National Institute of Technology, Tiruchirappalli

National Institute of Technology, Tiruchirappalli (NITT) was established in the year 1964 (as erstwhile REC). It offers ten under-graduate programmes in Engineering and Architecture. It offers twenty one post-Graduate programmes in Engineering as well as Science and Doctoral Programmes in all Engineering, Science, and Humanities disciplines. Currently about 5000 students are pursuing their under-graduate, post-graduate, and research studies in various disciplines. Electronics and Communication Engineering department of NITT offers a B.Tech programme and M.Tech as well as Doctoral programmes on VLSI System and Communication Systems. It has the reputation of having successfully completed several R& D projects in the last twenty five years. It is presently carrying out R&D projects funded by UKIERI, DST and DeiTy, New Delhi. It has the state of art DSP laboratory and SMDP funded VLSI Laboratory. ECE dept. has been active in carrying out research work on Analog circuit designs, Systems like UWB, Cognitive Radio, NoCs. Several ICs have been taped out and tested successfully.

Heriot-Watt University, Edinburgh, U.K

Heriot-Watt University is a public university based in Edinburgh, UK established in 1821 as the world's first mechanics' institute. It has branch campuses in the Scottish Borders, Orkney, Dubai, and Putrajaya in Malaysia. The School of Engineering and Physical Sciences was created in August 2002. The school embraces the subjects including Electrical, Electronic and Computer Engineering and carrying out R&D projects and consultancy funded by leading agencies and organizations.

3. Workshop Agenda:

Day-1:

9.00 – 9.15	**Registration**
9.15 – 10.45	**Expert Lecture - I**
10.45 – 11.00	**Tea Break**
11.00 – 12.30	**Expert Lecture - II**
12.30 – 1.30	**Lunch**
1.30 – 3.00	**Expert Lecture - III**
3.00 – 3.15	**Tea Break**
3.15 – 4.45	**Demonstration on WARP Kit by EdGATE Technologies, Bengaluru**

Day-2:

9.15 – 10.45	**Expert Lecture - IV**
10.45 – 11.00	**Tea Break**
11.00 – 12.30	**Expert Lecture - V**
12.30 – 1.30	**Lunch**
1.30 – 2.30	**Hardware Implementation details**
2.30 – 2.45	**Tea Break**
2.45 – 3.45	**Hardware Implementation details**
3.45 – 4.45	**Valediction**

DEPARTMENT OF ECE
NATIONAL INSTITUTE OF TECHNOLOGY
TIRUCHIRAPPALLI, TAMIL NADU
&
HERIOT-WATT UNIVERSITY
EDINBURGH, U.K

UKIERI Sponsored Workshop on Advances in Cognitive Radio and its Hardware Implementation
(Under UKIERI Programme)

Dec. 23 & 24, 2014

1. Name:
2. Email id:
3. Degree:
4. Specialization:
5. Designation (optional):
6. Name of the Institution:
7. Details of previous Experience, if any:
8. Address for Correspondence: (with Phone No.)
9. Is Accommodation Required? YES / NO
10. DD No. :

Date: Signature of Applicant

Signature of Head of the Institution with Seal

5. Course Faculty

Experts from leading Institutions and Research Organizations including UK.

Course Fee

Registration: **Rs.200/-**

Accommodation may be provided if required, at extra charges.

Mode of payment

The amount is to be paid by D.D drawn in favour of "The Director, National Institute of Technology, Tiruchirappalli" and payable at Tiruchirappalli.

Note

Only limited number of participants can be admitted to the workshop. The admission is on first come first served basis. The workshop is exclusively meant for Researchers, PG Students and Teaching Faculty. No TA/DA will be paid for the participants.

Address for Correspondence

Completely filled up Application forms accompanied by D.D. should reach the coordinator on or before **18.12.2014**. Selected candidates will be intimated by E-mail.

Dr. G. Lakshminarayanan
Coordinator
Department of ECE
National Institute of Technology
Tiruchirappalli - 620 015.
Ph: 0431 2503300, 09442940144
E-Mail: laksh@nitt.edu

4. About the workshop:

Cognitive radio is an emerging concept where the radio adaptively optimizes the utilization of spectrum by means of utilizing unused parts of the spectrum for its communication. One of the challenges in the Cognitive Radio is its implementation where the flexibility needed calls for innovative ways of making an effective realization.

The objective of this workshop is to highlight the recent developments and discuss about the techniques for hardware realization of the Cognitive Radios.

Topics including:

- Cognitive Radio systems and networks
- OFDM based Physical Layer (PHY) design
- Spectrum Sensing and Dynamic Spectrum Access
- Revolutionary new concept in wireless communications technology
- Demonstration
- Hardware Implementation details

Achievable skills:

- Cognitive Radio Concepts
- Physical Layer design of Multi-standard Cognitive Radio
- Algorithms for utilizing unused parts of the spectrum
- Innovative ideas for modern wireless technology
- Hardware realization and Challenges

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FOR FACULTY, RESEARCHERS AND POST GRADUATE STUDENTS

Coordinators

Dr. G. Lakshminarayanan
Dr. Mathini Sellathurai
Dr. B. Venkataramani

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