

ABOUT BERHAMPUR CITY

The city of Berhampur is quite well known as Silk City for its traditional handicrafts and Silk garments. The m a j o r attraction for



tourists is Gopalpur-on-sea which is 11 Kms away from Berhampur. It is famous for one of the most pristine beaches of Orissa, where swaying (casuarinas, coconut) trees and sand dunes which separates the beach from blue waters act as the perfect setting for peace and tranquility. Berhampur is also famous for its temples and creeping attractions like hot water spring with medicinal benefits (Taptapani). The climatic condition is almost favorable as the day time temperature is max 35° C with occasional monsoon rains.

COURSE INSTRUCTORS

Experts from IISc, IIT's, NIT's, IIIT's, NIST and Persons from Industry (having expertise in tools) would deliver the lectures on latest technologies, in association with NIST VLSI Group.

ELIGIBILITY OF THE APPLICANT

Faculty members from AICTE recognized Engineering Institute, Autonomous College and Fresher from Industry having one to two years of experience in relevant discipline are eligible to participate.

HOW TO APPLY

Xerox / typed application form duly filled and forwarded by the Head of the Institute should reach on or before 10th July, 2009. A copy of the same can be sent to akpanda@nist.edu. Application Form can also be downloaded from the website www.nist.edu. **No registration fee is required.** The applications will be short listed by first come first served basis and the candidates would be intimated through e-mails only. So all are requested to provide the valid mail ID's in the registration form. Please call at 09438178587 for more information.

TA/DA & ACCOMMODATION

The participants will be provided with free boarding and lodging and will get TA (as per AICTE norms to and fro fare on production of ticket) and local transport. Twin shared basis accommodation will be provided to the participants.

ORGANIZING COMMITTEE

Chairperson

Prof. Sangram Mudali, Director, NIST

Advisory Committee

Prof. Nirranjan Das

Prof. S. P. Pati (Emeritus fellow)

Prof. J. Majhi (Emeritus fellow)

Prof. Geetika Mudali

Dr. A. K. Padhy

Dr. P.C. Biswal

Dr. Sudhir K. Panigrahy

Dr. S. K. Tripathy

Dr. Motahar Reza

Dr. Siddharth Panda

Mr. Siddhartha Neelamani

Mr. Shom P. Das

Mr. Bhawani S. Patnaik

Mr. Abhro Mukherjee

Organizing Committee

Mr. M. Suresh

Mr. T. R. Lenka

Mr. Satyabrata Das

Mr. Rajesh Kumar Dash

Dr. Maituz Ali

Dr. Satyasopan Mahato

Mr. P. K. Patra

Mr. Manoj Kumar Sahoo

Mr. Sudhakar Das

Mr. Prabhudutta Pradhan

Mr. Mukesh Sukla

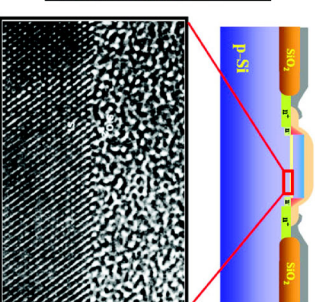
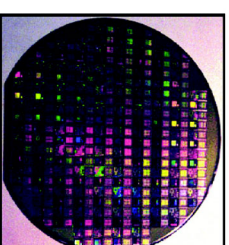
Mr. Mitu Baral

Ms. Runa Kumari

Ms. Malabika Patnaik

Mr. Mihir Hota

Dr. Ajit Kumar Panda (Co-ordinator)



Address for Correspondence:

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AICTE Sponsored



Faculty Development Program

On

**Microelectronics/VLSI Design
for Engineers & Scientists**

27 July to 08 August 2009

Co-ordinator

Dr. Ajit Kumar Panda



Organized by



**National Institute of Science &
Technology**

Palur Hills, Berhampur - 761008

Orissa

Introduction & Objective of the Program

Microelectronics/VLSI has emerged in each and every field of applications starting from Tablet PC, PDA's, and mobile phones to Super Computer, Communication etc. The courses of VLSI or Microelectronics are a part of curriculum of all universities around the world, even for undergraduate students. As per the recent statistics of VLSI Society of India, India needs at least 2000 VLSI teachers whereas available manpower for the same is 200. To increase the number 10 times, AICTE has focused to train the trainers in this area and hence this Faculty Development Program has been sponsored by AICTE. The course structure of this FDP program has designed to train the trainers in these emerging areas to help them out in teaching as well as research. The main focus of the program will be on hands on experience in Laboratory on Industry standard EDA tools such as Cadence, Synopsys IC station, TCAD, Tanner tool, Xilinx etc. Some of these tools will be handled by Industry experts. The topics are organized in such a manner that, a participant can be able to understand from basics of VLSI to the industry standard designs. This program will also help the participants to improve their skills in the field of VLSI and its applications and also to develop expertise in EDA tools apart from their focus on research topics in these areas.

