

REGISTRATION FEE DETAILS

Student/ Research Scholars/ Academicians : Rs. 2000/-
Industry Professionals : Rs. 3000/-
Group registration fee for a
minimum of 5 students :Rs.1500 / student

The registration fee must be in DD form drawn in favor of *The Principal, SVCE* payable at *Indian Bank, Sriperumbudur*. All student participants must submit a *bonafide certificate*. Filled in registration form along with DD & Bonafide should be sent on or before **15th November, 2016**.

BONAFIDE CERTIFICATE (For Students)

Mr./Ms. _____ is permitted to attend the DBT-Govt of India & ICMR- New Delhi Sponsored workshop on “Understanding the Molecular Aspects of Microbial Drug Resistance: An Emerging Microbial Threat to Health” from December 5th to 9th, 2016 at Sri Venkateswara College of Engineering, Sriperumbudur Tk - 602 117.

Date: _____ Signature
(Designation & Seal)

MAILING ADDRESS

Prof. Sulochana Somasundaram
Professor – Biotechnology Department
Sri Venkateswara College of Engineering
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DBT- Govt. of India & ICMR- New Delhi Sponsored Workshop

on
“*Understanding the Molecular Aspects of
Microbial Drug Resistance: An Emerging
Microbial Threat to Health*”

December 5th to 9th, 2016

REGISTRATION FORM

1. Name :
2. Designation :
3. Age :
4. Participant Category :
(Students/ Research Scholars / Academicians /
Industry Professionals)
5. Name of the Institution with postal address:
6. E-mail ID:
7. Mobile number:
8. Specialization:
9. Registration fee:
Demand draft No. & Date:

Declaration:

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

Place:

Date:

Signature

(Copy of this form can be used for registration)

SRI VENKATESWARA COLLEGE OF ENGINEERING



AUTONOMOUS INSTITUTION
Affiliated to Anna University, Chennai
An ISO 9001:2008 certified Institution
Accredited by NBA, New Delhi

**DBT- GOVT OF INDIA
&
ICMR- NEW DELHI**



SPONSORED

Workshop on “*Understanding the Molecular
Aspects of Microbial Drug Resistance: An
Emerging Microbial Threat to Health*”

December 5th to 9th, 2016

CONVENERS

Prof. M. Sivanandham

Prof. E. Nakkeeran

ORGANIZING SECRETARY

Prof. Sulochana Somasundaram

COORDINATORS

Mr. N. Sathish

Ms. A. Helen

Organized by

Department of Biotechnology
Sri Venkateswara College of Engineering
Sriperumbudur Taluk, Tamilnadu, India

<http://www.svce.ac.in>

ABOUT THE INSTITUTION

Sri Venkateswara College of Engineering (SVCE), one of the premier technical institutions in Tamilnadu, was established in 1985. The College is situated on the Chennai – Bangalore National Highway (NH4) about 37 km south-west of Chennai. The college offers 10 UG programmes and 10 PG programmes. The college is accredited by NAAC and AICTE, New Delhi, certified by ISO 9001:2008 and affiliated to Anna University, Chennai. Most of the departments are accredited by NBA.

ABOUT DEPARTMENT OF BIOTECHNOLOGY

Sri Venkateswara College of Engineering noted the recent growth in Modern Industrial Biotechnology. In order to support the growth, SVCE started the Department of Biotechnology in 2005. Since its inception, under the guidance of our Chairman Dr. A. C. Muthiah, a well known Industrialist who understands the strength of Industrial Biotechnology, the Department has grown tremendously in terms of excellence in providing Biotechnology education and producing industry ready professionals. The department offers B.Tech and M.Tech Biotechnology programme under Anna University, Chennai, approved by AICTE and accredited by NBA. It is recognized as a Research Center in Biotechnology for MS (by Research) and Ph.D. programmes by Anna University, Chennai. The department is equipped with full-fledged laboratories and in addition has a CPCSEA approved in house animal facility and has Cognizant Technology Solutions, Chennai sponsored state of the art Computational Systems Biotechnology Laboratory. The faculty members are well qualified and goal-oriented whose research expertise includes various frontier areas of research and the Department received grants from DBT, DST, SERB, ICMR, TNSCST, AICTE and CSIR.

