



Visual TCAD & Genius Device Simulator 2016 (TCAD & JDS)

**Department of Computer Science & Engineering,
Faculty of Engineering, Technology & Management & IQAC
University of Kalyani**

Date: September 05 - 09, 2016 :: Venue : Department of CSE

Chief Patron

Professor Malayendu Saha,
V.C., K.U.

Organizing Chair

Professor Manas Kumar Sanyal,
Dean, FETM, K.U

Organizing Co-Chair

Prof. Utpal Biswas, CSE, KU
Prof. K Mali, CSE, KU

Program Chair

Prof. J. K. Mandal, CSE, KU

Program Co-Chair

Dr. Anirban Mukhopadhyay, CSE,
KU
Dr. Priya Ranjan Sinha Mahapatra,
CSE, KU

Registration Chair

Dr. P. R. Sinha Mahapatra, CSE,
KU
Mr. D. Sardar, CSE, KU

Accommodation

University Guest House may
be provided on request at very
nominal charges (limited seats
on the basis of first come first
basis).

The University of Kalyani was established in 1960 with a campus area of over 400 acres in Kalyani town. It is well connected by road and railway, with a railway station very close to the University. The University is situated in a locality surrounded by a rural setting within a rural backdrop and it caters mostly to the students of rural and backward areas. Yet, its distance from Kolkata is only 50 km. This locational advantage of the University makes it particularly suitable for the 'Cafeteria Approach' to higher education.

Faculty of Engineering, Technology & Management

The Faculty of Engineering, Technology and Management is the newest Faculty of the university among all faculties. This faculty consists of five departments, namely Business Administration (BA), Computer Science & Engineering (CSE), Engineering and Technological Studies (ETS), The departments offer different under-graduate, post-graduate and doctoral courses in the areas of engineering, technology and management.

Department of Computer Science & Engineering

The Department of Computer Science & Engineering is relatively new compared to other academic departments of the University. This department was established in 1992. It started functioning in the Department of Physics, University of Kalyani, with only one course and that was Postgraduate Diploma in Computer Application (PGDCA) with student strength of fifteen. Subsequently, at the end of 2002, the Department started functioning in its new building. The two existing courses, Master in Computer Application (MCA) and Master of Technology in Computer Science (M.Tech.) were started from 2001 and 2003 respectively.

The following contents will be covered in this one week FDP

Visual TCAD GUI

Device Structure Drawing Tools
Circuit Schematic Capturing Tool
GUI Simulation Controller
Visual Tools for simulation & Results

GENIUS 2D/3D Device Simulator

Drift-diffusion Model
Lattice heating Model
Energy balance Model
Density Gradient Quantum Model
DC, AC and transient simulation models
Circuit/Device mixed simulation
Ray-tracing Optical simulation
Knowledge on Material library and utility
Mobility models
Impact ionization model
Band-to-band tunnelling models
Carrier tapping at defects
Hall effects and utility
3D Ray-tracing optics
2D FEM Optics

No TA/DA will be provided to the participants. There is no provision for refreshment. Participants will be enrolled on first cum first basis. Seal is limited.

Contacts: The Coordinator, TCAD & JDS, Director, IQAC and Professor, CSE, Department of CSE, Faculty of Engineering, Technology & Management, University of Kalyani, Kalyani, Nadia, West Bengal, India, Tel.033-25809615-18, E-mail:jkm.cse@gmail.com; Web: <http://kucse.in;www.klyuniv.ac.in>, Organizing Chair, M: (0)9434451520, Program Chair, M: (0) 9434352214