

High End Workshop (KARYASHALA)

on

Technical Insights of Ethanol Fermentation: 1G and 2G

Supported by

Science and Engineering Research Board (SERB),
Government of India under Accelerate Vigyan Scheme

January 27-31, 2023

Venue: NIT Rourkela

ORGANIZED BY

**Department of Food Process Engineering
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About NIT Rourkela

NIT Rourkela is one of the premier national level institutions for technical education in the country and is funded by the Government of India. The main objective of the Institute is to produce quality Engineers and Scientists in Graduate and Post-Graduate levels in various branches of Engineering and Science. The campus of the Institute consists of the institute buildings, halls of residence, staff colony, and is situated at the eastern end of Rourkela steel city, beyond Sector-1 over an area of 262 hectares of land provided by the Government of Odisha. The Food Process Engineering department at National Institute of Technology Rourkela blends engineering disciplines with a strong understanding of food chemistry and food science and offers B. Tech, M. Tech. and Ph.D. degrees in Food Process Engineering discipline.

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About The Event

India aims E20 by 2025. With 20% ethanol blending, the nation will reduce pollution and strengthen country's economy by limiting the import of crude oil. To meet this need, two times more indigenous ethanol production is required compared to the current days. Thus, the demand of ethanol becomes significantly big to cater different markets including liquor industry, cosmetics and pharmaceutical industry in addition to the biofuel market.

We know that microbial fermentation is an efficient way to produce ethanol from various feedstocks including sugar and starch. In order to support production of such large volume of alcohol naturally, it needs proportional amount of feedstocks. Under such circumstances it is required that fermentation process should be efficient enough to convert the feedstocks maximally into the product of interest. Otherwise, the feedstock price can become similar to the coal price. Attention to the by-product of this industry is equally necessary in order to harness maximum value holistically and to achieve sustainability. The design of the boiler, cooling tower, dryer, decanter, evaporator have a tremendous role to play in this process. Continuous research is going on and several companies have come up with some cutting edge technologies to generate more value over the conventional process equipment.

This workshop is expected to attract 100-150 participants from Pan India and will be a big platform for industries to showcase their products and discuss about the development in biofuel sectors.



Event Highlight

To educate participants about fermentation and ethanol.

Importance and role of enzymes.

Make participants aware of the current challenges and probable solutions.

A conclave for industrial and academic experts.

Excellent opportunity for collaboration.

TECHNICAL SESSIONS

Date : 27 - 31 January, 2023

Location : NIT Rourkela

TOPICS

Process of fermentation and ethanol.

Plant designing for the 1G and 2G ethanol for maximum efficiency.

Role of enzymes in 1G and 2G ethanol production.

Molasses to ethanol: a technical outlook from biofuel perspective.

Enzyme production and its formulation and application in the biofuel space.

Contamination and its control in the fermentation process for the production of ethanol.

The down-stream processing for the fermented wash: production of ENA, RS and Ethanol.

The by-product of ethanol industry.

The waste management of biofuel industry.

Technical Insights of Ethanol Fermentation: 1 G and 2 G

A HIGH-END WORKSHOP (KARYASHALA)



DEPT. OF FOOD
PROCESS
ENGINEERING

WHO WILL BENEFIT?

Students of M. Tech., M.Sc., Ph.D. with specialization in Biochemical Engg., Chemical Engg., Food Processing, Agricultural Engg, or related disciplines from universities, colleges and private academic institutions.

FEES

- Students (undergraduate, post-graduate, Doctoral level) : Rs. 2000
 - Faculty member : Rs. 2500
 - Industry person : Rs. 3000
- *** Fees include 18% GST ***

For paid participants, accommodation can be made in institute guest house depending on availability and on paid basis. [Click here](#) to view the institute guest house charges. For further details contact events.nitrkl@gmail.com or +91 8570857657.

Note: First 25 FREE student registrations has been filled already.

IMPORTANT DATES

- Registration Opens: Saturday, December 10, 2022
- Last date for registration: Friday, January 20, 2023
- Event date: January 27-31, 2023

REGISTRATION

[Click here](#) or Scan QR code to register.



Benefits for Sponsor

An excellent opportunity for industrial sponsors to discuss their technology & showcase their product.



PLATINUM

Prominent display of Company Logo as Platinum Sponsor at the main backdrop, workshop kit, memento, t-shirts, certificates and social media. Two free registrations and oral presentations. Acknowledgment of support in the "Thank you Panel". Company banner at auditorium. Playing videos of company profile at the beginning of each technical Sessions.



DIAMOND

Prominent display of Company Logo as Diamond Sponsor at the workshop kit, memento, certificates and social media. One free registration and oral presentation. Acknowledgment of support in the "Thank you Panel". Company banner at auditorium. Playing videos of company profile during break.



GOLD

Prominent display of Company Logo as Gold Sponsor in the workshop kit and social media. One free registration and oral presentation. Acknowledgment of support in the "Thank you Panel".

Investment Categories

Sponsor	Package
Platinum	Rs. 200000
Diamond	Rs. 100000
Gold	Rs. 50000
Exhibit booth (3m x 3m)	Rs. 75000

All packages are excluding 18% GST

[Click here](#) or Scan QR code to sponsor.



Thank you!
Hope to see you here!

For any queries, kindly contact:

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