UGC
REFRESHER COURSE ON NANO-DEVICES AND LOW POWER VLSI DESIGN

During 11th December 2013 to 2th January 2014

Organized By: Department of Electronics & Tele Communication Engineering
JADAVPUR UNIVERSITY

Course coordinator: Prof. SUBIR KUMAR SARKAR
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Venue
Department of ETCE, Jadavpur University, Kolkata-700032, India

Last Date for application: 29/11/2013

Introduction
Nano-science and Nanotechnologies are widely seen as having huge potential to bring benefits to many areas of research and application, and are attracting rapidly increasing investment from Governments and from businesses in many parts of the world. At the same time, it is recognized that their application may arise new challenges in the safety, regulatory and ethical domains that will require social debate.
In the last thirty years or so, by far, the strongest growth area of the semiconductor industry has been in Silicon Very-Large-Scale-Integration (VLSI) technology. The sustained growth in VLSI technology is fueled by the continued shrinking of transistors to ever smaller dimensions. The benefits of miniaturization—high packing densities, higher circuit speeds and low power dissipation—have been keys in the evolutionary progress leading to today’s computers and communication systems that offer superior performance, dramatically reduced cost per function, and much reduced physical size, in comparison with their predecessors. VLSI has become a technology of large economical importance. Mastering this technology on the one hand means mastering the latest semiconductor processing technology, and on the other hand mastering computer aided design.

Objective of the winter school

1. To provide the current state of scientific knowledge about nanotechnologies.
2. To identify the specific applications of the new technologies, in particular where nanotechnologies are already in use.
3. To carry out a forward look to see how the technologies might be used in future.
4. To identify what health and safety, environmental, ethical and societal implications may arise.
5. To bring together the device fundamentals that govern the behavior of CMOS and bipolar transistors into a single text, with emphasis on those parameters and performance factors that are particularly important for VLSI devices of deep-submicron dimensions.
6. To provide overall idea of VLSI circuits design with special emphasis on low power VLSI design.

Accommodation

Accommodation assistance will be provided to the out station participants, based on prior request.
UGC SPONSORED ORIENTATION PROGRAMME / REFRESHER COURSE IN ____________________________

1. Full Name of the Teacher (in block letters):

2. Address: i) Residential:

   ii) for Communication:

   iii) Phone: iv) E-mail:

3. Date of Birth:

4. Sex:

5. Please tick

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6. Educational Qualification (with subject):

7. Date of joining in the college: ___ / ___ / _______

8. Teaching Experience: _____ years _____ months

9. Present Designation and Dept.:

10. Name and address of the College / University:

11. Whether the College admitted under 2(I) 12B of UGC: Yes / No

12. a) Details of Previous Orientation / Refresher Course attended:

   b) Dates of last Refresher Course attended:

13. Any other information:

Place:
Date:
Signature of the Applicant

CERTIFICATE

I hereby certify that _______________________________ is interested in undergoing the Orientation Programme / Refresher Course and that he / she will be relieved in time to participate in the above course at

Place: Office seal
Principal / Date:  Signature of the Head of the Institution

Note: All the columns must be filled in by the applicant. Incomplete application forms will be rejected.