ABOUT THE WORKSHOP

The broad spectrum of resistance among various microbial species (infectious agents) to different antimicrobial drugs has emerged as a cause of public health threat and alarming to all over the world at a terrifying rate. Due to the pacing advent of new resistance mechanisms and decrease in efficiency of treating common infectious diseases, it results in failure of microbial response to standard treatment, leading to prolonged illness, and an immense risk of death. Almost all the capable infecting agents are expressing high levels of multidrug resistance (MDR) with enhanced morbidity and mortality; thus, they are referred to as “super bugs”. This workshop will emphasize the significance of MDR, various mechanisms contributing to its development, problems associated with MDR and its possible remedies, and the advancement of treatment strategies and preventive measures for eradicating the drug resistance.

COURSE CONTENT & SCHEDULE

This five-day workshop consists of series of hands-on sessions on various Modern Molecular techniques. The hands-on session schedule is as follows.

Day	Description of hands-on sessions
1	a) Isolation of microorganisms from clinical sample. b) Identification and biochemical test for confirmation of strains.
2	a) Antimicrobial assay by agar diffusion and Broth micro dilution method (Alamar blue assay). b) Isolation of chromosomal and plasmid DNA from isolated strains.

3	a) Primer designing & PCR amplification of resistant gene. b) Restriction fragment length polymorphism (RFLP) for the detection of mutation.
4	Real time PCR for rapid identification and quantification of microorganisms.
5	SDS-PAGE analysis of microbial proteins.

VENUE AND DURATION

This one week workshop is organized at Sri Venkateswara College of Engineering (SVCE), Sriperumbudur Taluk, Tamil Nadu, India, during December 5th - 9th, 2016.

TRANSPORTATION

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

ACCOMMODATION

Accommodation may be provided in the campus on prior notice, for which the participants have to bear the subsidized charges and send the request on or before 30th November, 2016.

DATES TO REMEMBER

Last date for e-mail registration : **05.11.2016**
Intimation of selection : **07.11.2016**
Last date for registration with DD : **15.11.2016**
Last date for accommodation : **30.11.2016**

For details please e-mail to mdr2016@svce.ac.in

**Understanding the molecular aspects of microbial drug resistance:
An emerging microbial threat to health**

PROGRAMME SCHEDULE 5th to 9th December, 2016

Day – 1	
TIME	EVENTS
8.30 – 9.00 am	Registration
9.00 – 9.05 am	Prayer
9.05 – 9.10 am	<p align="center">Welcome address by Prof. E. Nakkeeran Professor Department of Biotechnology Sri Venkateswara College of Engineering, Sriperumbudur</p>
9.10 – 9.20 am	<p align="center">Patron's address by Prof. S. Ganesh Vaidyanathan Principal Sri Venkateswara College of Engineering, Sriperumbudur</p>
9.20 – 9.30 am	<p align="center">Secretarial address by Prof. M. Sivanandham Secretary Sri Venkateswara Educational and Health Trust, Chennai</p>
9.30 – 9.40 am	<p align="center">Introducing the Chief guest by Prof. Sulochana Somasundaram Professor Department of Biotechnology Sri Venkateswara College of Engineering, Sriperumbudur</p>
9.40 – 10.30 am	<p align="center">Chief Guest Address Dr.N. Selvakumar Ex-Scientist 'F' National Tuberculosis Institute, Bengaluru Topic: Drug resistance on tuberculosis</p>
10.30 – 11.15am	<p align="center">Prof. M. Sivanandham Secretary Sri Venkateswara Educational and Health Trust, Chennai Drug resistance in Cancer</p>
11.15 am- 11.30 am	Tea break
11.30 am – 1.00 pm	Hands on Session

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11.15 am- 11.30 am	Tea break
11.30 am – 1.00 pm	Hands on Session

