

RESUME

Personal Information:

Name: Dr. Ajay Kumar
Father Name: Nand Kishore
Address for Communication: Department of Electronics and Comm. Engg.
HMR Institute of Technology and Management
Hamidpur (New Delhi).
Phone No: +91-9193090201
Email id: akgangwarr@gmail.com



Professional Qualifications:

Ph.D (2018) in ‘**Communication Systems Engineering**’ from Aligarh Muslim University, Aligarh (U.P.).
(Central University)

M.Tech (2013) in ‘**Digital Communication Engineering**’ from Bundelkhand Institute of Engineering and Technology (BIET), Jhansi, (U.P.) with an aggregate 68.0%. (Autonomous Institute funded by the U.P. Government)

B.Tech (2009) in ‘**Electronics & Communication Engineering**’ from Shivdan Singh Institute of Technology & Management, Aligarh, affiliated to Uttar Pradesh Technical University, Lucknow with an aggregate 62.5%.

Teaching Experience:

Worked as an **Assistant Professor** in the Department of Electronics and Communication Engineering at Institute of Engineering & Technology, Alwar (Rajasthan) during **15-7-2012 to 31-12-2014**.

Worked as an **Assistant Professor** in the Department of Electronics and Communication Engineering at HMR Institute of Technology and Management, Hamidpur (New Delhi) since **01-08-2019 to 31-03-2021**.

Working as an **Assistant Professor** in the Department of Electronics and Communication Engineering at Meerut Institute of Engineering and Technology, Meerut (UP) since **01-04-2019 to till Date**.

Accreditation Work Experience:

NBA work experience (As a **Departmental NBA Co-coordinator**) at HMR Institute of Technology and Management, Hamidpur (New Delhi).

Professional Activity:

- Life Membership of Indian Society for Technical Education (ISTE) India.
- Life Membership of Photonics society of India.
- Life Membership of the Institution of Engineers (IE) India.

Research of Interest:

Microstrip Antenna, Filters, Coupler, Power divider, Metamaterial, Electromagnetic Band Gap Structure (EBG)

Subject Teach in UG and PG:

- Basics Electronics
- Digital Communication
- Antenna and Propagations
- Analog Communication
- Electromagnetic Field Theory

Achievements:

- **GATE-2010 & 2013** qualified in Electronic & Communication Engg.
- **Best Paper award** in IEEE conference “IMPACT-2017”
- **Best Paper award** in Springer conference “ICICPS-2020”
- **Organized 5 days’ online workshop** based on “Advanced design in RF” at HMR Institute of Technology and Management, New Delhi from 16 Nov to 20 Nov 2020.
- **Organizing 5 days’ online Faculty Development Program (FDP)** based on “Recent Technologies in the Fields of RF and IoT” at HMR Institute of Technology and Management, New Delhi from 22 March to 26 March 2021.
- **Delivered Expert Lecture** based on “Reconfigurable Multi-Band Antennas for Wireless Applications” at HMR Institute of Technology and Management, Hamidpur, New Delhi (India) dated on 18th November 2020.
- **Work as a member of “Technical Program committee”** in the International Conference on Innovation in Cyber Physical System (ICICPS 2020) organised by HMRITM, New Delhi, India (**Springer Conference**).
- **Work as a member of “Organizing committee”** in the International Conference on Innovation in Cyber Physical System (ICICPS 2020) organised by HMRITM, New Delhi, India (**Springer Conference**).
- **Delivered Expert Lecture** based on “Multi-band Antennas for Wireless Applications” at Anand International College of Engineering, Jaipur (Rajasthan), India dated on 22nd January 2021.

Internship Program Attended:

- **Summer Internship Program** (20 November 2016– 05 January 2017) under the Supervision of **Prof. Kumar Vaibhav Srivastava**, Department of Electrical Engineering, at **IIT Kanpur, (U.P) India**.

List of Workshops & Short Term Courses Attended:

- A short term courses on “**Practical Skills in Technical Education**” organized by National Institute of Technical Teachers Training & Research (NITTTR) on 25 Nov-29 Nov 2019.
- A workshop on “**MENDELEY**” organized at Prof. M.N. Farooqui Computer Center at **A.M.U Aligarh** on 28 January, 2018.
- A tutorial on “**Advances in wireless Technology**” organized by Dept. of Electronics Engineering at **A.M.U Aligarh** on 24 November, 2017.
- A tutorial on “**Recent Trends in Radio Frequency Electronics**” organized by Dept. of Electronics Engineering at **A.M.U Aligarh** on 24 November, 2017.
- **One week Gian course** on “**Advanced Electromagnetic Engineering**” organized by Department of Electronics and Communication Engineering, University College of Engineering, **Osmania University, Hyderabad, India** on 02 Nov-08 Nov 2017.

