

## COMPETENT RENEW-2014 MINI-PROJECTS

- Automatic Waste Segregator
- Design & Fabrication of Green Slipper from Algal Waste Biomass
- Waste Energy Harvest from LPG Cooking Systems
- Generation of Electricity from Waste Water using Microbial Fuel Cells
- Incense Sticks from Ritual Waste
- Bioplastics from Mango seeds
- Purification of Waste Water with Alginates Extracted from Sargassum sp.



## INTERNATIONAL RESEARCH CENTRE SATHYABAMA UNIVERSITY

### Laboratory Bio fuel Production Unit

Bio Diesel, Bioethanol, Biohydrogen  
Bio Diesel Testing Lab Equipment: As per BIS IS 15607:2005 for testing  
Density, flashpoint, viscosity, copper corrosion.

### Material Synthesis and Characterization

- RF Magnetron Sputtering
- DC Magnetron Sputtering
- Pulsed Laser Deposition
- E-Beam Evaporator
- Thermal Evaporator Deposition
- Chemical Vapor Deposition
- Spin Coater
- XRD
- FESEM
- AFM
- Epifluorescence Microscope

### Contact:

#### Centre for Waste Management

#### Sathyabama University

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For further details visit:

[www.centreforwastemanagement.com](http://www.centreforwastemanagement.com)

[www.sathyabamauniversity.ac.in](http://www.sathyabamauniversity.ac.in)



(Established under section 3 of UGC Act, 1956)

Declared as Category 'A' University by MHRD, Government of India



## CENTRE FOR WASTE MANAGEMENT



## Call for Mini-Project Competition

# RENEW 2015

## A Research Exploration for Novel & Ecofriendly Waste handling techniques

April – June 2015



## CENTRE FOR WASTE MANAGEMENT

The Centre for Waste Management, the first of its kind in India was established with the intention of serving the community, by helping it become Greener and cleaner through sustainable waste management techniques. Some of the research projects at the Centre include

- Synthesis, Characterization and Application of a Novel Metal Complex Photocatalyst System for Carbon Dioxide Splitting – VSSC, ISRO Respond project
- Biodiesel Production from Waste Cooking Oil for Improved Oxidation Stability
- Production of Hydrogen from Food Waste
- Bioethanol from Algal Biomass Rejects
- Methane gas emission studies from Landfills
- Industrial Effluents Odor Control Studies
- Synthesis of Adsorbents from waste materials and seed coats for Effluent Treatment Applications
- Recovery of Heavy Metals from e-waste
- Hybrid Compactors for volume reduction of food waste

## RENEW – 2015

Existing technologies and enormous research activities happening in the Waste and Environmental Engineering field is comparatively less with the heaping organic, inorganic, hazardous and toxic wastes from various sectors. Awareness of exploitation of nature and encouraging research interests among the student community will bring effective changes in managing such serious environmental issues. As an initiative, the University Grants Commission (UGC) has already taken essential measures to make aware of environmental sciences to students of all disciplines of engineering, technology and sciences. To extend this initiative further, the Centre for Waste Management, Sathyabama University has planned to convene a Mini Project Competition RENEW – 2015, A Research Exploration for Novel & Ecofriendly Waste handling techniques for the second time encouraging the student community to take up “Waste, Energy and Environment” related Projects.

## ELIGIBILITY

Pre-Final/Final year Undergraduate (B.E/ B.Tech/ B.Sc ) students from any Engineering / Technology/ Science Discipline with two persons in a batch can apply for RENEW-2015 Mini Project Competition.

## OBJECTIVES OF RENEW - 2015

- To conduct, facilitate and co-ordinate research on waste recycle, reuse and recovery for environmental protection.
- To promote interdisciplinary approach in fundamental and applied research for effective Waste Management.
- To resolve ethical and practical problems in Waste management for Sustainable Development

## HOW TO APPLY

Interested candidates are requested to fill the details given in the Registration form and send the same through e-mail to dean@centreforwastemanagement.com / head@centreforwastemanagement.com along with a short abstract detailing an idea for handling waste, energy and environment related issues on or before 1st April, 2015. The abstract should contain title, introduction, procedure and expected result in not more than 500 words in a paragraph form.

## SELECTION PROCESS

Maximum fifteen batches will be selected and intimated by mail by 10th April, 2015 based on the technical merit of the concept note submitted. The selected batches will have to undergo a technical discussion with the expert team to highlight the competency of their proposed work on 15th April, 2015. Ten batches will finally be selected to pursue experimental work for the mini project competition. Selected batches will be provided with the infrastructure and Laboratory facilities to carry out the Project at the International Research Centre, Sathyabama University. At the end of eight weeks, the students are expected to submit a report and deliver a presentation of their work which will be reviewed by an expert committee to nominate the best Project of RENEW-15.

## REGISTRATION FEE

Upon intimation the selected batches of students should remit a Registration Fee of Rs.5000/- per batch through Demand draft drawn in favor of “Sathyabama University, Chennai”.

## CASH PRIZE

The best project will be rewarded with a cash prize of Rs. 5000/- . A Project Completion Certificate will also be awarded to all participating students.

## SATHYABAMA UNIVERSITY CENTRE FOR WASTE MANAGEMENT

**RENEW – 2015**

## REGISTRATION FORM (TWO STUDENTS PER BATCH)

1. Name (in Block Letters) :

Gender : Male / Female

Department :

Name of the College /  
University with address :

Address for  
Communication :

Phone :

Mobile :

Email ID :

Signature :

2. Name (in Block Letters) :

Gender : Male / Female

Department :

Name of the College /  
University with address :

Address for  
Communication :

Phone :

Mobile :

Email ID :

Signature :

Demand Draft Number  
(upon selection) :

Signature of Head of  
Department with seal :