

## RESUME

**Mr. Halappa R Gajera** BE, M-Tech, LMISTE, [PhD]

Assistant Professor, Department of Electronics,  
University of Mysore, Post-Graduate Center,  
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<b>Qualification</b>			
<b>Course</b>	<b>Specialization</b>	<b>Year</b>	
<b>M-Tech</b>	<b>Digital Electronics and Communication Systems(DECS)</b>	<b>2001-2002</b>	
<b>BE</b>	<b>Electronics and Communications (E&amp;C)</b>	<b>1998</b>	
<b>Teaching Experience:-</b>			
<b>Name of Institute</b>	<b>Year</b>	<b>Designation</b>	<b>Duration</b>
<b>Oxford college of engineering</b>	<b>2002</b>	<b>Lecturer</b>	<b>One year</b>
<b>K S I T Bangalore</b>	<b>2003</b>	<b>Lecturer</b>	<b>One year</b>
<b>University of Mysore.</b>	<b>2004 to till date</b>	<b>Assistant Professor (AGP 7000)</b>	<b>10+Years</b>

### **Personal Details:**

Date of birth: **20<sup>th</sup> 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.

### **Postal Address: Halappa R. Gajera**

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

**Research Title:** “New Approach of Metallic and Dielectric Perturbations in Cylindrical Dielectric Resonator Antennas to Control the Modal Fields and Its Radiation Characteristics”

**Reg\_No:** 2639 Dated: 16/07/2010

**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 17<sup>th</sup> 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. Miner 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 IEEE,**
2. **Secretary IEEE AP-MTT-Chapter Kolkata Section 17/01/2013 to 17/01/2014**
3. **Chairman Board of Examination (BOE), Department of Electronics, University of Mysore, 2014-15**
4. **Organizing committee member in Indian Antenna Week (IAW)-2013,**
5. **Life Member ISTE**
6. **Member Board of Admission, Department of Electronics, University of Mysore since 2006.**
7. **Member Board of Examination (BOE), Department of Electronics, University of Mysore since 2007.**

### **Journal Paper:**

1. 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.
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*, (Accepted for July issue).
3. **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 Transaction on Antennas and Propagation* (Under Review).
4. **Halappa R. Gajera**, Anoop C.N, "*The Circular Microstrip Patch Antenna (CMPA) with Circular and Rectangular slot Etched Ground Plane for Wireless Communication*", has been published in Volume 5, No 4, 2012, p295-299, *International Journal of Signal and Imaging Systems Engineering (IJSISE)*.
5. **Halappa R. Gajera**, Anoop C.N, "**The Study on Bandwidth Enhancement of Rectangular Microstrip Patch Antenna (RMPA) for Wireless Application**", accepted for **Volume 2, ISSUE 4, Dec-2011, International Journal of Electronics and Communication Technology (IJECT)**.
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**", Published in **Volume 2, ISSUE 3, September-2011,**

**International Journal of Electronics and Communication Technology (IJECT).**

7. **Halappa R. Gajera, Anoop C.N, “The Compact Square Microstrip Patch Antenna (CSMPA) for HIPERLAN/1 and HIPERLAN/2 Bands”,** Published in Volume 2, ISSUE 2, June-2011, International Journal of Electronics and Communication Technology (IJECT).

**Some Photos:**



**Technical Talks:**

1. **Invited technical talk given on “Microstrip Antenna Design using EM Simulator”,** given at Alvas Institute of Technology Mudabidire on 19<sup>th</sup> Feb 2011.
2. **Invited technical talk given on “Microstrip Antenna Design”,** given at Rajeev Institute of Technology (RIT), Hassan on 14<sup>th</sup> March 2014.
3. **Invited technical talk given on “Challenges in the Design of Microstrip Patch Antenna”,** given at MCE, Hassan on 19<sup>th</sup> June 2014.

**International Conference:**

- 1 D. Guha, H. Gajera, C. Kumar, Y. M. M. Antar, **“Strip-Fed Shaped Dielectric Resonator Antenna for Improved Radiation Characteristics Through Mode Filtering”,** Submitted to 2014 IEEE International Symposium on AP/USNC-URSI-National Radio Science Meeting, July 7-12, **USA.**
- 2 D. Guha, H. Gajera, C. Kumar, Y. M. M. Antar, **“Cross polarized radiations from cylindrical dielectric resonator antenna, conjecture, analysis and proof”,** 8<sup>th</sup> European Conference on Antennas and Propagation (EuCap-2014, April 6-11, **Hague, Netherlands.**

