

Dr. DEEPAK CHATRABHUJ KARIA

Associate Professor, Electronics Department,
Sardar Patel Institute of Technology

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- Date of joining the present institute: 11th July 2006
- Date of joining the present department: 29th June 2013

S.No	Degree	Institute	Year of passing	Class/CGPI/percentage
1.	PhD (Electronics)	V.J.T.I., Mumbai University	May 2012	---
2.	M.E.(Electronics)	Sardar Patel College of Engineering/ Mumbai University	2008	70.2 %

- Scholastic record: (*Begin with the highest degree and end with XII*)

- Teaching experience in totality : 15 years+

- **Academic merit record and achievements: (only in graduation and post-graduation years)**

- Topper in B.E. EXTC in 2001.
- Topper in M.E. Electronics in 2008.

- **Awards:**

Able to secure a position amongst the 253 participants declared as top performers (SAP Award of excellence of Rs: 5000/-) of IITBombayX Use of ICT in Education for Online and Blended Learning course conducted by IITB from May-July 2016. A total of 2180 participants out of approximately 4051 participants were found to be eligible for certificate and 253 participants were found to be eligible for SAP Award of excellence.

- **Domain expertise and areas of interest:**

- Wireless Communication
- Mobile Communication
- Networking

- **Details of subjects taught:**

S.No.	Name of subject	Year and branch
1.	Principles of Communication Engineering	Second Year (Computer and EXTC)
2.	Digital communication, Communication Networks, MITM, CCN, ANT	Third Year EXTC/ETRX Fourth year ETRX
3.	Data Communication and Networking	SYMCA
4.	Next Generation Networks , Mobile and Wireless Communication, NDM, Emerging Wireless Technologies	ME EXTC ME CMPN
5.	Satellite Communication and Advanced Satellite Communication	Final Year and ME First Year (Sem-II (EXTC))

- **Workshops/Refresher courses/Training programs/Seminars attended:**

- Two days Workshop on “Wireless Networking” organized by I.I.T, Mumbai, March 2004.

- Two days seminar on “**Challenges Ahead in Telecommunication**”, organized by D.J.S.C.E, Mumbai, October 2005.
- Two weeks S.T.T.P on “**Wireless Technologies and Networking**”, organized by D.J.S.C.E, Mumbai, October 2005.
- One day Course on “**Matlab and its Applications**” Conducted by SPIT, Mumbai, 2006.
- One week S.T.T.P on “**Electromagnetic Spectrum and its Applications**”, conducted by SPIT, Mumbai, 2009.
- One week S.T.T.P on “**Emerging Areas of Signal Processing and Communication**”, conducted by Watumull, Mumbai, 2010.
- Two week ISTE Workshop on “**Research Methodology**”, conducted by **I.I.T.B. and ICT (MHRD)**., Mumbai, July 2012.
- One Week NBA workshop on “**Outcome Based Accreditation for Stakeholders** ”, conducted NBA in association with NMIMS , Mumbai, Feb-2014.
- Two week ISTE Workshop on “**Communication Networking**”, conducted by **I.I.T.B. and ICT (MHRD)**., Mumbai, July 2014.
- One Week ISTE approved STTP on “**Microwave Antennas for Wireless Communication**”, conducted by SPIT, Mumbai, Nov-2015.

- **Workshops/Refresher courses/Training programs/Seminars conducted as a resource person: (Add only if applicable)**
 - A two days seminar on “**LASERS AND ITS APPLICATIONS**” sponsored by B.A.R.C., for Shah and Anchor Kutchhi Engineering College, Mumbai, May 2006.
 - A five days training program on “**Cisco Certified Network Associate**” for students of Sardar Patel Institute of Technology, Mumbai, 2008.
 - A four days training program on “**Mobile Repairing**” for students of Sardar Patel Institute of Technology, Mumbai, Feb 2009 & Sept2010.
 - A four days training program on “**Mobile Repairing**” for students of Sardar Patel Institute of Technology, Mumbai, Sept2010.
 - One Day Training program on “ **WLAN and its Security**” for students of PGDMIT, NITIE, Powai, 2013 and 2014.
 - Guest Lectures on “**Communication Networks**”, SPCE, Electrical Department, January- April 2016.

- Resource Person for One week ISTE-S.T.T.P on “ Networking and Cyber Security with hands-on labs”, SPIT, July 2015.

▪ **Membership of professional bodies:**

- Life Member of Institution of Electronics and Telecommunication Engineers (**IETE**).
- Life Member of Indian Society of Technical Education (**ISTE**).

