

October-December,
2014

NEWSLETTER

NATIONAL SUGAR INSTITUTE, KANPUR- 208017



TRAINING PROGRAMME-

Two days training programme on **“Basic Microbiological Techniques”** was organized at National Sugar Institute on 28th & 29th December, 2014.



Dr. A.K. Nagpal, Director, HBTI, Kanpur while inaugurating the workshop stressed upon the need for conducting such programmes more often keeping in view the limited infrastructural facilities available in Distilleries for such purpose.

Shri Narendra Mohan, Director, National Sugar Institute delivered a lecture on **“Ethanol Blending Programme”**. To make EBP programme a success in future, giving details of existing ethanol production and requirement, he emphasized upon the use of alternate non food feed stocks of Ethanol production. Dr. Brajesh Singh, HOD, Biochemical Engineering & Food Technology, HBTI, Kanpur delivered lecture on **“Method of Handling Microbes”**. Dr. (Mrs.) Seema Paroha, Prof. Bio Chemistry, National Sugar Institute, Kanpur & Mrs. Roshni Chaubey, Assistant Professor, St. Aloysius Post Graduate College, Jabalpur imparted practical training of various microbiological techniques. Large no. of participants from Distilleries, various Universities, Institute & Colleges attended the training programme.

EXTENSION LECTURE-

Dr. M. J. Parvej, Director, National Productivity Council, Kanpur delivered a lecture on **“Waste Minimization”** on 17th November 2014 for the benefit of faculty members & students.



Dr. Parvej gave an account of liquid and solid waste generation and its minimization in food processing industry and sugar industry in particular.

VISITORS FROM ABROAD-

Mr. Eldad Solowski (Coordinator), International Potash Institute, Switzerland and Dr. S.K. Bansal, Director, Indian Institute of Potash Research, Gurgaon visited the institute to collaborate for conducting experiments on sugarcane cultivation at institute farm by monitoring and maintaining levels of various macro and micro nutrients especially potash.



Trials on prominent sugarcane varieties viz. Colk 94184 and Co 0238 etc. shall be carried out for which necessary technical and other

required assistance shall be provided by M/s International Potash Institute, Switzerland.

GANDHI JAYANTI & SWACHH BHARAT ABHIYAN-

Gandhi Jayanti was celebrated at the institute on 2nd October, 2014 at institute in which all the staff & students participated.

As a part of Swachh Bharat Abhiyan launched on 25th September 2014, Director, National Sugar Institute administered "Swachhta Shapath" to the staff & students. On the occasion, prizes were also given to the winners of poster competition on "Swachh Bharat".

During the Swachh Bharat Abhiyan, a rally was also organized to create awareness about cleanliness among the students and colony residents of the Institute.





The staff members and students participated with enthusiasm in the cleanliness drive carried out in and around the institute campus.

ORIENTATION PROGRAMME-

To expose the students of “Certificate Course in Quality Control” to the defined protocols and practices for Quality Control Laboratories, institute arranged a programme on **“Good Laboratory Practices”** on 7th November, 2014 inviting experts from other organizations also.

INSTITUTE TO EXTEND IT'S SERVICES IN KARNATAKA-

Shri Tushar Girinath, IAS, Secretary to the Govt. of Karnataka, Deptt. of Commerce & Industries (MSME, Mines & Textiles) and Chairman, S. Nijalingappa Sugar Institute, Belagavi & Dr. R. B. Khandgave, Director S. Nijalingappa Sugar Institute, Belagavi visited the institute on 26th December, 2014 to discuss the collaborative work which can be taken by NSI-SNSI in order to provide better technical services to the Karnataka Sugar and Allied Industry and also in developing infrastructural facilities at S. Nijalingappa Sugar Institute, Belagavi, Karnataka.



Shri Tushar Girinath, IAS, Secretary to the Govt. of Karnataka, Deptt. of Commerce & Industries (MSME, Mines & Textiles) took keen interest in the research work being carried out by the institute and with regard to preparation of sugar standards. A MOU for collaborative research, training programme & for providing consultancy to sugar factories situated in Karnataka was also signed on this occasion.



RESEARCH PAPER PUBLISHED / SENT FOR PUBLICATION-

A Paper entitled **“Properties of Dextranase obtained from Isolated Strains of Penicillium**

SP” by Priyanka Jaiswal and Santosh Kumar published in September, 2014 in Indian Sugar.

RESEARCH -

Research on following topics continued and on many problems laboratory/factory scale trials were also conducted successfully:

1. Drying of bagasse using flue gas from boiler furnace.
2. Cane and/ or Bagasse Diffusion Process for extraction of juice to assess possibilities of replacing conventional milling process. Study of different type of Diffusers in working at present in the country is being made.
3. Development of Sensor for determining Staleness of Cane.
A technical team of the Physical Chemistry division carried out factory trials at M/s Sanjivani (Takli) SSK Ltd., Ahmednagar, Maharashtra & M/s Sant Tukaram SSK Ltd., Pune, Maharashtra in December, 2014.



