



## Faculty Details proforma for DU Web-site

Title	Mr.	First Name	Amit	Last Name	Birwal	Photograph
Designation		Assistant Professor				
Address		Department of Electronic Science University of Delhi, South Campus New Delhi – 110 021				
Phone No Office		91-11-24110440				
Residence Mobile		91-11-40079952 9971693650				
Email		<a href="mailto:amit.birwal@south.du.ac.in">amit.birwal@south.du.ac.in</a> , <a href="mailto:amit.birwal@gmail.com">amit.birwal@gmail.com</a>				
Web- Page						
Educational Qualifications						
Degree		Institution				Year
M.Tech.(Microwave Electronics)		Department of Electronic Science, University of Delhi				2006
B.Tech (Electronics & Telecommunication)		Bharti Vidyapeeth College of Engineering, Guru Gobind Singh Indraprastha University				2003
Career Profile						
Organization		Designation		Duration		Role
Deptt. of Electronic Science, UDSC, INDIA		Assistant Professor		21.01.2014 –Till Date		Teaching & Research
Ericsson India Pvt Ltd, Gurgaon, India		Verification Specialist		11.07.2007 - 20.01.2014		Telecom R&D
Administrative Assignments						
<ul style="list-style-type: none"> <li>• M.Tech Major Project Coordinator 2019-20</li> <li>• Nodal officer, M.Tech Admissions, 2019.</li> <li>• Coordinator, Department Educational tour and Alumni meet, March 2018</li> <li>• Member Department Purchase and Library Committee 2017-18</li> <li>• M.Tech Major Project Coordinator 2016-17</li> <li>• Department website Administrator 2015-till date</li> <li>• Member Department Purchase Committee 2015-16</li> <li>• Nodal Officer, M.Tech Admission 2016</li> <li>• Superintendent of Practical Examination, 2014-15</li> <li>• Coordinator, Seminar Organization for M.Sc (Electronics), Feb-Mar 2015.</li> </ul>						
Areas of Interest / Specialization						
<b>Modern Communication Systems, Microwave Communication, Antenna and wave propagation, IoT</b>  <b>MATLAB, C/C++, Unix</b>						

## Subjects Taught

### Theory:

#### M.Tech (Microwave Electronics)

- *Communication Theory and Wave Propagation*
- *Microwave and MM wave Planar Transmission Lines*
- *Antenna Theory and Techniques (Shared)*
- *Electromagnetic Theory and Transmission Line (Shared)*

### Practical:

#### M.Tech (Microwave Electronics)

- *Computational Laboratory*
- *Microwave Integrated Circuits*
- *MATLAB*

#### M.Sc (Electronics)

- *Computational Mathematical Laboratory using MATLAB*

#### M.Tech VI Sem Major Project Coordinator 2019-20

Academic M. Sc. project supervision: 04 (Jan - June 2020)

Academic M. Sc. project supervision: 03 (Jan - June 2018)

#### M.Tech VI Sem Major Project Coordinator 2016-17

M. Sc. II Sem Summer Training Coordinator 2015-16

Academic M. Sc. project supervision: 06 (Jan - June 2017)

## Research Guidance

List against each head (If applicable)

- |  |   |            |
|--|---|------------|
| 1. Supervision of awarded Doctoral Thesis              | - | <b>Nil</b> |
| 2. Supervision of Doctoral Thesis, under progress      | - | <b>Nil</b> |
| 3. Supervision of awarded M.Phil dissertations         | - | <b>Nil</b> |
| 4. Supervision of M.Phil dissertations, under progress | - | <b>Nil</b> |

## Publications Profile

List against each head (If applicable) (as Illustrated with examples)

1. Books/Monographs (Authored/Edited)-Nil
2. Research papers published in Refereed/Peer Reviewed Journals-
  1. Birwal, A., Singh, S., Kanaujia, B. K., & Kumar, S. (2020). Low-profile 2.4/5.8 GHz MIMO/diversity antenna for WLAN applications. *Journal of Electromagnetic Waves and Applications*, 1-17.
  2. Birwal, A., Singh, S., Kanaujia, B. K., & Kumar, S. (2019). CPW-Fed Ultra-Wideband Dual-Sense Circularly Polarized Slot Antenna. *Progress In Electromagnetics Research*, 94, 219-231.
  3. Birwal, A., Singh, S., Kanaujia, B., & Kumar, S. (2019.). Broadband CPW-fed circularly polarized antenna for IoT-based navigation system. *International Journal of Microwave and Wireless Technologies*, 1-9. doi:10.1017/S1759078719000461.
  4. Birwal, A., Manker, N. K., & Patel, K. (2020). Compact printed log-periodic dipole antenna (LPDA) with T-shaped arm for wide band applications, *Indian Journal of Pure & Applied Physics (IJPAP)*, 58(01), 16-23
  5. Patel, K., Jayant, S., Kaithal, K., & Birwal, A. (2019). 7th order harmonic suppression and wide rejection band using CSRR backed BSF. *Indian Journal of Pure & Applied Physics (IJPAP)*, 57(2), 85-89
  6. Rajput, A, Patel, K., Birwal, A. (2018). Compact microstrip low pass filter design using U-shaped folded high-impedance line. *Microwave and Optical Technology Letters*, vol 60, Issue 7, 1812-1815.

