

## SS014 Sustainable Technologies for Agro- Waste Management

This course consists of 24 hours of intensive lectures and guided discussions. Students are able to join 4 field trips covering visits to biogas (palm oil mill), composting and waste treatment plants and industrial visits. Participants will be able to visit a palm oil mill located where they will gain an insight into the whole palm oil processing flow and learn the technologies available of converting palm oil wastes into various value-added products including biogas, composts and electricity, separately or in integrated manner. Based on the inputs from the lectures, workshops and the experiential learning through the field trips, participant will have to accomplish individual and group assignments/project assigned to them as part of the assessment process. Students will enjoy an exciting tour to the rain forest in Johor where a series of survival skills in forest are taught. An optional homestay program is also offered at the end of the program.

*Palm Oil*

*Agro*

*Waste-  
Management*



## 1<sup>st</sup> day:

- Ice Breaking / Program Briefing/Campus Tour/ Visit to Library
- Free and easy

## 2<sup>nd</sup> day:

- Overview on Agro-waste Management Technology
- Production of Biogas from Palm Oil Mill and other Biomass

## 3<sup>rd</sup> day:

- Biomass Conversion Technologies to Fuels
- Biomass Conversion Technologies to Chemicals

## 4<sup>th</sup> day:

- Departure To Maokil Felda Palm Plantation Integrated Biogas & Composting Palm Oil Plants

## 5<sup>th</sup>-7<sup>th</sup> day:

- Adventurous & Survival Skills In Rain Forest

## 8<sup>th</sup> day:

- Application of Microbial Technology on Agro-wastes Management.
- Application of Microbial Technology on Composting

## 9<sup>th</sup> day:

- Visit to Biofertilizer Plant
- Field trip to Iskandar Malaysia

## 10<sup>th</sup> day:

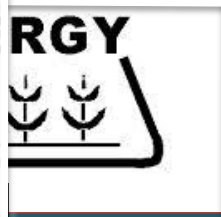
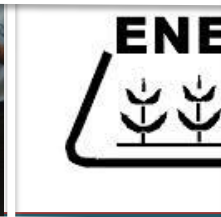
- Integrated Electricity Generation from Agro-waste for Sustainable Energy Supply
- Modeling and optimization for optimal use of Agro-waste

## 11<sup>th</sup> day:

- Free & Easy: Preparation For Group Project/Assignments/Presentation

## 12<sup>th</sup> day:

- Group Project/Assignments/Presentation/Closure



Fee:  
USD 1,000 (2weeks)  
USD 1,500 (3weeks)  
\*Price is negotiable for partner universities.

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Please contact :  
Siti Rahimah Mohd. Yusof  
e-mail: [globaloutreach@utm.my](mailto:globaloutreach@utm.my)

For further information contact:  
Assoc. Prof. Dr. Lee Chew Tin  
e-mail: [ctlee@cheme.utm.my](mailto:ctlee@cheme.utm.my)