dear ones.

SANJAY AWASTHI
PRESIDENT

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STAI Webinar on “Evaluation of C/B -Heavy molasses quality by traditional vis -a vis Gas Chromatography technique”

The Sugar Technologists’ Association of India in association with **Maarc Labs Pvt. Ltd.** organized a Webinar on “**Evaluation of C/B - Heavy molasses quality by traditional vis -a vis Gas Chromatography technique with Visual Demonstrations**” which was held on 20th January 2021.

The purity of final molasses depends upon various factors like cane quality, harvesting practices, quality of processing and engineering aspects. Assessing and controlling the operational loss of sugar in various byproducts during cane processing in sugar factories is a major concern for technologists.

Mr Sanjay Awasthi, President, STAI in his welcome address said that “In Sugar factories and distilleries with the new ethanol production targets more n more C and B Heavy molasses is now being diverted to distilleries. In such scenario control of losses & true analysis of C and B Heavy Molasses has become need of hour.

The biggest tool for any improvement being initiated is to be done through knowing the right facts and that can be only done through modern analytical techniques” he added further

Technical Presentations

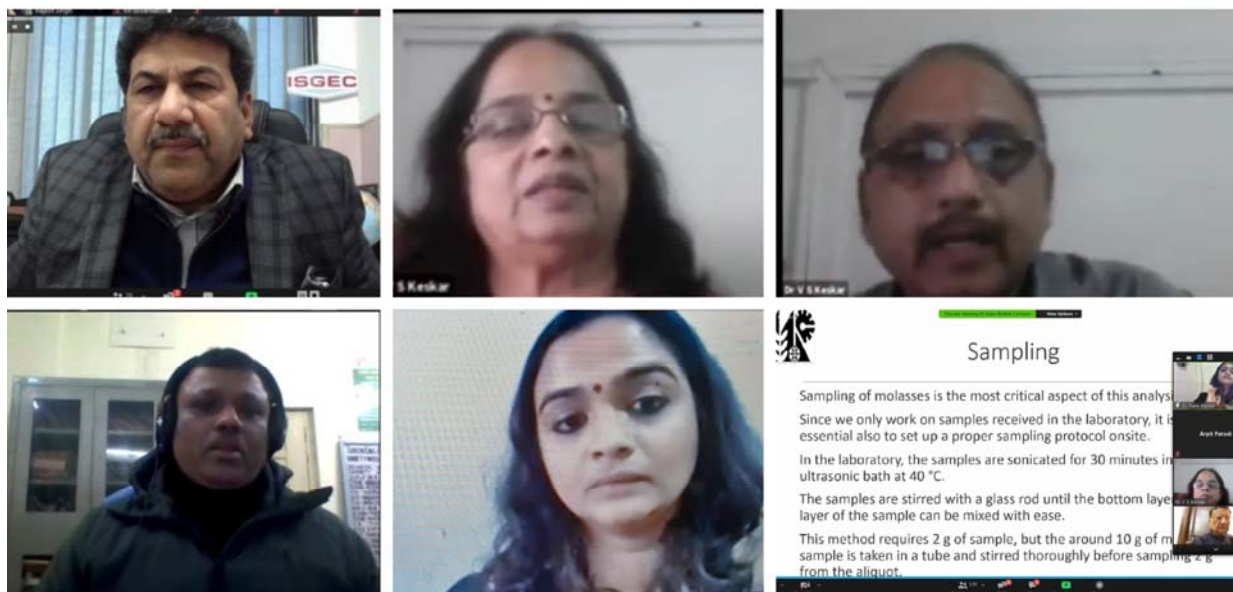
Following technical presentations were made during the webinar :

- Molasses Analysis by Traditional and Chromatographic Method -An overview by Dr. Vasudha Keskar, M. D., Maarc Labs, Pune
- Glucose, Fructose and Sucrose Analysis in Molasses by Gas Chromatography - A Demonstrative Session by Dr. (Ms.) Sae Keskar, Technical Manager, Maarc Labs, Pune.
- Comparison and Interpretation of Results by Lane Eynon Constant Volume and GC Method supported by Demonstration by Dr. S. S.

Nimbalkar, Director, Maarc Labs, Pune

- Importance of B and C Heavy Molasses Quality in Ethanol Production by Mr Rajesh Singh, AGM, Triveni Engineering and Industries, Khatauli, U.P.
- Molasses Quality Checking and Finance by Mr. Ram Sagare, VP-QA & Systems, Baramati Agro, Maharashtra. The presentation was made by Dr S S Nimbalkar.