7. Amit Birwal, "Evaluation and Comparison of Microstrip Effective Relative Permittivity Using MATLAB and Engauge Digitizer", *International Journal of Scientific & Engineering Research*, vol. 6, Issue 7, 625-629, 2015.
8. Akash, Amit Birwal, "IoT-based Temperature and Humidity Monitoring System for Agriculture". *International Journal of Innovative Research in Science, Engineering and Technology*. Vol. 6, Issue 7, 12756 - 12761, 2017.
9. Vikrant Kaim, Amit Birwal, Kamlesh Patel et al "Flower Shaped Slotted Microstrip Patch Antenna for Circular Polarization " *IOSR Journal of Electrical and Electronics Engineering (IOSR-JEEE)*, vol 11, Issue 1, 85-90, 2016

### 3. Research papers published in Refereed/Peer Reviewed Conferences

1. Birwal. A, Singh. S, and Kanajia. B.K (2019), "Smart Compact Folded Microstrip Antenna for GSM, LTE and WLAN Applications" in *2nd International Conference on Smart IoT Systems: Innovations in Computing (SSIC-2019)*, Jaipur, India.
2. Birwal. A, Singh. S, and Kanajia. B.K (2018), "CPW-fed broadband slot antenna for GNSS and Wi-Fi applications" in *IEEE Indian conference on Antenna and Propagation (InCAP)*, Hyderabad, India.
3. Verma, A., Birwal, A., & Patel, K. (2018, December). *Guitar-Shaped Patch Antenna With CPW Feed Line For WLAN and WiMAX Band Applications*. In *2018 IEEE Indian Conference on Antennas and Propagation (InCAP)* (pp. 1-4). IEEE.
4. Birwal, Amit. (2018). *Challenges for BRICS Nations in Geospatial World, National Seminar, Century of Asians: Role and Impact of Asian Countries*. UPSA, UGC-HRDC, Kumaun University, Nainital, 31-May-2018 to 01-June-2018.

### 4. Other publications (Edited works, Book reviews, Festschrift volumes, etc.)-

#### **Book Chapter**

1. Amit Birwal, Sanjeev Singh, Binod Kumar Kanaujia, "Smart Compact-Folded Microstrip Antenna for GSM, LTE, and WLAN Applications", a book chapter in the book entitled "Smart Systems and IoT: Innovations in Computing", Springer, Chapter 45, July 2019. ISBN 978-981-13-8405-9, DOI-10.1007/978-981-13-8406-6

#### *National/International conferences/Workshop attended*

1. Faculty Development programme in "ICT Enabled Higher Education in India: Challenges and Opportunities" conducted by Guru Angad Dev Teaching Learning center, SGBT Khalsa College, DU and MHRD. 13, April 2020
2. Faculty Development programme in "5G Communication" conducted by IIIT, Jabalpur. 13-17, March 2020.
3. Faculty Development programme in "Antenna Trends" conducted by Electronics and Information Technology (MeitY), Govt. of India and IIT Guwahati. 1-5, July 2019
4. Faculty Development programme in "Introduction to Research" conducted by NPTEL-AICTE, Funded by ministry of HRD. Aug 2018
5. Faculty Development programme in "Health Research Fundamental" conducted by NPTEL-AICTE, Funded by ministry of HRD. Sep 2018
6. National Science Day (NSD), University of Delhi South Campus, Feb 27-28, 2017.
7. RF/Microwave Design and Simulation Workshop, National Instruments, USA, Aug 12, 2016.
8. *International Mini Workshop on VLSI Systems*, Jawaharlal Nehru University, New Delhi, Jan12th -13th, 2015
9. *National Seminar on Basic Electromagnetic Theory, RF/Microwave Technologies and Applications*, Maharaja Agrasen College, DU, New Delhi, March 10th-11th, 2015
10. *Training Workshop on MATLAB Fundamentals*, Organized by Mathworks, New Delhi, Nov 17th-19th , 2014

Awards and Distinctions
<ul style="list-style-type: none"> <li>i. Qualified UGC NET 2010, JRF</li> <li>ii. Refresher Course in Electronics, Electrical &amp; Communication Engineering from UGC-Human Resource Development Centre, University of Hyderabad. February 2- 22, 2017.</li> <li>iii. Orientation Course from UGC-Human Resource Development Centre, Kumaun University, Nainital (Uttarakhand). February 23.05.2018- 20.06.2018.</li> </ul>
Research Projects (Major Grants/Research Collaboration)
<ul style="list-style-type: none"> <li>• <i>DU R&amp;D Grant 2015-16- Design, Simulation and Fabrication of microstrip patch antenna at ISM frequency band.</i></li> </ul>
Association With Professional Bodies
<ul style="list-style-type: none"> <li>1. <i>Editing</i></li> <li>2. <i>Reviewing</i> <ul style="list-style-type: none"> <li>• <b>Reviewer, Wireless Personal Communications, Springer</b></li> <li>• <b>Reviewer, Journal of Progress In Electromagnetics Research (JPIER)</b></li> </ul> </li> <li>3. <i>Advisory</i></li> <li>4. <i>Committees and Boards</i> <ul style="list-style-type: none"> <li>• <b>Member, TIC Club, Electropreneur Park, University of Delhi South Campus</b></li> </ul> </li> <li>5. <i>Memberships:</i> <ul style="list-style-type: none"> <li>• <b>Member- Microwave Journal, USA</b></li> <li>• <b>Member, IEEE</b></li> </ul> </li> <li>6. <i>Office Bearer</i></li> </ul>
Other Activities
<p>Have been actively engaged in various activities of the Department</p> <ul style="list-style-type: none"> <li>1. <i>Online teaching learning process management</i></li> <li>2. <i>Website management (<a href="http://electronics.du.ac.in">http://electronics.du.ac.in</a>)</i></li> <li>3. <i>Annual Visitor's Programme &amp; Alumni meet</i></li> <li>4. <i>Admission process for M.Sc, M.Tech.</i></li> <li>5. <i>Procurement and Establishment of new departmental lab facilities- from the grant received time to time.</i></li> </ul>

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*Amit Bimal*

Signature of Faculty Member

