# UNIVERSITY INSTITUTE OF ENGINEERING & TECHNOLOGY PANJAB UNIVERSITY, CHANDIGARH - 160014

## **FACULTY PROFILE**

1. Name : Naresh Kumar

2. Designation : Assistant Professor

3. Department : Electronics & Communication Engineering

4. Contact No. : 9216392982

5. Email id :naresh uiet@yahoo.com

6. Research Areas : Wireless Communication, Underwater Acoustic

Communication

7. Educational Background

(Provide details of Educational background in descending order)

PhD (Pursuing) from Panjab University Chandigarh

ME (Electronics) from Punjab Engineering College Chandigarh.

BE (ECE) CR State College of Engineering Murthal, Sonepat

8. Experience:

(Provide details of professional experience before joining this institute in the descending order)

Worked as Lecturer at NIT Kurukshetra from 07/01/2005 to 21/02/2005

Worked as Lecturer at NIT Hamirpur from 03/01/2005 to 07/01/2005

Worked as Lecturer at NIT Hamirpur from 04/08/2004 to 31/12/2004

#### 9. List of Publications:

(Publications can be segregated as Journals/Conferences. Provide list of publications in the following format:

#### **Recent Publications**

#### **International Conference:**

- 1. Anuradha and **Naresh Kumar**, "BER analysis of conventional and wavelet based OFDM in LTE using different modulation techniques", in the proceedings of International Conference Recent Advances in Engineering & Computational Sciences, UIET Panjab University Chandigarh, published by IEEE, ISBN: 978-1-4799-2290-1, March 2014, (SCOPUS Indexed).
- 2. Ishu and **Naresh Kumar**, "PAPR reduction in Wavelet based SC-FDMA using Partial Transmit Sequence(PTS) for LTE uplink transmission, in proceedings of International



Conference on Advances in Computing, Communications and Informatics (ICACCI-2014) to be held in Sept 2014 at Greater Noida, to be published by IEEE, accepted (SCOPUS Indexed).

# **International Journal:**

1. Ishu and **Naresh Kumar**, "PAPR Reduction in Wavelet based SCFDMA using Pulse Shaping Filters for LTE Uplink Transmission, in International Journal of Applied Engineering Research ISSN 0973-4562 Volume 9, Number 20 (2014) pp. 6481-6492. (SCOPUS Indexed).

# **B.** Other Publications:

#### **International Journals:**

- 1. Pooja Mehta and **Naresh Kumar** "Detection Of Foreign Fibers And Cotton Contaminants By using Intensity And Hue Properties", International Journal of Advances in Electronics Engineering, Vol. 1(1), pp. 230-240, 2011, ISSN: 2278 215X.
- 2. Anita and **Naresh Kumar**, "Test bed for power analysis of particle swarm optimization based wireless sensor networks", International Journal of Computer Science and Application, pp. 114-120, 2011, (Spl), ISSN: 0974-4752.
- 3. Shikha Mahajan and **Naresh Kumar**, "COFDM for Radio over Multimode Fiber: a Review. Special issues on IP Multimedia Communications", Vol. (1), pp. 68-71, October 2011. Published by Foundation of Computer Science, New York, USA, N: 978-93-80864-99-3.
- 4. Shikha Mahajan and **Naresh Kumar**, "Simulative Analysis of Influence of Modulation Techniques on COFDM based Radio over Fiber Transmission", I.J.Modern Education and Computer Science, Hongkong, Vol. 4 (8), pp. 1-8, 2012, ISSN: 2075-017X.
- 5. Sakshi Kapuria and **Naresh Kumar**, "Person Verification using Multimodal Biometric System & Information Fusion", Journal of Emerging Trends in Engineering & Management, Vol. 1(1), pp. 5-9, 2012.
- 6. Shikha Mahajan and **Naresh Kumar**, "Performance Analysis of Coded OFDM Signal for Radio over Fiber Transmission", IOSR Journal of Electrical and Electronics Engineering (IOSRJEE), Vol 1(1), pp. 49-52,2012, ISSN: 2278-1676.
- 7. **Naresh Kumar** and Pulkit Sharma, "Dynamic Energy Detection Approach for Spectrum Sensing in Cognitive Radio Networks", International Journal of advance innovations, thoughts & ideas, Vol. 1(4), pp. 37-42, 2012, ISSN: 2277-1891.
- 8. Dilpreet Kaur and **Naresh Kumar**, "Comparative Analysis of AODV, OLSR, TORA, DSR and DSDV Routing Protocols in Mobile Ad-Hoc Networks", I. J. Computer Network and Information Security, Hongkong, Vol. 5(3), pp. 39-46, 2013, ISSN: 2074-9104.

