#### **REGISTRATION FEE**

Students / Scholars / Academicians : Rs. 500 Industry Professionals : Rs. 750

Participants are requested to send their details through e-mail on or before 1<sup>st</sup> August, 2017. Confirmation will be sent to the selected participants through e-mail. Only the selected participants are requested to register with registration fee in the form of Demand Draft drawn in favor of "The Principal, SVCE, Sriperumbudur" payable at Indian Bank, Sriperumbudur. Filled in registration form along with DD should be sent to the below mentioned address on or before 8<sup>th</sup> August, 2017. The number of participants is limited to 40 and the selection will be based on first-cum-first serve.

#### **BONAFIDE CERTIFICATE**

(For Students only)

	Mr./Ms			
is	permitted to attend	d "Energy I	Biogenesis- A	A Nationa

workshop on metabolic approaches for bioenergy generation" during 23<sup>rd</sup> and 24<sup>th</sup> August, 2017 at Sri Venkateswara College of Engineering, Sriperumbudur Tk. – 602 117, Tamilnadu.

Date:

Signature (Designation & Seal)

#### MAILING ADDRESS

#### Ms. V. Sumitha

Associate Professor Department of Biotechnology Sri Venkateswara College of Engineering (Autonomous)

Pennalur, Sriperumbudur Tk - 602 117

Tel: 044 - 27152000 / 27163783 Extn: 576/584

Mobile: +91-9841932565/7200709715

E-mail: ebio@svce.ac.in

### Energy Biogenesis

"National workshop on metabolic approaches for bioenergy generation"

23rd and 24th August, 2017

#### **REGISTRATION FORM**

1. Name :

2. Designation:

3. Age

4. Participant Category: Student / Faculty / Industry

5. Branch & Year:

6. Name of the Institution with postal address:

7. E-mail ID:

8. Mobile number:

9. Specialization:

10. Registration fee:

Demand draft No. & Date:

#### Declaration

I agree to abide by the rules and regulations of the workshop.

Place:

Date:

Signature

(Copy of this form can be used for registration)

### Energy Biogenesis

"National workshop on metabolic approaches for bioenergy generation" 23<sup>rd</sup> and 24<sup>th</sup> August, 2017

Sponsored by





CSIR, India

DBT, GOI

# & Organized by



Department of Biotechnology Sri Venkateswara College of Engineering

#### **CONVENERS**

Prof. M. Sivanandham

Prof. E. Nakkeeran
ORGANIZING SECRETARY

Ms. V. Sumitha

#### **COORDINATORS**

Mr. P.K. Praveen Kumar Mr. B. Shankaranarayanan Department of Biotechnology Sri Venkateswara College of Engineering

> (Autonomous) Sriperumbudur Tk - 602117 Tamil Nadu, India

www.svce.ac.in

#### ABOUT THE INSTITUTION

Sri Venkateswara College of Engineering (Autonomous) (SVCE), one of the premier technical institutions in Tamilnadu, was established in 1985. The College is situated on the Chennai–Bengaluru National Highway (NH4) about 37 km south-west of Chennai. The college offers 10 UG programmes and 10 PG programmes. The National Board of Accreditation accredited many of the eligible programmes and SVCE is an ISO 9001:2008 certified institution.

#### DEPARTMENT OF BIOTECHNOLOGY

Sri Venkateswara College of Engineering noted the recent growth in Modern Industrial Biotechnology. In order to support the growth in Biotechnology, SVCE started the Department of Biotechnology in 2005 under the guidance of our Chairman Dr.A.C.Muthiah, a well known Industrialist who understands the strength of Industrial Biotechnology. The department offers B.Tech and M.Tech Biotechnology programmes under Anna University, Chennai, approved by AICTE. It is also approved as a Research Center in Biotechnology for MS (by Research) and Ph.D. programmes by Anna University, Chennai. The Department has well established laboratory facilities namely Bioprocess and downstream processing, Immunology, Instrumental Methods of Analysis, Genetic Engineering, Animal house, Research Lab and Computational Systems Biotechnology Lab.

#### PROGRAMME OBJECTIVE

Advances in all areas of science and technology are happening rapidly that everyone has the difficulty to keep up to these advances. Hence this workshop is aimed at imparting theoretical and practical training in the recent trends of Bioenergy generation. New energy sources are very much essential in Indian and global context. We are in a situation wherein we need to generate biofuels in a

way that adds value to the waste and hence becomes a path for a clean India. India's biofuel policy proposed 20% blending of biofuels, both for bio-diesel and bioethanol, by 2017. The Indian Railways has started to use biodiesel powered diesel engines with great success. Biowastes such as used vegetable oil, Crude glycerol (Byproduct of Biodiesel production) could be used as substrates for the production of Biofuels. Moreover, metabolic engineering tools will help analyzing the native pathway and identifying an alternate pathway for increasing the yield of the microbial products. Metabolic engineering tools will help enhance product yield by blocking side pathways that produce competing co-products and byproducts.

