Workshop on FPAA DESIGN OF ANALOG SYSTEMS

27th October – 28th October 2017

ABOUT THE COURSE

Field Programmable Analog Arrays (FPAA) are reconfigurable analog integrated circuits. It is an integrated device containing configurable analog blocks (CAB) and interconnects between these blocks. Unlike their digital cousin, the FPGA, the devices tend to be more application driven than general purpose as they may be current mode or voltage mode devices. For voltage mode devices, each block usually contains an operational amplifier in combination with programmable configuration of passive components. The blocks can, for example, act as summers or integrators. The main aim and motivation of organizing this workshop is to expose the academicians and industry personals to design of adaptive analog systems, using FPAA in the area of Control and measurement systems, Analog signal processing, and rapid prototyping.

COURSE CONTENTS

- FPAA
- EDA tool and simulation
- ✤ FPAA architecture and CAM
- Evaluation Board
- Static configuration
- ✤ Dynamic reconfiguration
- Filter design, signal processing, Biomedical applications, control applications.

OUTCOME OF THE WORKSHOP

At the end of the workshop, each participant is expected to have enhanced his/her knowledge on FPAA and its application in the areas of signal processing, control systems, Bio-medical applications and rapid prototyping.

INTENDED AUDIENCE

UG/PG Faculties, Research Scholars, Academicians and R&D personnel from industries in the area of Analog system design, Control and measurement systems, Analog Signal Processing, Audio signal processing, Biomedical signal processing, Signal Conditioning for sensor applications, rapid prototyping.

REGISTRATION AND FEE PARTICULAR

Workshop is conducted free of cost. You can register by sending a mail to the Coordinator. Accommodation can be availed based on availability at Institute guest house as per institute norms.

IMPORTANT DATES

Confirmation for participation	25/10/2017
Workshop Commences on:	27/10/2017

ABOUT NIT ROURKELA

National Institute of Technology (NIT), Rourkela was founded as Regional Engineering College, Rourkela in 1961. It is a prestigious Institute with a reputation for excellence at both undergraduate and postgraduate levels, fostering the spirit of national integration among the students, a close interaction with industry and a strong emphasis on research, both basic and applied.

The city of Rourkela is a bustling industrial town, cosmopolitan by nature and is well connected to all parts of the country by road and rail. It is en-route Howrah-Mumbai main line of South-Eastern Railway. Nesting amidst greenery on all sides, NIT campus is approximately 7km from Rourkela railway station. The nearest airports are Ranchi, Kolkata and Bhubaneswar, which are well connected by trains.

CORRESPONDENCE

Prof. D. P. Acharya	Prof. A. K. Swain
Coordinator	Co-coordinator
Electronics & Communication Engg. Dept.	Electronics & Communication Engg. Dept.
National Institute of Technology	National Institute of Technology
Rourkela – 769 008	Rourkela – 769 008
Phone: 0661-2462463(O)	Phone: 0661-2462458 (O)
e-Mail: dpacharya@nitrkl.ac.in	e-Mail: swain.ayas@gmail.com
Reconfigurable IC Lab : 0661-2464465	ESD Lab : 0661-2464459