

SRI VENKATESWARA COLLEGE OF ENGINEERING



Three day Workshop on Semiconductor Nano Devices – Modeling and Fabrication 16 to 18 - Feb -2018 REGISTRATION FORM

Name:

Dept:

UG Student/PG student/ Faculty:

Specialization:

Name of the Institution with Address:

Mobile No:

Email:

Details of Registration Fees : DD/Cash

DD No:

Issuing Bank:

DECLARATION

Dr./Ms/ Mr _____ is an
employee/Student of our institution is
sponsored to attend the three day
workshop on 'Semiconductor Nano
Devices – Modeling and Fabrication' ' on
16 to 18 – Feb-2018.

Signature of the Applicant

Signature of the Forwarding Authority with seal and
date.

ABOUT THE COLLEGE

Sri Venkateswara College of Engineering (SVCE), a premier self-financing engineering college was started in the year 1985 and is managed by Sri Venkateswara Educational and Health Trust. The college conducts 10 BE / B.Tech Degree Courses, 10 PG Courses in Engineering and 11 research centers approved by Anna University. The courses are approved by AICTE and affiliated to Anna University, Chennai. The college is accredited by *National Assessment and Accreditation Council (NAAC)*. The college is situated in a quiet environment about 37 Kms from Chennai and situated on the way of Chennai – Bangalore National Highway (NH4) at Pennalur, Sriperumbudur in Kancheepuram district



INTERDISCIPLINARY CENTRE FOR NANOTECHNOLOGY

The interdisciplinary Centre for Nanotechnology was established with grant awarded by the SVCE management. ICN-SVCE is engaged in research and development activities in the broad areas encompassing semiconductor device modeling, synthesis of semiconductor devices using wet methods and Sputtering, material characterization, material modification, and nurturing innovative ideas. The centre brings together researchers from the various departments of Chemical Engineering, Materials Science, Chemistry, Physics, Electrical Engineering and Biotechnology. The team comprises a set of dedicated, highly qualified, widely experienced and motivated researchers.



SRI VENKATESWARA COLLEGE OF ENGINEERING



Three day Workshop on Semiconductor Nano Devices – Modeling and Fabrication 16 to 18 - Feb -2018

Organized by

**INTERDISCIPLINARY CENTRE FOR
NANOTECHNOLOGY**

**Department of Electrical and Electronics
Engineering**

IEEE-Student Chapter, SVCE

CONVENOR

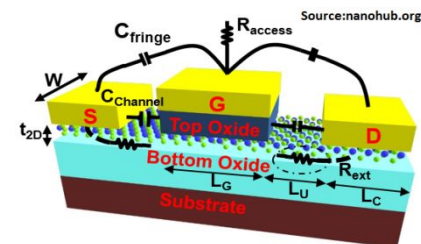
Dr. KR. SANTHA

COORDINATORS

Dr.SUDHAKAR K.B

Dr.NALINKANTH GHONE

**Sri Venkateswara College of Engineering,
Pennalur, Sriperumbudur.**



ABOUT THE WORKSHOP

The workshop aims at introducing the students/Research scholars/Researchers to the modeling and fabrication of semiconductor devices, so as to kindle an interest to work on the analytical and numerical modeling of a Nano-device. The recent advancements in the field of Nano-electronics and the various methods of Nano-fabrication will be provided. A demonstration of RF magnetron sputtering, where the particles of a solid target are ejected by bombardment of energetic particles will be shown to the participants. The workshop will be handled by the most eminent faculty/experts from IITM/ AU/ SVCE/ industry in the areas of Semiconductor Device modeling, compact modeling, emerging memory and transistor technologies and their micro-fabrication. As CMOS devices approaches the end of physical scaling, innovations in switches, design aspect, material systems, and their accompanying circuit advancements will be focused in this workshop. The three-day workshop is organized in a module format, with each module having lectures, tutorial, hand-on lab sessions and demonstrations.

TOPICS TO BE COVERED

- Introduction to Semiconductor Devices and Modeling
- Nanoelectronics
- Scaling issues of CMOS devices – Technology nodes
- Compact Modeling of a Nano-device
- Emerging memory technologies – Non-volatile SRAM, monolithic 3D, X- point
- Emerging Transistors- HTFET, GpnFET, Ferroelectric, Negative Capacitance FETs
- Emerging optoelectronic devices: Photodetectors and Sources
- Nano device challenges and opportunities
- Clean room demo fabrication of a Nano-device
- Hands-on session on MOS modeling

Key Note Speakers and Resource Persons

Dr.Shreepad Karmalkar, Professor of Electrical Engineering at IITM. His areas of interest include modeling and technology of semiconductor devices.

Dr.K.Rathnakannan, Assistant Professor, Department of Electrical and Electronics Engineering, College of Engineering Guindy, Anna University. He has worked on the Analysis of Reconfigurable Computational Processing Logics in Single Electron Technology. Areas of interest: Nanoelectronics, VLSI, Embedded Computing and Processors

Dr.R.Srinivasan, Professor, SSN College of Engineering. His research interests include VLSI, nano-scale transistors, and micro/nano-electronics and analog circuits. He has a good working experience on nano-scale MOSFETs using TCAD simulations.