The basic premise of this workshop is to transmit the facts and information about the production of biofuels, such as biodiesel and bioethanol from wastes. This workshop will provide a platform for the participants to be involved in exploring the possible metabolic engineering approaches towards biofuel generation. This workshop will dwell the students and researchers in setting up processing units for production of biodiesel and bioethanol, which will be in line with 'start-up India' concept. Further, this workshop also highlights the utilization and value aaddition of industrial and household waste. This workshop will provide a platform for the students, faculty and industrialists to share their knowledge and recent advancements in the fascinating field of Bioenergy generation.

# Proposed Invited Speakers from Industries & Institutions

- 1.Dr. T. Madhan Mohan Advisor, DBT, New Delhi
- 2.Dr. M.Sivanandham
  Secretary
  Sri Venkateswara Educational and Health Trust
  Chennai

- 3. Dr. Senthil Chinnasamy, Chief Technology Officer, Aban Infrastructure Pvt Ltd Biotech Division, Chennai
- 4. Dr. S. Vincent, Director, Loyola Institute of Frontier Energy, Chennai
- 5. Dr. Guhan Jayaraman, Professor, Indian Institute of Technology, Madras

#### COURSE CONTENT & SCHEDULE

The workshop consists of lecture sessions and hands on training sessions with relevance to Biofuel production and metabolic engineering tools to enhance biofuel production. The hands on sessions will deal with Biodiesel production from used waste cooking oil, bioethanol production using Biodiesel waste derived crude glycerol, and various metabolic approaches for enhancing biofuel production.

#### **VENUE**

Sri Venkateswara College of Engineering (SVCE), Sriperumbudur Tk.- 602 117, Tamilnadu, India.

#### TRANSPORTATION

The participants can avail the SVCE bus facility to attend this programme. For route details, please refer www.svce.ac.in.

#### ACCOMMODATION

Accommodation can be arranged in the nearby hotels on prior notice, for which the participants will have to bear the charges and the participants are advised to send the request on or before 8<sup>th</sup> August, 2017 to ensure the accommodation.

#### DATES TO REMEMBER

Last date for e- registration : 01.08.2017
Intimation of selection : 02.08.2017
Last date for registration with DD : 08.08.2017
Last date for accommodation : 05.08.2017

For clarifications please e-mail to ebio@svce.ac.in

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# Energy Biogenesis

"National workshop on metabolic approaches for bioenergy generation"

Organized By

Department of Biotechnology Sri Venkateswara College of Engineering Sriperumbudur TK -602117

### Tentative Programme Schedule

	17th August, 2017		
Time	Events		
08.00 - 08.50 AM	Registration		
08.50 - 09.00 AM	Prayer Song		
09.00 - 09.05 AM	Welcome address by Prof. E. Nakkeeran, Ph. D Professor & Head Department of Biotechnology Sri Venkateswara College of Engineering		
09.05 - 09.10 AM	Parton's Address by Prof. S. Ganesh Vaidyanathan, Ph. D Principal Sri Venkateswara College of Engineering		
9.10 - 09.40 AM  Prof. M. Sivanandham, Ph. D  Secretary  Sri Venkateswara Educational and Health Trust			
09.40 - 09.42 AM	Welcoming the Chief guest  Dr. T. Madhan Mohan, Advisor, DBT, New Delhi  Lighting the Kuthuvillakku& Releasing the Workshop manual		
09.42 - 09.45 AM	Introducing the Chief guest		
09.45 -10.40 AM	5 -10.40 AM Inaugural Address  by  Dr. T. Madhan Mohan, Advisor, DBT, New Delhi		
10.40-10.50 AM	Tea Break		

