

RESUME

Dr. Halappa Gajera BE, M-Tech, LMISTE, PhD

Assistant Professor (Stage-2), Department of Electronics,
Post-Graduate Center, Hemagagothri,
University of Mysore, Hassan,
Karnataka, India-573220

Tel: 08172-240578 (Off)

Cell: 09448792544

Fax: 08172-240674 Email: haleshn@rediffmail.com



Qualification			
Course	Specialization		Year
Ph.D.	Dielectric Resonator Antenna (DRA),		2017
M-Tech	Digital Electronics and Communication Systems(DECS)		2002
BE	Electronics and Communications (E&C)		1998
Teaching Experience:-			
Name of Institute	Year	Designation	Duration
Oxford College of Engineering	2002	Lecturer	One year
K S I T Bangalore	2003	Lecturer	One year
University of Mysore.	2004 to 2009	Assistant Professor (AGP 6000)	6 Years
	2009 to till date	Assistant Professor (AGP 7000)	7 Years

Personal Details:

Date of birth: **20th July 1974**

Sex: **Male**

Marital status: **Married**

Nationality: **Indian**

Languages Known:

English, Kannada, Hindi and Bengali

Passport No:

E6016371

Permanent Address:

S/O Ramappa S Gajera.
#78, Valmikinagar,
Itagi(Post), Ranebennur(Tq),
Haveri(Dist), Karnataka-581208
Phone: 08373-246573/ 08192-264347

Postal Address: Halappa R. Gajera

**C/o K. C. Mahendra
#501, 13th CROSS,
Laxmi Nivash
KUVEMPU NAGAR
HASSAN-573201**

Ph.D. Thesis Title: “New Approach of Metallic and Dielectric Perturbations in Cylindrical Dielectric Resonator Antennas to Control the Modal Fields and Its Radiation Characteristics”

Status: Ph.D. (Tech) Awarded on 14th February 2017

University: University of Calcutta, Kolkata, India

Name of the Supervisor: Prof. Debatosh. Guha
Institute of Radio Physics and Electronics, (IRPE).
University of Calcutta, Kolkata, India

Achievements:

1. APS-MTT-Kolkata Chapter got Best Chapter Award from APS-Society in 2014, I was the chapter secretary.
2. Best Paper Award in International Conference on Microwave, Antenna, Propagation & Remote Sensing (ICMARS-2010), 14th to 17th December, 2010, in Jodhpur, India.
3. “The Circular Microstrip Patch Antenna (CMPA) with Circular and Rectangular slot Etched Ground Plane for Wireless Communication”, one of the best paper selected and recommended for IJSISE journal publication by expert committee of ICES-2011.
4. Qualified in GATE-2000
5. Minor Research Project of Rs 1,60,000=00 Sanctioned by UGC,

Title of Project	Funding Agency	Sanction Letter No & Date	Amount	Amount released
<i>Study on Size Reduction and Enhancement of Band Width, Gain of Microstrip Patch Antennas for Wireless and Mobile Communication Applications</i>	UGC	F.No.41-1342(SR) Dated 26-07-12	1,60,000=00	1,22,500=00

Memberships and Positions in Professional Bodies

1. **Member**, Board of Examination (BOE)-2017, Department of Electronics, Mangalore University, Karnataka, India.
2. **Member** Board of Examination (BOE), Department of Electronics, University of Mysore since 2007.

3. Member BOS Electronics, UG, Yuvaraja College, University of Mysore, 2016
4. Member Invite for BOS Electronics, University of Mysore, 2016
5. **Organizing Chair** Recent Advances in Optical Technology (RAOT) - 2015, one day lecture series program in collaboration with IEEE Photonic Society, Bangalore Section.
6. **Technical Advisory** for two days workshop on “Recent Trends on Antenna Research and Communication Technology”, organized by MCE, Hassan, under TECQIP on 8th and 9th April 2015.
7. **Secretary** IEEE AP-MTT-Chapter Kolkata Section 17/01/2013 to 17/01/2014
8. **Member** IEEE,
9. **Chairman** Board of Examination (BOE), Department of Electronics, University of Mysore, 2014-15, 2015-16,
10. **Organizing committee member** in Indian Antenna Week (IAW)-2013,
11. **Life Member** ISTE
12. **Member** Board of Admission, Department of Electronics, University of Mysore since 2006.