Dr.A.Anandavadivel, Assistant Professor, Sri Venkateswara College of Engineering. His research interests include Dielectrics and condensed matter physics.

Dr.Sudhakar.K.B, Professor, Sri Venkateswara College of Engineering. His areas of interest include Semiconductor material synthesis and device fabrication using Molecular Beam Epitaxy, RF/DC Sputtering, their Structural, Optical and Electrical characterizations for optoelectronic, solar cell and flexible electronic applications.

In addition, experts from semiconductor industries will be invited for keynote address.

ELIGIBILITY

The workshop will be useful for faculty members who want to pursue research in the field of Semiconductor devices Modeling and Fabrication, Compact modeling, Emerging memory technologies, Ph.D research scholars, UG and PG students of EEE, ECE, CSE and IT.

REGISTRATION FEE

SVCE students – Rs. 1000
Students from other institutions- Rs.1500
Faculty members – Rs. 2000

Admission is based on first come first-served basis. The fee includes course materials, certification and refreshments.

The registration fee must be submitted in the form of a crossed demand draft drawn in favor of 'The Principal, Sri Venkateswara College of Engineering', payable at Sriperumbudur.

IMPORTANT DATES

Last Date of registration: 07.02.2018

Intimation of selection : 10.02.2018

TRANSPORTATION

The participants have to make their own arrangements for travel.No TA/DA will be provided.

ADDRESS FOR COMMUNICATION

Sudhakar K.B
Professor,
EEE Department,
Sri Venkateswara College of Engineering,
Pennalur, NH-4,
Sriperumbudur,
Kancheepuram- Dist,
Tamilnadu-602117.

Phone: 9487590691,
Cell No: 9566155731.

E-mail :sudhakar@svce.ac.in
sanitha@svce.ac.in

Sri Venkateswara College of Engineering

(Approved by the A.I.C.T.E. Accredited by the NAAC and affiliated to Anna University Chennai)

Post Bag No.1, Pennalur, Irungattukottai Post, Sriperumbudur Tk. 602117 India.

Phone : 91-44-27152000 (20 Lines)

27163783/27163784/27107016

Fax : 91-44-27162462 / 27162494

Email : acm@svce.ac.in URL : <http://www.svce.ac.in>



12/2/2018
Sriperumbudur

Respected Dr.Rathnakannan,

Sri Venkateswara College of Engineering is organizing a 3 days workshop on "**Semiconductor Nano Devices – Modeling and Fabrication**". The workshop aims at introducing the participants to the analytical and numerical modeling, micro-fabrication of semiconductor nano-devices and emerging Nano-devices.

I would like to extend my invitation to you to be the Chief Guest and keynote speaker for the workshop inaugural function.

Workshop Dates : 16th to 18th - February, 2018.

Inaugural function: 16th February, 2018 at 9AM followed by your keynote address.

Looking forward to your acceptance.

Thank You

Regards

KR. Santha
15-2-18

Dr.KR. Santha

Vice-Principal

HOD/ Electrical and Electronics Engineering,
Sri Venkateswara College of Engineering



Sri Venkateswara College of Engineering

Pennalur, Sriperumbudur – 602 117



IEEE Student Branch

Department of Electrical and Electronics Engineering

Interdisciplinary Centre for Nanotechnology

Solicits your esteemed presence
For the inauguration of Three days Workshop on

Semiconductor Nano Devices – Modeling and Fabrication

Inauguration and Address

by

Dr.K.Rathnakannan

Assistant Professor, Department of Electrical and Electronics Engineering, College of Engineering, Guindy, Anna University

Venue: Library Seminar Hall

Time: 09:30 AM

Date: 16/02/2018

ALL ARE WELCOME

Program Schedule

Date: - **16th February 2018**

Time: - 9:30 am to 10:00 am

1. Prayer song
2. Welcome address
3. Inauguration by Chief Guest
4. Introduction of Chief Guest by the Vice Principal, SVCE
5. Inaugural Speech and Keynote address by Chief Guest

Sri Venkateswara College of Engineering
Sriperumbudur 602117
Department of Electrical and Electronics Engineering

Three days workshop on Semiconductor (Nano) Devices – Modeling and Fabrication
Feb 16-18, 2018