▪ **Publications:**

International Conferences

S.No	Publisher	Title of International conference	Title of paper/article/poster presentation	Schedule and venue of conference
1.	IEEE	International Conference on Global Trends in Signal Processing, Information Computing and Communication	MMC: Multiple Metric Cost Routing Metric for Wireless Mesh Networks	Dec 2016, Jalgaon
2.	IEEE	International Conference on Global Trends in Signal Processing, Information Computing and Communication	Design of Apollonian Gasket Bow Tie Antenna for Satellite Application	Dec 206, Jalgaon
3.	IEEE	International Conference on Recent Trends in Electronics, Information & Communication Technology	Multiband Circular Bow Tie Antenna Design using Apollonian Gasket of Fractals	September 2016
4.	IEEE	Computer and Communication Network (CoCoNet)	A 1*2 array circularly polarised Microstrip antenna with a high gain for RFID applications	Kerala, Dec 2015
5.	IEEE	Next Generation Computing Technologies (NGCT)	A compact wideband antenna for wireless applications using rectangular ring	Dehradun, Sept2015

6.	IEEE	Next Generation Computing Technologies (NGCT)	A mapping-based model for preventing Cross site scripting and sql injection attacks on web application and its impact analysis	Dehradun, Sept2015
7.	IEEE	IEEE Bombay Section Symposium (IBSS)	Impact Analysis of Preventing Cross Site Scripting and SQL Injection Attacks on Web Application	Mumbai, Sept2015
8.	IEEE	Advances in Computing, Communications and Informatics (ICACCI)	A high gain 2-element Microstrip array antenna with Circular Polarisation for RFID Applications	Kochi, August 2015
9.	IEEE	Nascent Technologies in the Engineering Field (ICNTE), 2015	Performance measurement of WEP and WPA2 on WLAN using OpenVPN Authors	Vashi, New-Mumbai, India, 2015.
10.	IEEE	Nascent Technologies in the Engineering Field (ICNTE), 2015	A 5.8 GHz ISM band microstrip antenna for RFID applications	Vashi, New-Mumbai, India, 2015.
11.	Springer	Recent cognizance in wireless communication & image processing	Multiband and Wideband Antenna for Wi-Fi, WLAN, X-Band and Space Research Applications	16-17 January 2015, Jaipur ,India
12.	IEEE	Advances in Computing, Communications and Informatics (ICACCI, 2014)	Wideband printed dipole antenna with embedded loops and coupling patches for digital TV signal reception	Noida, India, September 2014.
13.	IEEE	Advances in Communication and Computing Technologies (ICACACT)	Patch antenna for communication devices	Mumbai, Aug-2014

14.	IEEE	Advances in Communication and Computing Technologies (ICACACT)	Planar Dipole Antenna Design for DTV Broadcasting Application	Mumbai, August 2014
15.	IEEE	<i>Machine Intelligence Research and Advancement</i>	Review of Routing Metrics for Wireless Mesh Network	Jammu, India Dec 2013
16.	IEEE	<i>Energy Efficient Technologies for Sustainability</i>	Wireless Based Load Control and Power Monitoring System	Tamil Nadu, India April 2013
17.	IEEE	<i>Signal Processing, Communication, Computing and Networking Technologies</i>	Interference Mitigation In Multiuser OFDM Systems Using Network MIMO	Kanyakumari, India, July 2011
18.	IEEE	<i>Signal Processing, Communication, Computing and Networking Technologies</i>	Optimization of Power Control Algorithms for Mobile Cellular Networks	Kanyakumari, India, July 2011
19.	IEEE	<i>Signal Processing, Communication, Computing and Networking Technologies</i>	Game Theory Based Spectrum Load Balancing in Cognitive Radio	Kanyakumari, India, July 2011
20.	IEEE	<i>Signal Processing, Communication, Computing and Networking Technologies</i>	Embedded Web Server Application Based. Automation and Monitoring System	Kanyakumari, India, July 2011
21.	IEEE	<i>Electronics Computer Technology</i>	Cooperation based multihop relaying for IEEE 802.16	India, 2011
22.	IEEE	<i>Intelligent Systems, Modelling and Simulation</i>	Radio Channel Characterization for IEEE 802.11	Liverpool, United Kingdom, Jan 2010
23.	IET	<i>Next Generation Networks</i>	Modeling of Indoor Radio Propagation Channel for IEEE 802.11b/g	India, 2010
24.	IEEE	<i>Mathematical/Analytical Modeling and Computer Simulation</i>	Statistical Tuning of Walfisch-Ikegami Model in Urban and Suburban Environments	Malaysia, May 2010
25.	IEEE	European Modeling	A QoS Provisioning for	Liverpool, United

		symposium	Real and Non Real Traffic Over WLAN Using Connection Admission Policy	Kingdom, Jan 2008
26.	IEEE	SPIT-IEEE Colloquium	Performance Analysis using Call Threshold CAC Scheme for MANET in Wireless MAN	India, 2008

- **Details of Chapters contributed to edited knowledge based volumes published by International Publishers:**