4. Process options for producing sulphur-less sugar for technical / commercial viability.

A technical team of the Sugar Technology division carried out factory trials at M/s Lokmangal Agro Ltd., Solapur, Maharashtra in December, 2014 using CO₂ as a clarification agent instead of SO₂. Laboratory scale trials were also conducted in the institute laboratory for another process employing a polymeric agent for bleaching instead of SO₂ gas.



5. Gasification of bagasse.
Preliminary work has been carried out and now trials on pilot scale shall be taken up in collaboration with M/s Ankur Scientific Energy Technologies Pvt. Ltd., Vadodara, Gujarat.
6. Production of Alcohol from Cassava.
The research work has been taken up in collaboration with S Nijlingappa Sugar Institute, Belagavi, Karnataka. Assistance has also been sought from Central Tuber Research Institute, Trivendrum to provide cassava chips and cassava flour etc.

7. Use of enzymes for increasing fermentability of molasses. Laboratory trials are on the way in the Biochemistry division with the commercially available enzymes.
8. Optimization of various factors affecting longevity of sugarcane juice preservation period. Laboratory trials shall be taken up during the ensuing sugar season with different preservatives.

CONSULTANCY SERVICES-

During October 2014 to December 2014 Consultancy Services provided to following factories and organizations:

1. M/s Fabtech Sugar Pvt. Ltd., Nandur, Solapur, Maharashtra.
2. M/s The Pandavapura S.S.K. Ltd., Mandya, Karnataka.
3. M/s Greta Energy Ltd., Mul, Chandrapur, Maharashtra.
4. M/s U.P. Co-operative Sugar Factories Federation Ltd., Lucknow, U.P.
5. M/s Siddhnath Sugar Mills Ltd., Solapur, Maharashtra.
6. M/s Gokak Sugars Ltd., Kolavi, Taluk-Gokak, Distt- Belagaum, Karnataka.
7. M/s The Bajpur Co-operative Sugar Factory (Distillery), Udham Singh nagar, Uttrakhand for their Distillery.
8. M/s Chaddha Sugar Institute Mills Ltd., Gurdaspur, Punjab.
9. M/s Rajasthan State Shri Ganganagar Sugar Mills Ltd., Jaipur .

10. M/s Shri Shivsagar Sugar & Agro Products Udapur, Taluk-Ramdurg, Distt.-Belagavi, Karnataka.

ACADEMICS-

1. Regular Classes of various courses were conducted during the period.
2. The examinations of Associateship of National Sugar Institute (Sugar Tech.) IIIrd year & IInd Year, Associateship of National Sugar Institute (Sugar Engg.) IInd year & Ist year, Sugar Engg. Certificate Course, IInd year & Ist year, Sugar Boiling Certificate Course, Certificate Course in Quality Control and Pre-Harvest Cane Maturity Survey Course were conducted during the period.
3. Results of Associateship of National Sugar Institute (Sugar Tech.) IIIrd year & Diploma in Industrial Fermentation & Alcohol Technology were declared.
4. Educational tour of Associateship of National Sugar Institute (Sugar Engineering) Ist Year was conducted.
5. The Students of Associateship of National Sugar Institute (Sugar Tech.) IInd Year, Associateship of National Sugar Institute (Sugar Engg.) Ist year, Sugar Boiling Certificate Course & Sugar Engineering Certificate Course Ist year were deputed for their in-plant training to sugar factories situated in various sugar producing states.

FARM-

For cultivation of sugar beet on experimental basis, the seed of LS-6 variety was obtained from Indian Institute of Sugarcane Research, Lucknow and sown at the institute. Studies shall be made with respect to yield, sucrose content and total sugar content etc. Further laboratory trials shall also be conducted for production of ethanol from beet juice.



VIGILANCE AWARENESS WEEK & NATIONAL UNITY DAY CELEBRATED-

Vigilance Awareness week was celebrated on 27th October 2014 to 01st November, 2014 at institute. On this occasion of Vigilance

Awareness Week, institute organized Slogan, Debate and Essay competition. Following were the winners:

Essay Competition:

1. Shri Santosh Kr. Tripathi, Upper Division Clerk- Ist Prize.
2. Shri Daya Shankar Mishra, Stenographer- IInd Prize
3. Shri Jitendra Paswan, Student, ANSI (Sugar Engg.), Ist Year - IIIrd Prize.
4. Shri Vimlesh Mohan, Student, Sugar Engg. Certificate Course - Consolation Prize.

Debate Competition:

1. Shri Ramakant, Stenographer, -Ist Prize
2. Shri Daya Shankar Mishra, Stenographer- IInd Prize.
3. Shri Akhilesh Kr. Panday, Draughtsman-IIIrd Prize.
4. Shri Vimlesh Mohan, Student, Sugar Engg. Certificate Course, Consolation Prize.