- 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 **H. Gajera, P. Gupta, D. Guha, C. Kumar, “*Single Coax-Fed Cylindrical Dielectric Resonator Antenna for Pattern Diversity*”, IEEE Applied Electromagnetic Conference (AEMC-2013), 18<sup>th</sup> to 20<sup>th</sup> December, 2013, **KIIT, Bhubaneswar, Odisha, India.****
- 5 **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.****
- 6 **Halappa R Gajera “The Compact Square Microstrip Patch for Wireless Applications, Accepted for International Conference on Communication, Circuits and Systems (IC<sup>3</sup>S-2012) 5<sup>th</sup> to 7<sup>th</sup> October-2012, Buvaneswar, Odisha, India.**
- 7 **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), 18<sup>th</sup> to 22<sup>nd</sup> December, 2011, **Hyatt Regency, Kolkatta, India****
- 8 **Halappa R Gajera, Anoop C.N, “The Wideband Circular Microstrip Patch Antenna (WCMPPA) with Beaker Shape Etched Ground Plane for Wireless Communication”, Accepted for International Conference on Microwave, Antenna, Propagation & Remote Sensing (ICMARS-2011), 07th to 11<sup>th</sup> December, 2011, in Jodpur , India.**
- 9 **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 11<sup>th</sup> December, 2011, in Jodpur , India.**
- 10 **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), 7<sup>th</sup> to 9<sup>th</sup> of January- 2011 held at National Institute of Technology (NIT), Rourkela, Orissa, India.**
- 11 **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), 7<sup>th</sup> to 9<sup>th</sup> of January- 2011 held at National Institute of Technology (NIT), Rourkela, Orissa, India.

**12 Halappa R Gajera, Anoop C.N, Lakshmikanth A.C , Yogitha H.L and, Sowmya A.S<sup>5</sup>, “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), 14<sup>th</sup> to 17<sup>th</sup> December, 2010, in Jodpur , India.

**13 Halappa R Gajera, Anoop C.N, Lakshmikanth A.C, Yogitha H.L and, Sowmya A.S<sup>5</sup>, “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), 14<sup>th</sup> to 17<sup>th</sup> December, 2010, in Jodpur , India.

**14 Halappa R Gajera “The Bandwidth Enhancement of Meandering Slot Loaded Rectangular Microstrip Antenna for Wireless Applications”**, *IEEE Applied Electromagnetics Conference AEMC-09*, Calcutta Section 14<sup>th</sup> -16<sup>th</sup> 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), 24<sup>th</sup> & 25<sup>th</sup> 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 24<sup>th</sup> 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 24<sup>th</sup> 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 10<sup>th</sup> 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 10<sup>th</sup> 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.

### **Conference/Seminar/Workshop attended:**

1. “**CALCON-2014**” A National Conference, Organized by IEEE Kolkata Section, Nov 7<sup>th</sup> and 8<sup>th</sup> 2014, Crome Hotel, Kolkata.
2. “**Young Scientist Colloquium on Antennas and Propagations**”, IEEE AP-MTT Kolkata Chapter, Aug 14, 2014, IIST, Howrah, Kolkata.
3. “**IEEE Author Ship Program**”, Organized by IEEE on June 2014 in Jodhavpur University, Kolkata, India,
4. “**One Day program for Members Orientation Program by Springer**”, Organized by Springer Publisher on March 2013 in Hotel Crome, Kolkata, India,
5. **One Day Technical Lecture Program**”, Organized by IEEE, Kolkata AP\_MTT Chapter at IIST, Kolkata, India on Sep-2013.
6. “**International Conference on Antenna Test and Measurement Society (ATMS-2013)**”, IEEE AP-MTT Kolkata Chapter, FEB, 2013, Hotel Pride, Kolkata.
7. “**Young Scientist Colloquium on Printed Circuits and Antennas**”, IEEE AP-MTT Kolkata Chapter, September 14, 2012, Pearl Hotel, Kolkata.
8. The National Conference on “**Emerging Trends in Wireless Technologies 2010 (ETWT-2010)**”, organized by Thaigarajar College of Engineering (TCE), Madurai, Tamilnadu, India, 23<sup>rd</sup> and 24<sup>th</sup> July 2010.
9. “**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, 31<sup>st</sup> to 5<sup>th</sup> June 2010.
10. “**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.
11. “**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.
12. “**37<sup>th</sup> ISTE Convention & National Seminar**”, Manipal Institute of Technology Manipal, December 17-19, 2007.

13. **“Refresher Course on Advanced Communications”**, Javaharlal Neharu Technological University Hyderabad (JNTU), 09<sup>th</sup> to 21<sup>st</sup> - Navamember-2006, Attended.
14. **“MAINES-2007”**, Bapuji Institute of Engineering & Technology (BIET) Davanagere, 27th October 2007, Davanagere. Attended.
15. **“One day state level work shop on Latest trends in Image Recognition”**, Malnad College of Engineering Hassan, on 09<sup>th</sup> Jan-2006.
16. **“One day state level work shop on Digital Analog Communication Techniques”**, Malnad College of Engineering Hassan, on 11<sup>th</sup> March-2006.