The webinar was conducted from different locations in Delhi NCR, Uttar Pradesh & Maharashtra. Mr Sanjay Awasthi, President, STAI presided over the session from Isgc Office, Noida, Mr D K Goel, Hon. Editor moderated the session from his residence at Delhi. 273 members of STAI family from their respective locations around the world actively participated in the webinar.



Top- (Left-Right) Mr Sanjay Awasthi, Dr (Mrs) V S Keskar , Dr S S Nimbalkar

Bottom(Left-Right) Mr Rajesh Singh , Dr (Ms) Sae Keskar, Screenshot of Presentation slide

STAI Virtual Workshop on “Techno-Economic Feasibility of Converting Molasses based Ethanol Plants to Dual Feedstock ”

The Sugar Technologists’ Association of India organized a virtual workshop on “Techno-Economic Feasibility of Converting Molasses based Ethanol Plants to Dual Feedstock” on 18 March 2021. The workshop was organized in association with M/s Excel and Engineers and Consultants, Pune.

Mr R V Vatnal, Group Technical Advisor, MRN Group of Companies in his Welcome Address said that “The Sugar Factory operations in South India are generally for 90-120 days in a year . It is very difficult for Sugar Factories to sustain themselves in such low operation period in view of the interests on loan, rising sugarcane prices and less revenue realization through sugar . The extended operation of distilleries attached with Sugar Factories through Multi Feed Stock would ensure yearlong sustainable and viable operations”

Mr D K Goel, Hon. Editor, STAI said that “The modified scheme for extending financial assistance to project proponents for enhancement of their ethanol distillation capacity or to set up distilleries for producing fuel ethanol from feed stocks such as rejected cereals (rice, wheat, barley, corn), cane juice, etc. or converting molasses based distilleries to dual feedstock is an exciting opportunity for Sugar Factories in India”

“This will encourage farmers to diversify their crops for helping the sugar factories to enhance production of ethanol from other feed stocks & would ensure good returns to them in

view of the increased industrial demand”, Mr Goel added further

Technical Paper Presentations

Following Technical Papers were presented during the webinar:

- Grain Ethanol Plant Design Consideration for Sugar Mills by Mr. Sanjay Desai, MD, Excel Engineers, Pune
- Evaluation of Dual Feed Route for Ethanol Production- Opportunities & Challenges and Economics by Dr Sanjay V Patil, T.A. and HOD Alcohol Technology and Biofuels , VSI,Pune
- Dual Feed Stock Distillery to Enhance Ethanol Production by Munishnandan Tyagi, Sudhir Kumar, R. A. Singh & HPS Bhatia, Chadha Sugars and Industries, Kiri Afgana, Punjab

- Multi - Feedstock Operation in Distilleries - A Challenge to existing ZLD Norms by Soham Sanyal, Anurag Goyal, Kiran Dangwal, ISGEC Heavy Engineering Ltd., Noida
- Grain Ethanol Production in a Molasses Distillery by the Sugar Mill-A Case Study by Daulat Kadam, N. M. Patil, Krishnan Govindasamy, Hermes Distillery, Shivshakti Sugars Ltd., Karnataka. The Paper was jointly presented by Mr Daulat Kadam and Mr Sanjay Desai.

This webinar was conducted from different locations in Delhi NCR region, Pune, Punjab and Karnataka. Mr D K Goel, Hon. Editor, STAI was the moderator for the session. Nearly 200 members of STAI family from their respective locations around the world actively participated in the Virtual Workshop.



Top - (Left-Right) Mr D K Goel, Dr Sanjay V Patil , Mr Sanjay Desai

Bottom(Left-Right) Mr R V Vatnal , Mr Munish Tyagi, Mr Soham Sanyal

STAI President Calls on Yogi Adityanath Ji, Hon'ble Chief Minister of Uttar Pradesh

On 26th February 2021 STAI President Mr Sanjay Awasthi called on the Hon'ble Chief Minister of Uttar Pradesh Yogi Adityanath Ji at Lucknow and as a token of appreciation and gesture from STAI presented him a trophy for the spectacular growth and development of the sugar industry in Uttar Pradesh.

During the 78th Annual Convention of STAI held from 20-21 Oct. 2020 at Hotel JW Marriot, New Delhi, the Council and the members of the Indian sugar fraternity acknowledged the contribution being made by the Hon'ble Chief Minister of Uttar Pradesh Yogi Adityanathji towards fostering the growth and development of the sugar industry in Uttar Pradesh.

Under his dynamic leadership Uttar Pradesh is now the largest sugar producer of sugarcane and sugar in the country, achieving a record recovery of 11.35%, encouraging production of ethanol through sugarcane juice/B-heavy molasses,



setting up of new sugar plants, reviving and rehabilitating old sugar mills, adoption of modern technologies like, zero liquid discharge, production of sulphurless sugar etc.

