

WORKSHOP ON
**NEXT GEN FUELS: A SUSTAINABLE
APPROACH**

16 –20, MARCH 2022

(VIRTUAL MODE)



ORGANIZED BY

**DEPARTMENT OF CHEMICAL ENGINEERING
NATIONAL INSTITUTE OF TECHNOLOGY
TIRUCHIRAPPALLI - 620 015**

SPONSORED BY

SHASTRI INDO-CANADIAN INSTITUTE (SICI)



ORGANIZING MEMBERS

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About NIT Tiruchirappalli

National Institute of Technology Tiruchirappalli (NIT-T), formerly known as Regional Engineering College, Tiruchirappalli (REC-T) is one of the technical institutes started by the Government of India. REC-T was imparting quality education since its inception. In 2003, the institute has been granted “Deemed to be University” status with the approval of UGC/AICTE. NIT-T was registered under Societies Registration Act XXVII of 1975. The College has a total campus area of 800 acres. NIT-T ranked top among NITs and is in top 250 of QS Asia University rankings. With the cream of engineering and management talent, encompassing exuberant students and inspiring faculty, integrated with state-of-the-art infrastructure facilities, NIT-T today has emerged as one of the premier institutions in the country.

About the Department

Department of Chemical Engineering at NIT-T was established in 1968 and is regarded as one of the premier institutes for in Chemical Engineering in India by industries and academia. It offers a B. Tech programme in Chemical Engineering, M. Tech programmes in Chemical Engineering and Process Control & Instrumentation and Doctoral programme. The department is backed by highly qualified and experienced faculty members and are involved in teaching and research with a main focus on energy and environmental engineering, control systems and separations. The department is equipped with several state-of-art laboratories, computing facilities and analytical facilities.

About the workshop

Recently, biofuels have attracted considerable scientific and public attention as a promising alternative to fossil fuels. Biofuels are made from biomass through processes such as chemical, biochemical or hybrid conversions. Biofuels do not create additional emissions, avoid the environmental drawbacks associated with the consumption of fossil fuels. Biofuels are usually classified as first, second, third and fourth generation. First-generation is mainly produced from food crop feedstock, Second-generation comes from lignocellulosic biomass. Third generation derived from algae biomass. Fourth Generation biofuels is achieved by enhancing the quality and productivity of microalgae using genetic modification. Bioenergy has been utilized for cooking, heating, and lighting since the dawn of humans. This workshop is to bring together people of scientific community from various organisation, industries and research centres to discuss the research issues and looking for portable solutions for bioenergy and biofuels productions. The topic which are not limited to

- Overview of third and fourth generation of biofuels
- Biohydrogen production route through waste biomass
- Bioelectrochemical Systems for bioenergy production
- Biomass conversion to biofuels and intermediates
- Algae screening & optimization for biodiesel production
- Bioenergy from waste plastics and biomass.
- Process modelling, simulation and control on bioenergy and biofuel production.

This workshop mainly concentrating the faculty, research scholars, PG students, scientist and industrialist who are interested in this field would get an opportunity to gain the invaluable knowledge, which will aid them

in the future to make substantial contribution in this field. Interaction with eminent speakers can lead to various collaborative research proposal thus leading to a symbiotic association between the research groups.

Who should Attend

- Faculty, research scholars, PG students, scientist and industrialist from Science and Engineering who are interested in next gen fuels.
- **The number of participants will be restricted to 50.**

Resource Persons

- Speakers from International academicians, IITs, NITs, R&D organizations, Industrialist will deliver lecture.

Programme Mode and Schedule

Workshop will be conducted via **online mode only**. Standard Platform (Cisco webex / Google Meet /MS Team) may be used for lecture. The schedule of the programme and the online meeting link will be shared to the participants through their registered email.

Registration Fees

Faculty / Scientist/ Industrialist : Rs. 300/- (inclusive GST)

Research Scholars and PG Students : Rs. 200 /- (inclusive GST)

Payment Procedure: <https://www.onlinesbi.com/sbicollect/> → Accept the terms and conditions → State: Tamil Nadu → Type: Educational Institutions → select: Conference and Workshop NIT Trichy → **category: NGFSA2022CHL**” and provide details of payment and submit.

Please use the link below for the course registration.

[https://docs.google.com/forms/d/e/1FAIpQLScuTWECD6PylWKXawI
Pholb_1I_n1F1KjRcke_ZFIaZ7Grlig/viewform?usp=pp_url](https://docs.google.com/forms/d/e/1FAIpQLScuTWECD6PylWKXawIPholb_1I_n1F1KjRcke_ZFIaZ7Grlig/viewform?usp=pp_url)

Important Dates

Last date for submission or Registration : **7st March 2022**
Confirmation of participation : **10th March 2022**
Workshop Dates : **16-20 March 2022**