- 9. Harjot Singh, Vinod Karar, **Naresh Kumar** and Surender S Saini, "Performance Comparison: Optical and Magnetic Head Tracking, International Journal of IT", Engineering and Applied Sciences Research (IJIEASR), VOl. 2(3),pp. 27-32, 2013, ISSN: 2319-4413.
- 10. Tulika Mehta, **Naresh Kumar** and Surender Singh Saini, "Development of an iterative algorithm for spectrum sensing using energy detection technique for cognitive radios", Digitech: an International Journal of Computer science and applications, VOl. 3, No. 7, Feb 2013. ISSN 2229-4597.
- 11. Tulika Mehta, **Naresh Kumar** and Surender Singh Saini, "Comparison of Spectrum sensing techniques in cognitive radio networks", IJECT vol. 4, Issue spl-3, April-June 2013. ISSN 2230-7109.
- 12. Harjot Singh, Vinod Karar and **Naresh Kumar**, "Characterisation of angular error in Magnetic Head Tracking", International Journal of Computer applications (IJCA), published New York, USA, Vol. 73, No. 19, July 2013, ISSN. 0975-8887.
- 13. Harjot Singh, Vinod Karar and **Naresh Kumar**, "Performance Comparison: Optical and Magnetic Head Tracking", International Journal of IT, Engineering and Applied Sciences Research (IJIEASR), Vol. 2, No. 3, March 2013, ISSN 2319-4413.
- 14. Harmanpreet Kaur, **Naresh Kumar**, Randhir Bhatnagar, "Design of Elcetronic circuitry for temperature monitoring system using FBG sensors", PURJ (Science), Vol 59, 2009, ISSN 0555-7631.

### **C.** International Conferences:

- 1. Priyanka Handa and Naresh Kumar, "Comparison of routing protocols used in underwater acoustic sensor network", Proceedings of International conference on emerging trends and technology (IETET-2010), October 14-16, 2010 at Geeta Institute of Management and Technology, Kanipala, Kurukshetra, Haryana, India.pp. 246-251.
- **2.** Hempriya and **Naresh Kumar**, "Gradient based techniques for the avoidance of over segmentation", Proceddings of International conference on Biomedical engineering and Assistive technologies (BEATS-2010), December 17-19, 2010 held at Dr. B R Ambedkar National Institute of Technology, Jalandhar, India.
- **3.** Mandeep Singh and **Naresh Kumar**, "Classification of voltage reference design techniques", Proceedings of International conference on recent trends of computer technology in academicia on April 21-23, 2012 held at Janardan Rai Nagar Rajasthan Vidyapeeth (D) University, Udaipur, Rajasthan, India.ISBN- 9788-179063163.
- **4.** Mandeep Singh and **Naresh Kumar**, "Design and Simulation of Bandgap reference voltage circuit in 0.13 μm CMOS technology", Proceedings of ICNICT International conference 2012. (IEEE sponsored).
- **5.** Mandeep Singh and **Naresh Kumar**, "Temperature independent CMOS band gap reference circuit in 0.13 μm CMOS technology" Proceeding of ICRTC International conference 2012.