The 78th STAI Convention was inaugurated by Sh. Suresh Ranaji,

Hon'ble Minister for Sugarcane Industry and Cane Development Dept., Govt. of Uttar Pradesh.

Activities of Research & Investigation Committee and Publications Advisory Committee

The 2nd meeting of the Research and Investigation Committee of STAI and the 2nd meeting of Advisory Committee on Publications were clubbed together and held through video conference on 3rd February 2021. **Mr Sanjay Awasthi**, President, STAI presided and **Mr D K Goel**, Convener and Hon. Editor, STAI conducted the meeting which was attended by 14 members.

Update on the ongoing Research & Investigation Projects of the Association were presented by the respective co-ordinators:

Dr Priyanka Singh, Scientific Officer, UPCR gave a detailed update regard-

ing the Project "Utilization of Sugarcane and Sugar Industry Wastes for Sustainable Sugarcane Production" which was commenced at Nigohi Sugar Factory in March 2020 and is presently scheduled to be completed in March 2023.

Mr R S Shewale, Manager, Distillery, SMSKL, Pune made the presentation on the project "Bio-enzymes for Condensate treatment and Recycling in a Distillery" in the absence of Mr D M Raskar.

Mr Anurag Goyal, AGM, Isgec Heavy Engineering gave details of his

proposal for "Utilizing Filter Cake to produce Biogas/Bio CNG".

Mr Anup Kesarwani, Director, Chemical Systems gave details of his proposal for "Removal of Suspended Material in Mixed Juice by Use of Flotation Clarifier"

The other items discussed were proposed topics for holding Webinar/ Seminars 2021, update on Year Book and Technical Directory of Indian Sugar Factories 2019-20 & Directory of Cane Sugar Factories and Distilleries for 2019-20.

Obituary-Shri Ashok Kumar Malik , Vice President, STAI

Shri Ashok Kumar Malik a sitting member of the STAI Council left for his heavenly abode on Monday 8th March 2021 . He was one of the Vice President from Region-B for the two terms 2015-18 and 2018-23.

The Council of Sugar Technologists' Association of India is deeply shocked on the sad sudden demise of Shri Malik .

Shri Malik had a long and illustrious journey spanning nearly four decades with the sugar and allied industries in India and Uganda.

During his tenure as Technical Advisor of Haryana Federation of Co-operative Sugar Factories Ltd. , Shri Malik took the federation to new heights . He was also one of the distinguished leaders who did a commendable job for guiding the industry in tough times.

Shri Malik took active participation in the activities of the association and provided technical inputs in different committees of STAI.

The Council of STAI and entire members fraternity express their



heartfelt condolences and deep sympathies to bereaved family.

Members Corner

1.Membership Dues

Members whose membership dues are not paid send the membership subscription through cheque/DD in favour of **"The Sugar Technologists Association of India"**

Account Details :The Sugar Technologists' Association of India, HDFC Bank SB A/C No. 13851450000023, RTGS/NEFT IFSC CODE : HDFC 0001385, Okhla Phase-I, New Delhi- 20

Payment Gateway : <http://member.staionline.org/>

2.Upcoming Events

STAI Webinar on **"Setting up Bio CNG Projects for the Financial Health of Sugar Factories"** is scheduled to be held on Tuesday the 28th April 2021. The Indian Sugar Industry has a potential to produce 12777 million m³ Biogas/Bio CNG generations per year . Government of India, under the SATAT (Sustainable Alternative towards Affordable Transportation) initiative envisages setting up of 5000 CBG plants by 2023-24 .

There will be technical presentations by eminent persons representing different stakeholders viz. technology providers , sugars mills and distilleries .There is no registration fee for the webinar. The detailed programme of the webinar is being issued separately, we request members to participate in large numbers.

3. Publications for Sale

- The new edition of STAI publication **"Year Book and Technical Data Directory of Indian Sugar Factories** for the years - 2019-20 " is available for sale. This edition of the Year Book has for the first time incorporated data on diversion of B-Heavy molasses/Syrup for ethanol production in respect of 30 sugar factories.

Interested members may purchase the same by transferring Rs 1000/per publication copy to STAI Account.

- **Prof. Narendra Mohan**, Director, National Sugar Institute, Kanpur has published his fourth book entitled **"Analytical Handbook for Cane Sugar Industry"**. This is an important publication and has been priced at Rs.1000/per book (P&F extra, if applicable) . Interested members may communicate to e-mail: all-natures2001@rediffmail.com for purchasing the book .

Hon. Editor : Mr D K Goel

Secretary General : Mr Amit Khatter

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