DESCRIPTION	Lecture Secsion-I DRIVING SUCCESS IN BIOENERGY PRODUCTION* by	
10.50 - 11. 45AM	Dr. Senthil Chinnasamy Chief Technology Officer Aban Infrastructure Pvt Ltd	
11.45 - 12.30 PM	Biotech Division, Chennai	
11.43 - 12.50 FM	Lunch Break  Hands on Sessions – I/II  Total 2 Sessions  150 minutes for 2 sessions: 75 Minutes/Session  30 Participants /Session	
12.30 - 01.45 PM	Hands on Session – I  Production of biodiesel from waste vegetable oil	
01.45 - 03.00 PM	Hands on Session - II Production of Bioethanol from crude glycerol	
	18th August, 2017	
Time	Events	
08.30 - 09.45 AM	Lecture Seesion-II BIOFUELS- RENEWABLE AND SUSTAINABLE ENERGY by Dr. S.Vincent Dean of Research- Loyola College & Former- Director Loyola Institute of Frontier Energy (LIFE) Loyola College, Nungambakkam Chennai-600 034.	
09.45 – 11.00 AM	AM Hands on Session – III  Qualitative and Quantitative analysis of Biodiesel	
11.00 - 11.15 AM	Tea Break	
11.15 – 12.30 PM	Hands on Session – IV  Qualitative and Quantitative analysis of Bioethanol	
12.00 - 01.00 PM	Lunch Break	
01.00 - 01.05 PM	Valedictory Function	
01.05 - 01.15 PM	Introducing the Chief guest	
11.15 – 2.15 PM	Lecture Seesion-III SUSTAINABLE FEEDSTOCK FOR BIOETHANOL PRODUCTION	
2.15 - 02.35 PM	Certificate distribution to the participants	
2.35 - 02.45 PM	by the Chief guest	
2.45 - 02.55 PM		
2.55 - 03.00 PM	NATIONAL ANTHEM	

Prof. E. NAKKEEHAN, til Teib., Fh.D. Professor & Head Department of Biotechnology

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# Report on Energy Biogenesis- A National Workshop on Metabolic Approaches for Bioenergy Generation" held during August 17-18, 2017.

The Department of Biotechnology, SVCE conducted Energy Biogenesis- A National Workshop on Metabolic Approaches for Bioenergy Generation" sponsored by DBT, GOI & CSIR,New Delhi during August 17-18, 2017.

The registration for the workshop started at 8.00 am on 17<sup>th</sup> August, 2017. Totally 74 external participants registered for this workshop from various colleges across Tamilnadu. The inaugural function started with a prayer song at 9.00 A.M. Prof. E. Nakkeeran, Head of the Department of Biotechnology, Sri Venkateswara College of Engineering gave the welcome address followed by Prof. M. Sivanandham, Secretary, SVEHT delivered the Chief Patron's address.

The workshop coordinator, Mr. P.K. Praveen Kumar, Assistant Professor, Department of Biotechnology introduced the chief guest Dr. Senthil Chinnasamy, Chief Technology Officer, Aban Infrastructure Pvt Ltd, Biotech Division, Chennai, for the inaugural function. The inaugural function started with lighting the lamp followed by the release of the workshop manual by the chief guest. He gave an inaugural address and a technical talk on "Biocrude production from algae and its relevance to India".

After the technical talk, the participants disbanded for a tea break and reassembled at the biotechnology department for hands on sessions. The first session of hands on dealt with "Production of biodiesel from waste vegetable oil". After this session, the participants were served with lunch. After the lunch break, the hands on session-II on "Production of Bioethanol from crude glycerol" followed by hands on session-III on "Manipulating Metabolic pathway of Microbes using OptFlux" were scheduled upto 4.00 P.M. The Hands on session were handled by faculty members of Department of Biotechnology.

On 18<sup>th</sup> August, 2017, Dr. S.Vincent, Dean of Research- Loyola College & Former-Director of Loyola Institute of Frontier Energy (LIFE), Loyola College, Nungambakkam delivered a technical talk on "Green energy- The Future energy". Subsequently, hands on sessions -V on "Qualitative analysis of Biodiesel and Bioethanol" and hands on session-VI on "Sequence Retrieval" were performed. After the hands on sessions, the valedictory function started at 2.15 PM. Dr. Guhan Jayaraman Professor, Indian Institute of Technology, Madras was the chief guest for the valedictory address. He gave a technical talk titled "Bioenergy: Can Metabolic Engineering provides the solution?" He also gave a brief valedictory address on the

current status of Bioenergy production and their demand. After his valedictory address, feedback from the participants was received both orally and through the forms, about technical sessions and hands on sessions. Further, certificates were distributed to the participants. Photo session was arranged for the participants along with resource person and faculty members. The organizing secretary, Ms.V.Sumitha delivered the vote of thanks. The organizing secretary whole heartedly thanked the National funding agencies namely CSIR & DBT, New Delhi, for their financial support to organize this workshop for two days. She also thanked the SVCE management for their encouragement and the participants for their keen interest to participate in this workshop. The workshop came to an end with the National Anthem by 3.30 pm.





Ms. V. Sumitha

Organizing secretary

Approved by

Prof. E. Nakkeeran, HoD BIO

Prof. E. NAKKEERAN, M. Tech., Ph.D.
Professor & Head
Department of Biotechnology
Sri Venkateswara College of Engineering
Sriperumbudur Tk - 602 117, Tamihadu, INDIA