Journal Paper:

1. **H. Gajera**, D. Guha, and C. Kumar, “Dielectric Perturbation to Control Higher Order Mode in a Dielectric Resonator Antenna Leading to Improved Polarization Purity of Radiation Fields”, *IEEE Antennas and Wireless Propagation Letters*, Vol. 16, 2017, p 445-448.
2. D. Guha, **H. Gajera**, and C. Kumar, “Perturbation Technique to Improve Purity of Modal Fields in Dielectric Resonator Antenna Resulting in Reduce Cross-Polarized Radiation”, *IEEE Transaction on Antennas and Propagation*, vol. 63, No. 7, July 2015, p1863-1867.
3. D. Guha, **H. Gajera**, and C. Kumar, “Cross-Polarized Radiation in a Cylindrical Dielectric Resonator Antenna: Identification of Source, Experimental Proof, and Its Suppression”, *IEEE Transaction on Antennas and Propagation*, vol. 63, No. 4, April 2015, p3253-3257.
4. **Halappa R. Gajera**, Anoop C.N, “The Circular Microstrip Patch Antenna (CMPA) with Circular and Rectangular slot Etched Ground Plane for Wireless Communication”, *International Journal of Signal and Imaging Systems Engineering (IJSISE)*, Vol 5, No 4, 2012, p295-299.
5. **Halappa R. Gajera**, Anoop C.N, “The Study on Bandwidth Enhancement of Rectangular Microstrip Patch Antenna (RMPA) for Wireless Application”, *International Journal of Electronics and Communication Technology (IJECT)*. Volume 2, ISSUE 4, Dec-2011,

6. **Halappa R. Gajera**, Anoop C.N, M M Naik. G, Archana S. P, Nandini R, Pushpitha B.K, Ravi Kumar M.D, “The Microstrip Fed Rectangular Microstrip Patch Antenna (RMPA) with Defected Ground Plane for HIPERLAN/1”, *International Journal of Electronics and Communication Technology (IJECT)*, Volume 2, ISSUE 3, September-2011.
7. **Halappa R. Gajera**, Anoop C.N, “The Compact Square Microstrip Patch Antenna (CSMPA) for HIPERLAN/1 and HIPERLAN/2 Bands”, *International Journal of Electronics and Communication Technology (IJECT)*, Vol 2, ISSUE 2, June-2011.

Some Photos:



Technical Talks:

1. Invited as Resource Person for one day workshop on “**The Antenna Theory and Design of Microstrip Patch Antenna using HFSS**”, organized by Department of E&C, Malnad College of Engineering (MCE), Hassan on 25th March 2017.
2. As a chief guest and invitee for Technical talk on “**Antenna Research**”, organized by “**Student Forum 2016 -17**”, Department of Electronics, and Communication, UBDT College of Engineering, Davanagere on 27th October 2016.
3. As resource person for “**Invited Technical Talk on Satellite Communication and Antennas**”, organized by Department of Electronics, SBRR Mahajana First Grade College, Jayalakshmipuram, Mysuru on 11th March 2016.
4. As resource person for “**One Day Technical Symposium on Microstrip Patch Antenna Since 1952**”, organized by Department of E&C, SDM Institute of Technology on 5th Feb 2016 at Ujjire. Karnataka, India.
5. Invited technical talk on “**Challenges in the Design of Microstrip Patch Antenna**”, organized by Department of E&C, Malnad College of Engineering (MCE), Hassan on 19th June 2014.
6. Invited technical talk on “**Microstrip Antenna Design**”, organized by Department of E&C, Rajeev Institute of Technology (RIT), Hassan on 14th March 2014.
7. Invited technical talk on “**Microstrip Antenna Design using EM Simulator**”, given at ALVAS Institute of Technology, Mudabidire on 19th Feb 2011.

