



PUNE KNOWLEDGE CLUSTER (PKC) AND AGHARKAR RESEARCH INSTITUTE (ARI), PUNE
ANNOUNCE A COURSE ON
MICROBIAL PROCESSES FOR ENERGY RECOVERY FROM ORGANIC WASTES

Abundant energy is available in various wastes, especially in lignocellulosic biomass and the organic fraction of municipal solid wastes. Lignocellulosic biomass represents the polymeric forms of several fermentable sugars, mainly glucose and xylose. These trapped sugars, if hydrolyzed efficiently from cellulose and hemicellulose, can directly be fermented to biofuels like biohydrogen, bioethanol, biomethane or biobutanol.

The course will provide academic as well as industrial perspective about different biofuels and their microbial production methods. The participants will gain basic knowledge of different types of microbes and their potential role in anaerobic processes for energy recovery from organic wastes.

The course is designed for doctoral students, post-doctoral fellows, young investigators from industry and academia, research/science managers, CTOs and CSOs, in and around Pune.

- Duration and dates:
Monday 15 Feb to Friday 26 Feb 2021
- Number of participants: **20**
- There will be no registration/participation charges
- Announcement of selection: **11 February 2021**
- The course will consist of **12 online sessions followed by 2 days of laboratory demonstrations** in the laboratories of Agharkar Research Institute, Pune.
- Last date for online application: **05 February 2021**
- To apply click on the below link
<https://forms.gle/bXvAvEkxgc8ADV9GA>

Speakers	Topics
Dr. Prashant K Dhakephalkar, Director, Agharkar Research Institute	Omics Tools and Techniques in Anaerobic Digestion Processes
Dr. Dilip Ranade, Ex-director, Agharkar Research Institute	Biobutanol Production
Dr. Sumit Singh Dagar, Scientist D, Agharkar Research Institute	Anaerobes for Energy Recovery from Agro-wastes
Dr. Monali Rahalkar, Scientist D, Agharkar Research Institute	Methanotrophs for Biomethanol Production
Dr. Karthick Balasubramanian, Scientist D, Agharkar Research Institute	Diatoms for Biofuel Production
Dr. Abhishek Baghela, Scientist D, Agharkar Research Institute	Specialized Yeasts for 2G/ Bioethanol Production
Mr. Pranav R Kshirsagar, Scientist D, Agharkar Research Institute	Fermentation Processes
Dr Vikram B Lanjekar, Tech Officer B, Agharkar Research Institute	Hands-On Training on Anaerobic Techniques and Processes
Mr. Smedh Bapat, CEO, Tattva Consultants	Home Biogas
Dr. Nitant Mate, Managing Director and Partner, SeeGreen Solutions LLP	Extracting Energy from Biomass: Opportunities and Challenges
Ms. Srideepika Sivakumar, Research Process Manager - Mailhemkos	Energy from Municipal Solid Waste
Mr. Sameer Rege, CEO, Mailhem IKOS	Commercial Plants for Waste to Energy
Mr. Kaustubh Pathak, Tech Lead Alternative Fuels, KPIT Technologies Limited	Innovations in Hydrogen Generation

This course of lectures is a part of the Capacity Building Programme of PKC. A number of such courses will be conducted for young researchers and professionals by PKC to expose them to the latest developments in science and technology. The lectures will be delivered by experts from the academia, R&D institutions and industry and will have elements of interactivity and hands-on sessions wherever possible. The courses will seek to expose participants to employment opportunities in the industry. Courses at the undergraduate and post-graduate levels will also be conducted to improve the skill sets and employability of the participants.



The Pune Knowledge Cluster (PKC) has been established by the Office of the Principal Scientific Advisor to the Government of India. The aim is to bring together academia, R&D institutions and the industry of Pune and its surrounding regions to address the challenging problems of the region through innovative means, using scientific knowledge and engaging highly skilled human resources.

www.pkc.org.in