S.No	Publisher	Title of Book	Title of Book Chapter	Schedule and venue of conference
1.	Springer	Signal Processing and Intelligent Recognition Systems	Inbuilt Multiband Microstrip Antenna for Portable Devices	Trivandrum, India, 13-14 March 2014
2.	Springer	Security in Computer Networks and Distributed Systems	Clustering Based Routing Strategies for Energy Management in Ad-hoc Networks	Trivandrum, India, 13-14 March 2014
3.	Springer	Security in Computer Networks and Distributed Systems	MM-SOAR: Modified SOAR Protocol Using Multiple Metrics for Wireless Mesh Network	Trivandrum, India, 13-14 March 2014
4.	Springer	Security in Computing and Communications	Privacy Issues in Single and Multi-hop Wireless Mesh Network	Mysore, India, August 2013
5.	Springer	Energy efficient wireless communications and networking	Performance Analysis of ZigBee based on Load Control and Power Monitoring System	Mysore, India, August 2013

- **Details of National and International Journal publications:**

S.No	Title of Journal	Title of paper	Co-authors
1.	International Journal of Electronics and Communications, Elsevier journal of Electronics and communication, <u>2017 - Vol. 72, pp.33-39</u>	A compact monopole antenna for wireless applications with enhanced bandwidth	S.Goswami and D.C.Karia
2.	<i>International Journal of Wireless</i>	QoS Provisioning in Cellular	B.K.Lande and

	<i>Mobile Computing, Inderscience Publishing House, England, 2012 - Vol. 5, No.2 pp. 161 - 167</i>	Networks Using Environment Based Interference Alleviation Model	R.D.Daruwala
2.	<i>International Journal of Intelligent Engineering Informatics, Inderscience Publishing House, England, 2011 - Vol. 1, No.3/4 pp. 246 - 260</i>	Back Propagation Neural Network Based Energy Efficient Routing Protocols for Mobile Ad-hoc Networks	B.K.Lande and R.D.Daruwala
3.	<i>International Journal of Intelligent Engineering Informatics, Inderscience Publishing House, England, 2013 - Vol. 2, No.1 pp. 21 - 29</i>	Improving Spectral Efficiency in Cooperative Cellular Networks Via Convex Optimization	B.K.Lande and R.D.Daruwala
4.	<i>International Journal of Ad-hoc Ubiquitous Computing, Inderscience Publishing House, England, 2012 - Vol. 11, No.4 pp. 206 - 213</i>	Performance Analysis of HMM and ANN based Spectrum Vacancy Predictor Behaviour for Cognitive Radios	B.K.Lande and R.D.Daruwala
5.	<i>International Journal of Intelligent Engineering Informatics, Inderscience Publishing House, England, 2013 - Vol. 2, No.1 pp. 30 - 46</i>	Mobility Models and Traffic Pattern Generation Based Optimization of Reactive Protocols (In Press)	V. Godbole
6.	<i>International Journal of Ultra Wideband Communications and Systems, Inderscience Publishing House, England, 2012 - Vol. 2, No.3 pp. 133 - 140</i>	Genetic Algorithm-Based Energy-Efficient Protocol For Wireless Sensor Networks (In Press)	V. Godbole
7.	<i>IET journal of Networks, England, 2013, Volume:2, Issue 3, pp.171-180</i>	A New Approach For Routing In Mobile Ad-Hoc Networks Based On Ant Colony Optimization With GPS	V. Godbole
8.	<i>International Journal of Communication Networks and Distributed Systems, Inderscience Publishing House, England, 2014 - Vol. 12, No.3 2, pp. 169-182</i>	Dynamic Clustering Scheme for Distributed Spectrum Sensing in Cognitive Radio Networks	P. Joshi, P. Rawat and M.Thakur
9.	<i>International Journal on Advanced Computer Theory and Engineering</i>	Wireless Electronic Notice Board	A. Gaikwad, T. Kapadia, M. Lakhani
10.	<i>International Journal of Swarm Intelligence, Inderscience Publishing House, England, 2015 – Vol.1, Issue 4, pp. 299-320.</i>	ACO based Biology Inspired Routing Protocol for Ad-hoc Networks	V. Godbole

▪ **Contribution to and role played in the administrative affairs of the institute:**

1. Controller of examination section, SPIT, from May 2014-May 2016.
2. Program Coordinator, ETRX Department, SPIT, since Feb-2014.
3. Chief Coordinator of MH-DTE-MCA Counseling Round-III for the academic years 2010-11, 2011-12, 2012-13 and 2013-14.

4. In-Charge of Institute Level F.E. Admission Rounds for the academic years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14.
5. Faculty In-Charge SPIT, IETE and ISF Students' forum from 2008-2013.
6. Member of college level Student Welfare committee since January 2012.

- **Other Contributions:**

Invited Reviewer for IEEE Transactions on Wireless Communications, IEEE Journal on Vehicular Technology, IET Journals of Sensor Systems, Networks, IEEE Communication Magazine, IEEE Symposiums and Conferences.