International Conference:

- 1 **Halappa Gajera**, M. M. Naik, Charana. H. S, Chandrakantha. N, Shalini, H. S, Shwetha. K. P, “*The E-Shaped Patch to Enhance the Bandwidth in Printed Monopole Antenna for UWB Applications*”, Accepted for Indian Antenna Week 2017 (IAW-2017), 5th -9th June 2017, Pune, India
- 2 M. M. Naik, H. Gajera, S. K. Naveen Kumar, “*The Modal Conversion in Quarter Wave Transformer-Fed Rectangular MPA using DMS Technique for Dual Band Operation*”, Accepted for APSYM-2016, Cochin Science and Technical University, Cochin, Kerala, India.
- 3 **H. Gajera**, D. Guha, C. Kumar, “*Shaped Dielectric Resonator Antenna for Improved Radiation Characteristics*”, Regional Conference on Radio Science 2014 (RCRS-14), Jan 2-5, 2014, **Symbiosis International University, Pune, India.**

- 4 D. Guha, H. Gajera, C. Kumar, Y. M. M. Antar, ***“Cross polarized radiations from cylindrical dielectric resonator antenna, conjecture, analysis and proof”***, 8th European Conference on Antennas and Propagation (EuCap-2014, April 6-11, **Hague, Netherlands**.
- 5 D. Guha, H. Gajera, C. Kumar, Y. M. M. Antar, ***“Strip-Fed Shaped Dielectric Resonator Antenna for Improved Radiation Characteristics Through Mode Filtering”***, 2014 IEEE International Symposium on AP/USNC-URSI-National Radio Science Meeting, July 7-12, **USA**.
- 6 **H. Gajera**, P. Gupta, D. Guha, C. Kumar, ***“Single Coax-Fed Cylindrical Dielectric Resonator Antenna for Pattern Diversity”***, IEEE Applied Electromagnetic Conference (AEMC-2013), 18th to 20th December, 2013, **KIIT, Bhubaneswar, Odisha, India**.
- 7 D. Guha, H. Gajera, C. Kumar, Y. M. M. Antar, ***“Dielectric Resonator Antenna with Metallic Perturbation: Investigation into Modal Fields and New Radiation Properties”***, 2013 IEEE International Symposium on AP/USNC-URSI-National Radio Science Meeting, July 7-12, **Orlando, Florida, USA**.
- 8 **Halappa R Gajera** ***“The Compact Square Microstrip Patch for Wireless Applications, Accepted for International Conference on Communication, Circuits and Systems (IC³S-2012) 5th to 7th October-2012, Buvaneswar, Odisha, India.***
- 9 **Halappa R Gajera**, ***“The Edge Truncated Compact Square Microstrip Patch Antenna (ET-CSMPA) for Wireless Applications ”***, IEEE Applied Electromagnetics and Indian Antenna Week (AEMC-IAW-2011), 18th to 22nd December, 2011, **Hyatt Regency, Kolkatta, India**
- 10 **Halappa R Gajera**, Anoop C.N, ***“The Wideband Circular Microstrip Patch Antenna (WCPMA) with Beaker Shape Etched Ground Plane for Wireless Communication”***, Accepted for International Conference on Microwave, Antenna, Propagation & Remote Sensing (ICMARS-2011), 07th to 11th December, 2011, in Jodhpur, India.
- 11 **Halappa R Gajera**, Anoop C.N, ***“The High Gain Simple Circular Microstrip Patch Antenna (CMPA) with Circular slot Etched Ground Plane for HIPERLAN/1 Applications”***, Accepted for International Conference on Microwave, Antenna, Propagation & Remote Sensing (ICMARS-2011), 7th to 11th December, 2011, in Jodpur , India.
- 12 **Halappa R Gajera**, Anoop C.N, ***” The Circular Microstrip Patch Antenna (CMPA) with Circular and Rectangular slot Etched Ground Plane for Wireless Communication”***. International Conference on Electronic Systems 2011 (ICES-

2011), 7th to 9th of January- 2011 held at National Institute of Technology (NIT), Rourkela, Orissa, India.