Programme Schedule

S. No	Time	Session Topic	Speaker	Venue
Feb 16 (DAY 1)				
1	09:30 -10:00 AM	Inaugural Session	Dr.KR.Santha, Vice-Principal, SVCE	Library Seminar Hall
Tea Break				
2	10:15 -11:15 AM	Introduction to Semiconductor Devices, Physical Modeling of a Nanodevice	Dr.K.Rathnakannan, Anna University, Chennai	Library Seminar Hall
3	11:15 AM-12:30 PM	Silicon Nanotube FET	Dr. R. Srinivasan, SSN College of Engineering, Chennai	Library Seminar Hall
Lunch Break				
4	01:30 -03:00 PM	Fabrication of Nanofibres by Electrospinning	Dr. T. S. Natarajan, Professor, IIT Tirupati	Library Seminar Hall
Feb 17 (DAY 2)				
5	09:00 -10:30 AM	Introduction to Semiconductor Device Modeling for Engineering students	Prof.Shreepad Karmalkar, Professor, IIT Madras	Library Seminar Hall
Tea Break				
6	10:40 AM-11:30 AM	Building a Transistor	Dr.Sudhakar.KB, Professor, SVCE	Video Hall
Lunch Break				
7	12:45 PM – 1:45 PM	Electrospinning to Nanotechnology	Dr.Anandhavadivel, Associate Professor, SVCE	Video Hall
8	1:45 -03:15 PM	Fabrication of a Nanodevice – Lab Demo	Dr.Sudhakar.KB, Professor, SVCE, Research Scholar	ICN – TIC Building
Feb 18 (DAY 3)				
9	09:00 -10:30 AM	Emerging Memory, Optoelectronics and Solar cell devices	Dr.Sudhakar.KB, Professor, SVCE	Library Seminar Hall
Tea Break				
10	10:45 AM – 12:30 PM	Fabrication/ Modeling of a Nanodevice – Lab Demo	Research Scholar	ICN – TIC Building ,EE Block- Software Lab
Lunch Break				
10	1:30 – 03:00 PM	Lab Demo - Contd	Research Scholar	ICN – TIC Building, EE Block- Software Lab
11	03:00-03:15 PM	Valedictory Function	Dr.Sudhakar.KB	Seminar Hall

Pictures from the Workshop:



Certificate Distribution



K.R. Sankar

Head of the Department
Department of Electrical and Electronics Engineering
Sri Venkateswara College of Engineering
Pettah, Sriperumbudur Taluk-602 117
Tamil Nadu, INDIA

N.K. Mohanty

DR.N.K.MOHANTY, Asso Prof EE

Co Ordinator

Sri Venkateswara College of Engineering

Sriperumbudur 602117

Department of Electrical and Electronics Engineering

Interdisciplinary Centre for Nanotechnology

Three days workshop on Semiconductor (Nano) Devices – Modeling and Fabrication

Feb 16-18, 2018

Participant List

Sl No	Name	Name of the Institution	Amount
1	Vijay H.M	VIT - Vellore	1500
2	Ramkumar K	VIT - Vellore	1500
3	S. Ashwinkarthik	SVCE, Sriperumbudur	600
4	Ajay Krishna R.V	SVCE, Sriperumbudur	600
5	Sivaranjani K	SVCE, Sriperumbudur	600
6	Sangavi J	SVCE, Sriperumbudur	600
7	Arthi K	SVCE, Sriperumbudur	600
8	Padmavathy M	SVCE, Sriperumbudur	600
9	Sabarivasan R	SVCE, Sriperumbudur	600
10	Santhosh Kumar K	SVCE, Sriperumbudur	600
11	Shri Lakshmi A	SVCE, Sriperumbudur	600
12	Meghana N	SVCE, Sriperumbudur	600
13	Balachander	SVCE, Sriperumbudur	600
14	Hariharan D	SVCE, Sriperumbudur	600
15	Ramkumar S	SVCE, Sriperumbudur	600
16	Natarajan A	SVCE, Sriperumbudur	600
17	Bhaskar S	SVCE, Sriperumbudur	600
18	Leoponraj S	SVCE, Sriperumbudur	600
19	Kevin Immanueal Gubbi	SVCE, Sriperumbudur	600
20	Aviakshi	SVCE, Sriperumbudur	600
21	Varsha S	SVCE, Sriperumbudur	600
22	Nandhini Priya	SVCE, Sriperumbudur	600
23	Shoja Sherlin	SVCE, Sriperumbudur	600
24	Poornima K	SVCE, Sriperumbudur	600
25	Gowtham K	SVCE, Sriperumbudur	600
26	Abhirami S	Crescent University	1500
27	Yusuf Umar Tarauni	SRM University	1500
28	Nithyashree R	SVCE, Sriperumbudur	600
29	Sangeeta Meena	SVCE, Sriperumbudur	600
30	Mohana Krishnan K R	SVCE, Sriperumbudur	600
31	Priyanka A	Anna University	1500
32	Premkumar.M	SVCE, Sriperumbudur	600
33	R.Jothiraj	SVCE, Sriperumbudur	600

34	S.Akshay	SVCE, Sriperumbudur	600
35	Vasavi.S	Panimalar Engg College	1500
36	K.Sai Krishna	Saveetha School of Engg	600
37	N.Santhosh Kumar	Saveetha School of Engg	600
38	S.Sai Chandra Mouli	Saveetha School of Engg	600
39	K.Mounica	Saveetha School of Engg	600
40	V.Babu Rao	Saveetha School of Engg	600
		Total Amount	29400