Topics to be covered

1. Introduction to Microelectronics/VLSI Design
2. VLSI Design Methodology
3. Spice Models
4. Digital VLSI Design (will cover the syllabus of many Universities)
5. Introduction to Analog VLSI Design
6. HDL based FPGA Design
7. Process Technology
8. Laboratory on EDA Tool

About the Department of the Electronics and Communication Engineering

The Department of Electronics and Communication Engineering started in the year of 1996 with an intake of 60 and later increased to 120 seats. The department of ECE conducts M.Tech in Electronics and Communication Engineering with an intake of 18 seats and it also provides various certification courses in VLSI and Embedded systems to UG as well as PG students. This AICTE sponsored FDP program will be organized by the department of ECE with modern state-of-art VLSI and Embedded system laboratory equipped with industry standard EDA tools, measurement set up having Agilent's Vector Network Analyzer (upto 20GHz), Semiconductor parameter Analyzer, Microstrip antenna fabrication unit etc, sponsored by DST, Govt. of India under DST-FIST program. Apart from this the department also has various other laboratories such as Microprocessor and Microcontroller Lab, Analog Electronics Lab, Microwave communication Lab, Signal Processing Lab etc. The department is also enriched by high profile faculties from various reputed institutions all over the country and abroad. All are engaged in various areas of research like Microelectronics, Modeling of Semiconductor Devices, Signal processing using FPGA, VLSI based Embedded System, Microstrip Antenna design and fabrication, Optical Technology etc. The department has published more than 10 papers in last two years in International Journals of repute (including IEEE and IEE) and more than 20 Conference papers in last two years. The department has produced two BOYSCAST fellow and one Samanta Chandrasekhar Young Scientist Awardee.

ABOUT NIST

National Institute of Science & Technology was set up in 1996. It is approved by AICTE and affiliated to BPUT. The institute campus of 60 acres

is located at picturesque Palur hills about 12 kms from Berhampur and 3 hours drive from Bhubaneswar. The institute is headed by Prof. Sangram Mudali (M.S., University of Houston, B.Tech., IIT Kanpur, B.F. Goodrich, Ohio). About 2500 students are studying in various disciplines of M.Tech, B.Tech., MCA, MBA & PGDM at NIST. The entire campus is 24X7 WLAN connected.

Within a short span of 13 years, NIST has produced 4 BOYSCAST scholars, 2 Full Bright scholars, 3 Samant Chandrasekhar Young Scientist Awardees and more than 20 Post-Doctorate scholarships have been awarded to the institute faculty. Our faculty members have published more than 15 books and 50 papers in international journals of repute. The institute received a number of grants from AICTE, DST, UGC, MHRD, CSIR and private IT companies for projects, Staff and Faculty Development Programmes. In 2009, NIST received a grant of about Rs. 25 Lakhs to conduct FDP's/SDP's in Advanced Computer Control of Industrial Process and Automation Engineering, Advanced DSP implementation using FPGA & DSP Processor, Microelectronics/VLSI Design for Engineers and Scientists, VLSI Design using FPGA & IC station (the next course in this series), EDC Programmes, etc. sponsored by AICTE. Prof. S.P. Pati and Prof. J. Majhi have been appointed by AICTE as Emeritus fellow in NIST for two years.

NIST students are recruited every year by almost all top notch MNCs and Indian IT sector & Core Engineering sector companies. Students are also recruited by few MNC's like Wipro etc. in VLSI Domain. NIST conducts certification courses during summer vacation on VLSI, ORACLE, Industrial Automation, JAVA, .NET, SAP etc. to groom the students and make them industry ready. The institute has tied up with companies like Infosys, Wipro, Mphasis, TCS etc. for projects and technical certification courses etc. through various Industry-Institute interaction programmes.

APPLICATION FORM

for

**AICTE Sponsored
Faculty Development Program On**

"Microelectronics/

VLSI Design for Engineers & Scientists"

27 July to 08 August 2009

1. Full Name :

(In Block letter)

2. Designation :

3. Institute Name & Address :

4. Whether the Institute has AICTE approval ?:

Yes / No

5. Sex : M / F

6. Contact Number :

7. E-mail Id :

8. Accommodation needed : Yes / No

9. Signature of the Participant :

Date:

Place:

Signature of the Head of the Institute /
Sponsoring Authority
(With Date and Seal)