- 13 Halappa R Gajera, Anoop C.N, "The Design of Wideband Square Microstrip Patch Antenna (SMPA) with DGS and DMS for Hiperlan1 and Hiperlan2".** International Conference on Electronic Systems 2011 (ICES-2011), 7th to 9th of January- 2011 held at National Institute of Technology (NIT), Rourkela, Orissa, India.
- 14 Halappa R Gajera, Anoop C.N, Lakshmikanth A.C , Yogitha H.L and, Sowmya A.S⁵ , "The Design of a Wide Band Compact Square Microstrip Patch Antenna (CSMPA) with DMS (Inverted A-Shape) and DGS for HiperLAN/1 and HiperLAN/2",** International Conference on Microwave, Antenna, Propagation & Remote Sensing (ICMARS-2010), 14th to 17th December, 2010, in Jodpur , India.
- 15 Halappa R Gajera, Anoop C.N, Lakshmikanth A.C, Yogitha H.L and, Sowmya A.S⁵ , "The Design of a Compact Circular Microstrip Patch Antenna (CCMPA) with Circular Slot on Ground Plane as DGS for Wireless Applications",** International Conference on Microwave, Antenna, Propagation & Remote Sensing (ICMARS-2010), 14th to 17th December, 2010, in Jodpur , India.
- 16 Halappa R Gajera "The Bandwidth Enhancement of Meandering Slot Loaded Rectangular Microstrip Antenna for Wireless Applications", IEEE Applied Electromagnetics Conference AEMC-09, Calcutta Section 14th -16th December 2009.**

National Conference:

- 1. Halappa R Gajera, Anoop C.N "The Wideband Circular Microstrip Patch Antenna (WCMPA) with Round Bottom Flask (RBF) Shape Etched Ground Plane for Wireless Applications ,** National Conference on Antennas and its Applications (NConANT 2012), 24th & 25th February, 2012 Regional Campus, VTU, Bangalore, Karnataka.
- 2. Halappa R Gajera, Anoop C.N, Lakshmikanth A.C , "The Design of a Compact Sandwiched Dielectric Layer Circular Microstrip Patch Antenna (SCMPA) with Slot Loaded Ground Plane for Wireless Applications", National Conference on Emerging Trends in Wireless Technologies 2010 (ETWT-2010),** Thygarajar College of Engineering, Madurai, 23 and 24th July 2010.
- 3. Halappa R Gajera, Anoop C.N, Lakshmikanth A.C , Yogitha H.L and, Sowmya A.S "The Design of a Compact Square Microstrip Patch Antenna (SMPA) with DMS and Slotted Ground Plane for WLAN Applications", National Conference on Emerging Trends in Wireless Technologies 2010 (ETWT-2010),** Thygarajar College of Engineering, Madurai, 23 and 24th July 2010.
- 4. Halappa R Gajera "The Wideband Ring Cylindrical Dielectric Resonator Antenna for Wireless Applications", NCEMEP-2010, Bahubali college of Engineering, Shravanabelagola, 08-to 10th April 2010.**

5. **Halappa R Gajera** “*The Design of Simple Slot Loaded Rectangular Microstrip Antenna for WiBro Band (2.3-2.390GHz)*”, **NCEMEP-2010**, Bahubali college of Engineering, Shravanabelagola, 08-to 10th April 2010.
6. **Halappa R. Gajera, Rekha S, Anil kumar Aradya M. J**, “**Study on Properties of Carbon Nano-Tubes Interconnect Vias for Future VLSI and ULSI Applications**”, presented in State Level Technical Paper Presentation **WIZITECH-2008** held at GMIT Davanagere.
7. **Halappa R Gajera, Aswini B.M, Madhu K.R** Second Semester M.Sc. Electronics, “**Study on New RLC Equivalent Circuit Models of SWNT’s and MWNT’s Bus Architecture for Future Interconnect Applications**”, State Level Technical Paper Presentation **WIZITECH-2008** held at GMIT Davanagere.

Students Projects Supervision: Year-2010

1. “*Design of Microstrip-Fed Rectangular Microstrip Patch Antenna (RMPA) using EM Simulator for Wireless Communication*” **Archana & Group, Department of E & C, Malnad College of Engineering, Hassan, project carried out at The Department of Electronics, PGCH, University of Mysore, Hassan during 2009-10.**
2. “*The Study on the Design and Implementation of Circular Microstrip Antenna for improved Characteristics*”, by **Anoop C.N, Lakshmikanth A. C**, done at Department of Electronics, University of Mysore, during 2009-10.
3. “*The Study on the Design and Implementation of Rectangular Microstrip Antenna for improved Characteristics*”, by **Yogitha H.L and, Sowmya A.S** done at Department of Electronics, University of Mysore, during 2009-10.

