Short course Program

Modeling and Simulation of Nano-Transistors

13 - 17 Feb. 2017

Venue - Outreach Auditorium

Dr. Yogesh S. Chauhan & Dr. A. Agarwal
Nanolab, Department of Electrical Engineering
IIT Kanpur
http://home.iitk.ac.in/~chauhan/

Day-1 (Monday, 13th Feb. 2017)

Topic	Time	Speaker
Registration	8.00AM-9.00AM	
Inauguration	9AM-9.30AM	
High Tea	9.30AM-9.45AM	
Physics of semiconductors-1	9.45AM-11.15AM	A. Agarwal
Physics of semiconductors-2	11.15AM-12.45PM	A. Verma
Lunch	12.45PM-2.00PM	
IC Fabrication	2.00PM-3.30PM	S. S. K. Iyer
MOSFET Modeling	3.30PM-5.00PM	A. Dutta

Day-2 (Tuesday, 14th Feb. 2017)

Topic	Time	Speaker
MOSFET Modeling	9AM-10.30AM	A. Dutta
Break	10.30AM-10.45AM	
Circuit Simulation and SPICE	10.45AM-11.45AM	Y. S. Chauhan
TCAD Simulation demo	11.45AM-12.45PM	Sudip/Avirup
Lunch	12.45PM-2.30PM	
Compact MOSFET Modeling	2.30PM-3.30PM	Y. S. Chauhan
Break	3.30PM-3.45PM	
MOSFET Modeling	3.45PM-5.15PM	A. Dutta

Day-3 (Wednesday, 15th Feb. 2017)

Topic	Time	Speaker
Compact MOSFET Modeling	9.00AM-11.00AM	Y. S. Chauhan
Break	11.00AM-11.15PM	
Modeling of GaN HEMT	11.15AM-1.00PM	Aamir
Lunch	1.00PM-2.30PM	
FinFET/FDSOI Modeling	2.30PM-4.00PM	Y. S. Chauhan
Break	4.00PM-4.15PM	
Parameter Extraction and Keysight ICCAP demo	4.15PM-5.15PM	Sudip

Day-4 (Thursday, 16th Feb. 2017)

Topic	Time	Speaker
Negative Capacitance FET	9AM-10AM	Y. S. Chauhan
Hyper FETs	10AM-11AM	A. Verma
Break	11AM-11.15AM	
2D Materials - Atomistic Simulation & Modeling	11.15AM-1.00PM	S. Bhowmick C. Yadav
Lunch	1.00PM-2.30PM	
On wafer characterization	2.30PM-4.00PM	Cascade
Group Photo	4.00PM	L16
Characterization Lab visit	4.30PM	Nanolab
Banquet dinner	7PM	Outreach lawn

Day-5 (Friday, 17th Feb. 2017)

Topic	Time	Speaker
Device Characterization	9AM-10.30AM	Keysight
Break	10.30AM-11.00AM	
Introduction to RF Modeling	11.00AM-12.30AM	KVS & YSC
Lunch	12.30PM-2.00PM	
Quasi-ballistic Transport	2.00PM-3.30PM	A. Agarwal
Funding, Proposal writing, and New research topics	3.30PM-5.00PM	Faculty Members
Tea/Certificates	5.00PM	

Announcements

- Please wear course badge all the time in the campus.
  - Also keep your institute ID-card with you.
- Wifi not available for the participants. You can purchase Jio SIM from IITK gate using Aadhar card.
- Meals will be available only on 5 days (13-17Feb) from our side
  - Participants staying in GH-1 and GH-Tower will use GH-1 mess for all the meals.
  - Participants staying in Hall-5/10/12 and VH-Extension will use Hall-12 mess for breakfast and dinner.
  - Participants staying in Hall-5/10 and VH-Extension will use Hall-1 mess for lunch.
  - Participants staying in Hall-12 will use Hall-3 mess for lunch.