Day - 2	
9.00 - 9.15 am	Introducing the Chief guest by Ms.A. Helen SRF, ICMR project, Department of Biotechnology Sri Venkateswara College of Engineering, Sriperumbudur
9.15 - 10.15 am	Chief Guest Address Prof. Thangam menon, Director and Head, Microbiology, UNOM, Taramani Topic: Methicillin Resistant in <i>Staphylococcus aureus</i> (MRSA)
10.15 - 10.30 am	Tea break
10.30 - 12.30 am	Hands on Session Isolation of chromosomal and plasmid DNA from pathogenic strains and resolving the DNA on agarose gel electrophoresis
12.30 - 1.15pm	Lunch break
1.15 - 3.15 pm	Hands on Session Isolation of chromosomal and plasmid DNA from pathogenic strains and resolving the DNA on agarose gel electrophoresis
Day - 3	
9.00 - 9.15 am	Introducing the Chief guest by Mr.N.Sathish Asst.Professor Department of Biotechnology Sri Venkateswara College of Engineering, Sriperumbudur
9.15 - 10.15 am	Chief Guest Address Dr. Luke.E.Hanna National Institute for Research in Tuberculosis, Chennai - 600031. Topic: Drug resistance in <i>E.coli</i>
10.15 - 10.30 am	Tea break
10.30 - 12.30 am	Hands on Session PCR amplification of the resistant gene.
12.30 - 1.15 pm	Lunch break
1.15 - 3.15 pm	Hands on Session Restriction fragment length polymorphism for the detection of mutation.

N. Sathish



Prof. E. NAKKEEHAN, M. Tech., Ph.D.
Professor & Head
Department of Biotechnology
Sri Venkateswara College of Engineering
Sriperumbudur T:- 602 117, Tamil Nadu, INDIA

Report of National Workshop on

“Understanding the Molecular Aspects of Microbial Drug Resistance: An Emerging Microbial Threat to Health”
sponsored by DBT, GOI and ICMR - New Delhi held between 5th to 10th December 2016.

The Department of Biotechnology, Sri Venkateswara College of Engineering conducted the National workshop on “Understanding the Molecular Aspects of Microbial Drug Resistance: An Emerging Microbial Threat to Health” sponsored by DBT and ICMR New Delhi held between 5th to 10th December 2016.

The registration was started at 8.00 am on 5th December 2016. Totally 66 external participants registered for this National workshop from various colleges of Tamil Nadu. Inaugural function was started with a prayer song at 9.00 am. Welcome address by Prof. E. Nakkeeran, Professor & Head, Department of Biotechnology, Sri Venkateswara College of Engineering, Sriperumbudur followed by Patron's address by Prof. S. Ganesh Vaidyanathan, Principal, Sri Venkateswara College of Engineering, Sriperumbudur. Patron's address was followed by Chief patron's address by Prof. M. Sivanandham, Secretary, Sri Venkateswara Educational and Health Trust, Chennai. Organizing secretary, Prof. Sulochana somasundaram, Professor, Department of Biotechnology introduced the chief guest Prof. Dr. T. Thangaradjou, Scientist 'E', Science and Engineering Research Board (SERB), Statutory Body under the Department of Science and Technology, New Delhi. Inaugural function was started by lighting the lamp and the workshop manual was released by chief guest. He gave an inaugural address and a technical talk on “SERB and Multiple Drug Resistance (MDR) research in the world”. After the inaugural programme, Hands on Session on “Isolation of pathogens from clinical sample”, was started with instructions for the practical work. Then the participants were served with lunch. After lunch break, the hands on training on “Identification and confirmation of pathogens using biochemical tests” were started at 1:00pm. The above training was given to the Participants as parallel sessions by the faculty members of the Department of Biotechnology. Then the hands on training were completed at 4:00pm.