Year-2013

4. “**Design and Analysis of Circular Polarized Circular Microstrip Antenna for Mobile and Wireless Applications**”, **Arunkumar M. Shetty** (Roll No.102508094), Master of Science in **[ESD]-2013, Manipal University, Manipal.**

Year-2014

5. “**Design and Implementation of Rectangular Microstrip Patch Antenna for ZIG-BEE Applications**”, **Kiran, Vinayachandra**, done at Department of Electronics, University of Mysore, during 2014.
6. “*Design, Simulation and Implementation of Rectangular Microstrip Patch Antenna (RMPA) for WiBro (2.3GHz-2.39GHz) Application*”, **Jyothi B.M (EL112407), D. Rachana (EL112416)**, done at Department of Electronics, University of Mysore, during 2014.
7. “*Design of a Circular Micro strip Patch Antenna (CMPA) for ISM Band Application*”, **Ratila (EL----), Yeshoda (EL---)**, done at Department of Electronics, University of Mysore, during 2014.
8. “**Design and Implementation of Compact Circular Microstrip Patch Antenna for Personal Communication Services (PCS)**”, **Jayaraj (EL----), Shivapriya (EL---)**, done at Department of Electronics, University of Mysore, during 2014.

9. **“Design and Implementation of Rectangular Microstrip Patch Antenna using EM Simulator and Study the Aspect Ratio (L/W) Effects on its Parameters”**, Devaraj, M-Tech, Department of E&C, MCE, Hassan, during 2014.
10. **“The Design and Analysis of Cylindrical Dielectric Resonator Antenna with Dominant $HEM_{11\delta}$ mode Excitation using EM Simulator”**, Bharath & Group, BE, Department of E&C, MCE, Hassan, during 2014.
11. **“MATLAB Based Design and Implementation of Rectangular Microstrip Patch Antenna for C- Band Applications”**, Anita & Group, BE, Department of E&C, MCE, Hassan, during 2014.
12. **“Matlab Based Design and Implementation of Rectangular Microstrip Patch Antenna (RMPA) for Zig-Bee Band Wireless Communication”**, Sredevi & Group, BE, Department of E&C, MCE, Hassan, during 2014.

Year-2015

13. **“Performance Study of Microstrip Patch Antenna with Slotted Ground Plane”**, Bhavya M-Tech, Department of E&C, MCE, Hassan, during 2015.
14. **“Design of M-Fed H-Shaped DRA for UWB Operations”**, Sangeeta, M-Tech, Department of E&C, MCE, Hassan, during 2015.
15. **“Design and implementation of Circular Microstrip Patch Antenna with Partial Ground Plane for UWB Response”**, Harshavardhan, M-Tech, Department of E&C, MCE, Hassan, during 2015.
16. **“The Design of Rectangular Micro-strip Patch Antenna using DGS to Enhance Bandwidth and attaining miniature”**, Renuka & Group, BE, Department of E&C, MCE, Hassan, during 2015.
17. **“Circular Microstrip Patch Antenna Design using DGS for Reduced Cross-Polarization”**, Pooja & Group, BE, Department of E&C, MCE, Hassan, during 2015.
18. **“Metal Pin Loading of Planner Patch Antenna for Enhanced Characteristics”**, Harshita (EL----), Anushree (EL---), done at Department of Electronics, University of Mysore, during 2015.
19. **“Analysis of Rectangular Microstrip Patch Antenna with Reactive Loading for Broadband Operations”**, Venkatesh (EL----), Sowmya (EL---), done at Department of Electronics, University of Mysore, during 2015.

Year-2016

20. **“The”**, Lavanya, Vijayalaxmi, done at Department of Electronics, University of Mysore, during 2016.
21. **“Higher Order Mode Excitation in Cylindrical Dielectric Resonator Antennas for High Gain and Broadside Radiation”**, Rashmi, Chandrakumar, Department of Electronics, University of Mysore, PG Centre, Hassan-573220.
22. **“The Control of Surface Waves in Microstrip Patch Antenna using Perturbation Technique”**, Nandini, Swapna, Department of Electronics, University of Mysore, PGC-Hassan -573220.
23. **“Design of Multiband Microstrip Patch Antenna”**, Ganesh&Group, Department of E&C, Malnad College of Engineering (MCE), Hassan-573201.

