



Udupi District

Bioenergy Research, Information & Demonstration Centre

NMAM Institute of Technology, Nitte-574110



ACTIVITY REPORT 2023-24

Dr. NSAM English Medium High School Students Visit to Bioenergy Centre

On 5 April 2023, Nitte High School students along with staff visited, Udupi District Bioenergy Research, Information & Demonstration Centre Biotechnology Engineering Department, NMAMIT-Nitte. The Bioenergy Centre staff Dr. Santhosh and Mr. Vinay helped to organise this training program.



NMAMIT first year engineering students orientation programme Biofuel

Awareness Talk

On 8 August, during the First year Engineering Students Orientation Programme an awareness talk on Biofuel was conducted by Dr. Ujwal P & Dr. Santhosh. Mr. Vinay assisted in conducting this programme.



World Biofuel Day-2023

The Udupi District Bioenergy Research, Information and Demonstration Centre, Department of Biotechnology Engineering in association with Karnataka State Bioenergy Development Board (KSBDDB-Department of Rural Development and Panchayat Raj) Government of Karnataka and Karnataka State Council for Science and Technology (KSCST-Energy Cell, Indian Institute of Science, Bengaluru) celebrated the World Biofuel Day at NMAMIT Campus on 10th August, 2023. The program was inaugurated by lighting the Biofuel Lamp by dignitaries. The Nitte campus Director Sri Yogish Hegde in his presidential address expressed the opinion that the biofuels have always demand even for electricity generation for electric based appliances and there is need for economically sustainable method for biofuel production. The chief guests Dr. U T. Vijay, Executive Secretary from KSCST and Dr. G.N. Dayananda, Manager, KSBDDB has explained the importance of Biofuels for future energy needs. Mr. Pranav Shetty, Nitte Biotech-alumni and Principal of GM Vidyannikethan Global School Brahmavar enunciated his pleasant experience of biofuel usage on their vehicles. Dr. Ujwal P. Professor and Head of the Department of Biotechnology Engineering welcomed the gathering. Dr. Santhosh Poojary, Assistant Professor proposed the vote of thanks. Ms. Shiva Priya, second year Biotechnology engineering student was the master of ceremony for the event. The BRIDC staff Mr. Vinay& the students, teaching and supporting staff of the department of Biotechnology Engineering actively participated in the biofuel sapling planting and biodiesel usage in vehicles programmes.



Biofuel Skill Lab

In the academic year 2023-24 the major activity in the BRIDC was the Biofuel Skill Lab programme conducted for the 1st Year Engineering students of NMAMIT-Nitte, throughout the semesters. Dr. Ujwal P, Co-ordinator BRIDC, Dr. Santhosh, Co-coordinator, Mrs. Vibha & Mrs. Chandrika-Research Scholars Biotech Department and BRIDC staff Mr. Vinay Shetty put an earnest effort to conduct these theory and lab classes to more than 1000 students. Dr. Santhosh conducted the biofuel demonstration programme for Biofuel Engineering course students in both the semesters. Few batches of other college students also came for their academic project.

Biofuel Skill Lab Highlights

- Appreciation of the Karnataka State Government's initiative for biofuel awareness programmes
- Understanding the importance of biofuels in comparison with fossil fuels
- Study the basic aspects of biofuel production in lab and pilot scale including raw material processing, quality testing and end product

Topics covered in the skill lab

Detailed explanation on Biofuel programme of Karnataka State Bioenergy Development Board, biofuels such as biodiesel, bioethanol and biogas as alternative fuels, biofuel production raw materials such as seeds and used cooking oil, environmental benefits of biofuels Demonstration of biodiesel production process for lab and Pilot scale (50ltr capacity), oil quality analysis, biodiesel production (chemicals

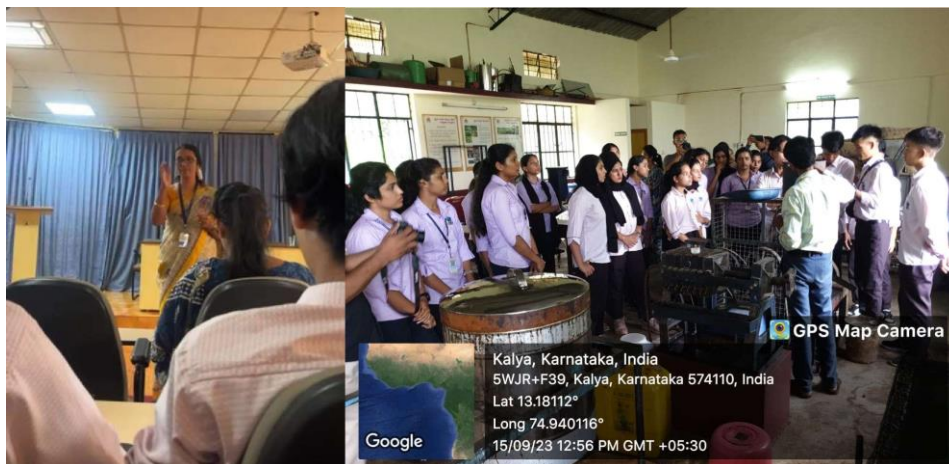
required reaction, duration etc.) purification and fuel quality analysis, soap preparation using by-product glycerine.





Degree Students Visit to Bioenergy Centre

On 15 September 2023, as a part of curriculum degree students and staff of St. Agnes college, Mangaluru visited Udupi District Bioenergy Research, Information and Demonstration Centre- Department of Biotechnology Engineering NMAMIT, Nitte .



MBA Students visit to Bioenergy Centre

As part of business field visit, MBA -Marketing stream students and staff of Justice K. S. Hegde Institute of Management (JKSHIM) visited Udupi District Bioenergy Research, Information and Demonstration Centre-Department of Biotechnology Engineering NMAMIT, Nitte on 14 March 2024.



P U College Students visit to Bioenergy Centre

As part of demonstration program 180 students from Christ King P U College, Karkala, along with 6 faculty members, visited Biofuel Centre (BRIDC) at NMAMIT on 15 March 2024, to gain insights into the biodiesel production process. Dr. Ujwal P, Coordinator BRIDC addressed the students, shedding light on the opportunities in Biotechnology Engineering. Dr. Santhosh Poojary Co-coordinator BRIDC explained the significance of biofuel and its production, utilizing various non-edible seeds and used cooking oil. Mr. Vinay supporting staff BRIDC helped to conduct this activity along with students of Biotechnology Engineering NMAMIT Nitte.