On day 2, Introduction of the Chief Guest was done by Mr. N. Sathish, Asst. Professor, Department of Biotechnology, Sri Venkateswara College of Engineering, Sriperumbudur. Chief Guest Address was given by Dr. Luke Elizabeth Hanna, Scientist 'D', Department of Clinical Research, National Institute for Research in Tuberculosis, Chennai on topic “Drug resistance in HIV”. Hands on Session on “Isolation of chromosomal and plasmid DNA from pathogenic strains and resolving the DNA on agarose gel electrophoresis”, was carried out. Then the participants were served with lunch. After lunch break, the hands on training on “Isolation of chromosomal and plasmid DNA from pathogenic strains and resolving the DNA on agarose gel electrophoresis” was continued at 1:00pm. The above training was given to the participants as parallel sessions by the faculty members of the Department of Biotechnology. Then the hands on training were completed at 4:15PM.

Photos captured during the event



On day 3, Introduction of the Chief guest by Mr. J. Hariharan, Assistant Professor, Department of Biotechnology, Sri Venkateswara College of Engineering, Sriperumbudur and Chief Guest Address was given by Dr. Lily Therese, Professor & Head, Department of Microbiology, Sankara Nathralaya, Chennai on topic Molecular mechanism of Drug Resistance. Then hands on Session on "PCR amplification of the resistant gene and Primer designing", was carried out. Then the participants were served with lunch. After lunch break, the hands on training on "Restriction fragment length polymorphism for the detection of mutation" was started at 1:00pm. The above training was given to the Participants by the faculty members of the Department of Biotechnology. Then the hands on training were completed at 4:30pm.

On day 4 Introduction of the Chief Guest by Ms. P.Jaibiba, Asst. Professor, Department of Biotechnology, Sri Venkateswara College of Engineering, Sriperumbudur.. Chief Guest address was given by Dr. V.D. Ramanathan, Former-Deputy Director (Sr. Grade), Indian Council of Medical Research, Chennai, on topic "Vaccines against TB & HIV to combat drug resistance". The hands on training on "Real time PCR for rapid identification and quantification of pathogens and SDS PAGE analysis for pathogenic proteins" were given by the department faculty members. After the break, hands on training on "Real time PCR for rapid identification and quantification of pathogens and SDS PAGE analysis for pathogenic proteins" were given to the participants. Then the hands on training was completed at 4:00pm.

On day 5, introduction of the Chief Guest by Ms.A. Helen, SRF, ICMR project, Department of Biotechnology, Sri Venkateswara College of Engineering, Sriperumbudur. Chief Guest Address was given by Prof.Sulochana Somasundaram, Professor, Sri Venkateswara College of Engineering, SriperumbudurTk on topic "Molecular basis of drug resistance in Tuberculosis and extended spectrum beta lactamase Escherichia coli (*ESBL E.coli*)". After the tea break hands on training on "Primer designing and SDS PAGE" was continued by the faculty members. After lunch break the training session was completed with analysis of the result and then the valedictory function started 2:00 PM.

For valedictory address, Dr.K.Pitchandi, COE, Sri Venkateswara College of Engineering, Sriperumbudur Tk, was invited as the chief guest. He gave a brief valedictory address on "importance of research on MDR". He explained the participants about the importance of research publications, patents and fellowship for the research career. After his valedictory address, the feedbacks from the participants were received both orally and through the forums about technical sessions and hand on training for five days. Then the certificates were distributed to the participants. The organizing secretary, Prof. Sulochana Somasundaram delivered a vote of thanks. The organizing secretary whole heartedly thanked the two National funding agencies namely DBT & ICMR-New Delhi, for the financial grant sanctioned to organize this workshop for two days. She also thanked the college management for their encouragement and the participants for their keen interest to participate in this workshop. Then the programme was ended with National Anthem by 2:40pm. Then the photo session was arranged for the participants along with resource person, and faculty members.



Dr. Sulochana Somasundaram
Professor/Biotechnology Dept.
Organizing Secretary

Sulochana Somasundaram, Ph.D
PROFESSOR
Department of Biotechnology
Sri Venkateswara College of Engineering
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