### **Project Supervision:**

#### **I. Projects completed under my supervision:**

1. *“Design of Microstrip Fed Rectangular Microstrip Patch Antenna Using EM Simulator for Wireless Communication”* ARCHANA S P, NANDINI R, PUSHPITHA B K, RAVIKUMAR M D, *Department of Electronics and Communication, Malnad College of Engineering, Hassan, project carried out at The Department of Electronics, PGCH, University of Mysore, Hassan*
4. *“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.
5. *“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.

#### **II. Projects Department of Electronics, University of Mysore since 2004 as Internal Guide**

1. *“GSM Based Car Security System”* by Miss. Sowmya K.C, done at Computer Paradise, Mysore-07, during 2007-08.
2. *“Microcontroller Based Railway Station Information System”* by Mr. D.M.Mayaprasad, at Cranes International Software Ltd. Bangalore -08, in 2007-08.
3. *“RFID Attendance System”*, by Miss. Rashmi B.V completed at Computer Paradise, Mysore-07, during 2007-08.
4. *“Generate Video Signal in Realtime using PIC Microcontroller”*, by Mrs. Shruthi D.L done at Computer Paradise, Mysore-07, during 2007-08.



5. ***“Microcontroller Based Automatic Railway Gate Control”***, by Mr. Charankumar M. R. done at Computer Paradise, Mysore-07, during 2007-08.
6. ***“Wireless Heart-Beat Monitoring System”*** by Mr. Dileep M.K. completed at Computer Paradise, Mysore-07, during 2007-08.
7. ***“Networking of Microcontrollers using USB”*** by Mrs. Sowmya H.S. done at BCS Innovations, New BEL Road, Bangalore-54, during 2006-07.
8. ***“Display Updation through GSM (SMS Based)”*** by Miss. Kavya K.L done at iQ infotech Ltd. Bangalore -74, during 2006-07.
9. ***“Communication between two modules using serial communication”*** By Miss. Arpitha M. J done at Silicon gateway[p] Ltd, Bangalore-11, during 2006-07.
10. ***“Simulation of GMSK Modulation Technique for GSM”***, by Miss. Shilpa.Y.D. and Miss. Sowmyashree. N.G. done at Signal Processing and Communication,MSRSAS, Bangalore-54, during 2006-07.
11. ***“Real time monitor and control of fuel flow and temperature using Blue Tooth”*** by Miss. Chethana. H. T. done at ETBR &DC, Engine Division HAL, Bangalore-93, during 2005-06.
12. ***“PT 130 Converter for Recorders”*** by Miss. Roshal Priya D’souza, done at Yokogawa India Limited, Electronic City Complex, Hosur Road, Bangalore-100, during 2005-06.
13. ***“GPS Based Vehicle Monitoring and Security System”***, by Miss. Jyothi. H. K done at iQ infotech Pvt. Ltd, kumbalgodu Ind.Area, Bangalore-74, during 2005-06.
14. ***“Electronic Billing Machine”*** by Ms. Savita. N. done at New Tec Bangalore, 693/A, Sessa Krupa, 2<sup>nd</sup> Cross, 2<sup>nd</sup> Stage, 2<sup>nd</sup> Block, BSK Layout, Bangalore-50, during 2004-05.
15. ***“Microcontroller based minimum wired communication between ground control panel and the Aircraft Engine”***, by Mr. Lathesh Kumar D.K. done at ETBR &DC, Engine Division HAL, Bangalore-93, during 2004-05.

## **II. KSIT during 2003-04:**

1. ***“Remote Controlling of Devices Using Telephone”***, by Vinaykumar K and Sunilkumar M.I., Department of E&C Engg, KSIT (Kammavary Sangha Institute of Technology), No-14, Raghuvanahalli, Kanakapura Road, Bangalore-62
2. (Kammavary Sangha Institute of Technology), No-14, Raghuvanahalli, Kanakapura Road, Bangalore-62.
3. ***“Home Automation Using 89C51 Microcontroller”***, by Rakshak agrawal, Lokesh Kogta, Shabri R, Mukeshkumar Sharma Department of E&T Engg, KSIT

(Kammavary Sangha Institute of Technology), No-14, Raghuvanahalli, Kanakapura Road, Bangalore-62.

4. *“User Authenticator using a Microcontroller”*, by Gruprasad H.L,Pavan S, Hemanth N, Srinivash K. Department of E&T Engg, KSIT (Kammavary Sangha Institute of Technology), No-14, Raghuvanahalli, Kanakapura Road, Bangalore-
5. *“GPS Data Acquisition and Its Applications”*, by Priya N and Rekha K, Department of E&C Engg, KSIT