- **6.** Pulkit Sharma and **Naresh Kumar**, "Differential Mean energy detection approach for spectrum sensing in Cognitive Radio Networks", Proceedings of International Conference on Advanced Computing Technologies (ICACT 2012), Gurukul Vidyapeeth, Punjab, June 2012.
- **7.** Pulkit Sharma and **Naresh Kumar**, "Collective spectrum sensing & Decision in Cooperative spectrum sensing for Cognitive radio networks", Proceedings of International Conference on Advanced Computing Technologies (ICACT 2012), Gurukul Vidyapeeth, Punjab, June 2012.
- **8.** Pulkit Sharma and **Naresh Kumar**," Comparitive analysis of indivisual & cooperative spectrum sensing for cognitive radio networks", Proceedings of International conference on Emerging Paradigms and Practices in Information & communication technology and Management (EPPICTM), Gautam Budh University Noida, 2012.
- **9.** Tulika Mehta and **Naresh Kumar**, "Survey report on techniques used for spectrum sensing using cognitive radios", Proceedings of International conference SIBIP at Chitkara University, 2012.
- **10.** Tulika Mehta, **Naresh Kumar**, Surender S Saini, "Performance improvement in Spectrum sensing for cognitive radio Networks with Optimized weighted threshold principle", Information and Mathematical Sciences, published by Elsevier, 2013.

# **D. National Conferences/Seminars:**

- 1. **Naresh Kumar** and Priyanka Handa, "Routing Protocol in Underwater acoustic sensor network", Proceedings of National conference on advances in Digital signal processing NCADSP-2010, October 22-23, 2010, at Chitkara Institute of Engineering & Technology, Punjab.
- 2. **Naresh Kumar**, "Wireless Body area network for health care", National Seminar on sustainable development and public health in india organized by Centre for public health, Institute of emerging areas in science and technology (IEAST), Panjab University Chandigarh on 17-18 January 2011.
- 3. Pooja Mehta and **Naresh Kumar**, "Review of Automated techniques for detection of foreign fibers & cotton contaminants, 5th Chandigarh Science Congress, 26th -28th Feb 2011 at Panjab University Chandigarh.
- 4. Sakshi Kapuria and **Naresh Kumar**, "Person verification using Multimodal biometric system & Information fusion", Proceedings of National Conference on Advances in Computational Intelligence on 9th July 2011 organised by Sat Priya Group of Institutions , Rohtak, (Haryana).
- 5. Pulkit Sharma and **Naresh Kumar**, "Spectrum sensing techniques for Cognitive Radio Networks: A Review", In National conference on Recent advances in communication & Electronics (RACE-2012), Hoshiarpur, Punjab, January 2012.
- 6. Mandeep Singh and **Naresh Kumar**, "A-Review study of low sensitive CMOS bandgap reference 130 nm CMOS tech.", National conference on ICT-2012 at Sri Sukhmani Institute of Engineering & Technology, Dera Bassi (Punjab) on March 15-16, 2012.

- 7. Mandeep Singh and **Naresh Kumar**, "Band gap reference voltages in mixed signal system", National conference on emerging trends in communication control and computation, 7th April 2012 at Baddi University, Baddi (HP).
- 8. Mandeep Singh and **Naresh Kumar**, "Role of reference voltage in portable devices", National conference on Challenges in Emerging Computer Technologies, 16th-17th May 2012 at Rayat & Bahra Institute of engineering & biotechnology (Punjab).
- 9. Tulika Mehta and **Naresh Kumar**, "Spectrum sensing techniques in Cognitive radio networks", 15th April 2013, jointly organized by IETE Chandigarh and Indoglobal colleges at Indo Global College of Engineering, Abhipur (Punjab).

# 10. Projects/Consultancy Work:

Major Research Project submitted to UGC.

11. Achievements/Awards etc: