

REGISTRATION FORM

CSIR

**Sponsored Workshop on
“Recent Development In
Modeling of Biomedical Instrumentation Design
Using Molecular Dynamics (MD) and Monte
Carlo (MC) Techniques”
July 11th & 12th, 2019**

1. Name :
 2. Designation :
 3. Academic Qualification :
 4. Department :
 5. Institution/Industry :
 6. Address :

 7. Mobile :
 8. E-mail ID :
 9. Accommodation Required : YES/NO
- Payment Details
10. DD No & Date :
 11. Amount :
 12. Bank & Branch :

DECLARATION

The above information is true to the best of my knowledge. I agree to abide by rules and regulations governing the course. If selected, I shall attend the programme for the entire duration. I also undertake the responsibility to inform the coordinator in case I am unable to attend the course.

Date:

Place:

Signature of the Participant

ORGANIZING COMMITTEE

CHIEF PATRON

Thiru. S. S. Kandasamy
President, Vellalar Educational Trust

PATRON

Thiru. S. D. Chandrasekar
Secretary, Vellalar Educational Trust

PRESIDENT

Dr. M. Jayaraman, Principal
Velalar College of Engineering and Technology.

VICE PRESIDENTS

Prof. L. Peter Stanley Bebington
Dean (Academics)

Prof. P. Jayachandar
Dean (Student Affairs)

CONVENER

Dr. S. Mangai, Professor & Head/BME.

COORDINATORS

Mr. S. Vigneshwaran, Assistant Professor/ BME.
Ms. M. Menagadevi, Assistant Professor/ BME.

SUBMISSION OF THE REGISTRATION FORM

Candidates should mail the soft copy of registration form duly filled to vcetcsir@gmail.com on or before **08.07.2019**

Submission of Application : 05.07.2019

Intimation of Selection : 06.07.2019

Confirmation by Participants : 07.07.2019

ADDRESS FOR COMMUNICATION

Dr. S. Mangai,
Professor & Head,
Department of BioMedical Engineering,
Velalar College of Engineering and Technology,
Thindal, Erode - 638 012, Tamil Nadu.
Mobile no: 9942953419, 9842777847



CSIR

SPONSORED



NATIONAL LEVEL WORKSHOP

ON

**“RECENT DEVELOPMENT IN
MODELING OF BIOMEDICAL
INSTRUMENTATION DESIGN USING
MOLECULAR DYNAMICS (MD) AND
MONTE CARLO (MC) TECHNIQUES”**

JULY 11th & 12th, 2019



Organized by

**DEPARTMENT OF BIOMEDICAL
ENGINEERING**

(Accredited by NBA, New Delhi)

**VELALAR COLLEGE OF ENGINEERING
AND TECHNOLOGY (Autonomous)**

(Accredited by NAAC with ‘A’ Grade)

Phone: 0424-2244201 to 204 and 206

Email: vcetcsir@gmail.com

Website: www.velalarengg.ac.in

Thindal, Erode - 638012, Tamil Nadu.

ABOUT THE INSTITUTION

Velalar College of Engineering and Technology is a self-financing co-educational autonomous institution established in the year 2001 with all the necessary infrastructural facilities provided by Vellalar Educational Trust that ably governs the institution. The college is approved by AICTE, affiliated to Anna University, Chennai and accredited with 'A' Grade by NAAC. The BE/BTech programmes of BME, ECE, EEE, CSE, & IT have been accredited by NBA. The institution has completed 18 years of dedicated and excellent service in the field of technical education. The institution offers eight UG Programme (BME, Civil Engg., CSE, ECE, EEE, IT, Mech. Engg & Medical Electronics) and six PG (M.E - CSE, Embedded System Technologies, Applied Electronics, VLSI Design, MBA & MCA) programmes. There are six Anna University approved research centers in the departments of ECE, EEE, CSE, Management Studies, Physics and Chemistry.

ABOUT THE DEPARTMENT

The Department of Biomedical Engineering was established in the year 2005 with undergraduate programme in Biomedical Engineering. The Department is well equipped with laboratories such as Biochemistry Lab, Physiology Lab, Pathology Lab, Diagnostic and Therapeutic Equipment Lab, Biomedical Instrumentation Lab, Devices & ICs Lab, Signal and Image Processing Lab. The department has received funds from AICTE for Modernization of Biomedical Instrumentation Laboratory. The department has also received funds from ICMR, CSIR, TNSCST, DST and Anna University. The students of the department have received various awards like Best Project and Paper Award.

OBJECTIVE OF WORKSHOP

Biomedical Instrumentation Design Using Molecular Dynamics (MD) and Monte Carlo (MC) The main objective of this workshop is to apply quantitative engineering analysis to understand the operation of living systems, and to design novel systems for development of innovative equipment. The workshop intends to provide a forum for researchers, entrepreneurs and developers to share and discuss advances in the field of Recent Development in Modeling of Techniques. The workshop covers theoretical and practical aspects as well as latest technologies and systems.

WORKSHOP CONTENTS

Day 1

- ✓ Introduction to Modeling Techniques in Biomedical Instrumentation Design
- ✓ Length and Time Scales, Types of MD simulations
- ✓ Integration Algorithms and its variants
- ✓ Leap-frog Algorithm
- ✓ Hand-on-Session - Computing material properties for Biomedical Instrument Design using FPGA

Day 2

- ✓ Velocity-Verlet Algorithm
- ✓ MD simulations in microcanonical (NVE)
- ✓ canonical (NVT) and isothermal-isobaric (NPT)
- ✓ Hands-on-Session-Monte Carlo Methods and Bayesian Computation in Biomedical Instrument Design
- ✓ Application Modeling of Biomedical Instrumentation Design

TARGET AUDIENCE

Faculty members working in various Engineering and Medical Colleges, Research scholars, PG Students, Industry Persons from relevant background of Science and Engineering.

FACULTY

Sessions will be handled by experienced faculty members from reputed institutions and Experts from IT and Medical Fields.

BOARDING AND LODGING

Accommodation and boarding if required will be provided in the college campus on first-come-first serve basis.

REGISTRATION FEE DETAILS

Registration Fee: Rs.350/- per Participant.

- Registration for the course can be made by sending the duly filled registration form along with a DD for Rs.350/- in favor of “**Secretary, VCET - GRANT A/C**” Payable at Erode.
- Registration is limited to 50 participants and selected on first-come-first serve basis.

HOW TO APPLY

The applicants should send the filled in application form and DD to us on or before **08.07.2019**.

REGISTRATION LINK

<https://forms.gle/AJESHQVtLRarWMwq5>