24. ***“The Design of wide band Compact RMPA using Slot Loading Technique”***, --&Group, Department of E&C, Malnad College of Engineering (MCE), Hassan, 2016.
25. ***“Design of Circular Microstrip Patch Antenna for Wideband Applications”***, G. Ashok Kumar & Group, Department of E&C, Malnad College of Engineering (MCE), Hassan-573201.
26. ***“Microstrip Patch Antenna with Defected Ground Structure for Cross-Polarization Suppression”***, Madhura & Group, Department of E&C, Malnad College of Engineering (MCE), Hassan-573201.

Conference/Seminar/Workshop attended:

1. ***“Indian Antenna Week A Workshop on Advanced Antenna Technology 2016 (IAW-2016)”***, June 6 to 10, Hotel Heritage, Madurai, Tamil Nadu, India.
2. ***“CALCON-2014”*** A National Conference, Organized by IEEE Kolkata Section, Nov 7th and 8th 2014, Crome Hotel, Kolkata.
3. ***“Indian Antenna Week A Workshop on Advanced Antenna Technology 2013 (IAW-2013)”***, June 3 to 9, Hotel Ramana, Hourangabad, Maharastra, India.
4. ***“Young Scientist Colloquium on Antennas and Propagations”***, IEEE AP-MTT Kolkata Chapter, Aug 14, 2014, IIST, Howrah, Kolkata.
5. ***“IEEE Author Ship Program”***, Organized by IEEE on June 2014 in Jodhavpur University, Kolkata, India,
6. ***“One Day program for Members Orientation Program by Springer”***, Organized by Springer Publisher on March 2013 in Hotel Crome, Kolkata, India,
7. ***One Day Technical Lecture Program”***, Organized by IEEE, Kolkata AP_MTT Chapter at IIST, Kolkata, India on Sep-2013.
8. ***“International Conference on Antenna Test and Measurement Society (ATMS-2013)”***, IEEE AP-MTT Kolkata Chapter, FEB, 2013, Hotel Pride, Kolkata.
9. ***“Young Scientist Colloquium on Printed Circuits and Antennas”***, IEEE AP-MTT Kolkata Chapter, September 14, 2012, Pearl Hotel, Kolkata.
10. ***“Indian Antenna Week A Workshop on Advanced Antenna Technology 2012 (IAW-2012)”***, June 3 to 9, ---, Gangtak, WestBengal, India.
11. The National Conference on ***“Emerging Trends in Wireless Technologies 2010 (ETWT-2010)”***, organized by Thaigarajar College of Engineering (TCE), Madurai, Tamilnadu, India, 23rd and 24th July 2010.
12. ***“Indian Antenna Week A Workshop on Advanced Antenna Technology 2010 (IAW-2010)”***, IEEE AP-MTT Chapter Calcutta Section in association with UGC-NRCPs, University of Calcutta, conducted by Institute of Radio Physics and Electronics, in Mayfair Resort in Puri, Orissa , India, 31st to 5th June 2010.
13. ***“IEEE International Conference on Applied Electromagnetic and Communication Conference (AEMC-2009)”***, held at Hyaath Regency Kolkatta by IRPE University of Calcutta, Dec-14 16, 2009.
14. ***“Winter School on Broadband and Microwave Systems and Communications, MiSCom-09”***, Organized by UGC Networking Resource

Centre, Institute of Radio Physics and Electronics, University of Calcutta, February 9-27,2009.

15. **“37th ISTE Convention & National Seminar”**, Manipal Institute of Technology Manipal, December 17-19, 2007.
16. **“Refresher Course on Advanced Communications”**, Javaharlal Neharu Technological University Hyderabad (JNTU), 09th to 21st - Navambr-2006, Attended.
17. **“MAINES-2007”**, Bapuji Institute of Engineering & Technology (BIET) Davanagere, 27th October 2007, Davanagere. Attended.
18. **“One day state level work shop on Latest trends in Image Recognition”**, Malnad College of Engineering Hassan, on 09th Jan-2006.
19. **“One day state level work shop on Digital Analog Communication Techniques”**, Malnad College of Engineering Hassan, on 11th March-2006.