National Unity Day was also celebrated on 31st October 2014 at the Institute and an oath was administered to the students and staff members.



APPOINTMENTS -

1. Shri Mahendra Pratap Singh joined the institute on the Post of Senior Technical Assistant (Sugar Tech.) on 12th November, 2014.
2. Shri Mahendra Kumar Yadav joined the institute on the Post of Junior Technical Officer (Sugar Tech.) on 8th December, 2014.
3. Shri Rakesh Shukla joined the institute on the post of Senior Administrative Officer on 31st December, 2014.

MEETINGS-

1. A meeting of Sugar Industry Sectional Committee, FAD-2 was conducted under the Chairmanship of Director, NSI at Kanpur on 8th October 2014 to review existing standards and formulate new ones.
2. Director attended the meeting held to review presentations for cane monitoring proposals funded by SDF at New Delhi on 10th October 2014.
3. Director attended various meetings for Evaluation of Technical & Financial bids with respect to Impact Analysis of SDF loans at New Delhi in October 2014.

4. Director attended The State Advisory Price (Sugarcane) meeting held under the Chairmanship of Chief Secretary, U.P. on 28th October 2014 at Lucknow.
5. Director attended the meeting with ISMA and ISEC officials for collaborative research on various topics concerning sugar industry viz, Water Conservation & Bagasse Gassification.
6. Director, National Sugar Institute, Kanpur acted as an expert in the selection board for the Post of Director of S. Nijalingappa Sugar Institute, Belagavi on 20th November, 2014 at Belagavi, Karnataka.
7. Director, inspected works of M/s Shantaram Engineering Ltd., on 16th December 2014 at Kolhapur along with the officials of National Federation of Cooperative Sugar Factories, National Cooperative Development Corporation, Directorate of Sugar and officials of Department of Heavy Industry.
8. Dr. Ashutosh Bajpai acted as an expert for selection of Post of Chief Chemist(Processing Head), M/s Rajasthan State Shri Ganganagar Sugar Mills Ltd., Jaipur on 12th December, 2014. .

SUGAR SAMPLES RECEIVED FOR ANALYSIS-

During the period October-December 2014, Analytical Services were provided to the following factories/ organizations:

1. M/s Delhi State Civil Supplies Corp. Ltd., New Delhi.
2. M/s Karnal Co-operative Sugar Mills Ltd., Karnal, Haryana.
3. M/s Ch. Devi Lal Co-op Sugar Mills Ltd., Gohana, Haryana.

4. M/s Panipat Co-operative Sugar Mills Ltd.,
Panipat, Haryana.

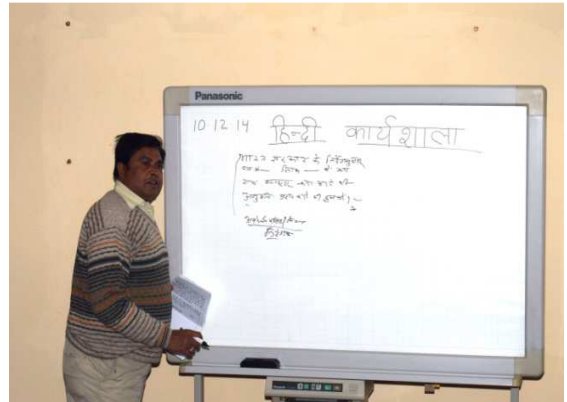
PLACEMENT CELL-

During the period campus interview were conducted by various sugar factories and other organizations to recruit the students of various courses viz. M/s. Olam Agro-net Ltd., M/s. Uttam Sugar Mills Ltd., M/s. Dalmia Bharat Sugars Ltd, M/s. Mawana Sugars Ltd., M/s. Innovation Chemicals & M/s. Catalyst Bio-Group Ltd. etc.



हिन्दी कार्यशाला :

संस्था में हिन्दी के प्रति जागरूकता तथा हिन्दी को बढ़ावा देने के लिए दिनांक 10 दिसम्बर 2014 को एक कार्यशाला का आयोजन किया गया, जिसमें स्टाफ के कर्मचारियों एवं अधिकारियों ने भाग लिया।



MISCELLANEOUS –

- i. Junior Research Fellowship interview was held on 17th December, 2014 & one candidate was selected in Physical Chemistry Division.
- ii. After Interview, seven students were selected for M.Sc. dissertation/project work in various Chemistry disciplines.
- iii. Surveillance Audit of ISO 9001:2008 was held on 31st December, 2014.
- iv. Prof. Sugar Tech., Prof. Sugar Engg, Asstt. Prof. Sugar Tech. & Asstt. Prof. Sugar Engineering visited Sugar Refinery M/s Haidergarh Chini Mills Ltd., U.P. on 18th December, 2014 to study the Refinery Process.