- One-week workshop on “**Antenna Design and Signal Processing Techniques for 5G Networks and IoT (ADSPNIT-2017)**”, organized by IEEE MNNIT student branch chapters and Department of Electronics and Communication Engineering, **MNNIT, Allahabad** on 27th Feb-4th March 2017.
- One-day workshop on “**Analog IC design using SCL CMOS Technology**”, organized by the Department of Electronics Engineering, **AMU, Aligarh** on 9th October 2016.
- One-day workshop on “**Analog IC Design using SCL CMOS Technology**” organized by Department of Electronics Engineering at **A.M.U Aligarh** on 9th October 2016.
- One-day workshop on “**Research paper writing & Publication Ethics**” organized by the Department of Computer Engineering & Applications, **GLA University, Mathura (U.P.)**, India on 24 September 2016.
- Short term courses on “**Low loss & efficient Antenna**” organized by **IIT kharagpur** during September 12th to September 16th, 2016.
- Workshop on “**Emerging RF Technologies: A Design Perspective**” organized by Department of Electronics Engineering **A.M.U, Aligarh** on the 13th Feb 2016.
- Workshop on “**Intellectual Property & Innovation Management in Knowledge Era**” organized by CGPDTM, NRDC and **A.M.U., Aligarh** on 7th Dec 2015.
- One day hands on workshop on “**Technical Manuscript Preparation using LaTeX**” organized by Dept. of Electronics Engineering at **A.M.U Aligarh** on October 31, 2015.
- “**5-day Course on Advanced RF Design**” at **IIIT Delhi**, India on 22-26 July, 2015.
- Short term Course on “**Advanced Materials and Characterization**” at **NIT Kurshetra (Haryana) India** on during 08 - 12 June, 2015.
- Workshop on “**Antenna Design Using HFSS**” at **Thapar University Patiala (Punjab) India** on 22-23 Dec 2013.
- Workshop on “**High Frequency Component Design**” at **IET Alwar (Rajasthan) India** on 25Feb-2 March 2013.

List of Faculty Development Program Attended:

- Faculty Development Program on “**Advanced Pedagogy in Outcome Based Education**” under TEQIP-II sponsored at **IET Alwar (Rajasthan) India** on 24-29 November, 2014.
- Faculty Development Program on “**Simulation of Mathematical Applications in Recent Technology**” under AICTE Sponsored at **IET Alwar (Rajasthan) India** on 19 March-01April 2014.
- Faculty Development Program on “**Research Methodology**” under TEQIP-II **IET Alwar (Rajasthan) India** on 25-26 June 2013.
- Faculty Development Program on “**Networking & Security**” by Network Bull at **IET Alwar (Rajasthan) India** on 6-May 2013.
- Faculty Development Program on “**IMPROVEMENT, INNOVATION & GROWTH**” at **IET Alwar (Rajasthan) India** on 9-10 Feb.2013.

Seminar & project:

- Multi-band antennas for wireless Applications (**Ph.D Project**).
- Band Width of Microstrip Antenna Improved by using Mushroom type EBG Structure (**M.Tech Project**).
- Electromagnetic wave propagation in a sandwich structure containing single negative metamaterial (**M.Tech Seminar**).
- Project on voice & data Transmit through a Laser Beam (**B.Tech Project**).
- Presented Seminar on Mobile Telephony (**B.Tech Seminar**).

Knowledge of working on PC/work Station & software packages:

- (i) IE3D Simulation
- (ii) HFSS Simulation
- (iii) CST Simulation
- (iv) Advanced Design System (ADS)

List of Publications:

National Conference

- **AK Gangwar**, MS Alam. "A SSRR based multiband antenna for mobile phone", **IEEE Twenty Second National Conference on Communication (NCC 2016)**, at IIT Guwahati during 4-6 March 2016.
- **Ajay Kumar**, D.K.Srivastava and J.P.Saini, "Design of Slotted Ground Plane Microstrip Patch Antenna with Stripline Feed for Wireless Communication," **National Conference on Advances in Computer Communication & Embedded Systems (ACCESS-2012)**, M.M.M. Engineering College, Gorakhpur, pp. 114-117, April 12–13, 2012.
- **Ajay Kumar**, D.K.Srivastava and Yash Vardhan Varshney, "Bandwidth Improvement by Cutting Slot at Ground Plane" **National conference on Advances in Communication, Computer & Electrical Engineering (ACCE-2012)** at Modern Institute of Technology & Research Centre, Alwar during 7-8 April 2012.

International Conference

- Ajay Kumar, A comprehensive study on transparent antennas for wireless applications, **International conference on innovation in cyber physical systems (ICICPS-2020)**, 22-23 Oct 2020, HMRITM, New Delhi (**Best paper Award**).
- **AK Gangwar** and MS Alam, A Compact Size Tri-band MIMO Antenna with Reduced Mutual Coupling for WLAN and WiMAX, **IEEE International Conference on Multimedia, Signal Processing and Communication Technologies (IMPACT)**, 24-26 Nov. 2017, AMU Aligarh. (**Best Paper Award**).
- **A K Gangwar**, M S Alam, "A SSRR based Multiband Reconfigurable Monopole Antenna" **IEEE student technology symposium** at IIT Kharagpur during September 30-October 02, 2016.
- **Ajay kumar**, Dwejendra Arya, D.K Srivastava, "Band Width of Microstrip Antenna Improved by using Mushroom type EBG Structure" **IEEE International Conference IMPACT-2013**, Aligarh, India held on 23-24 November 2013.
- **Ajay kumar**, D.K.Srivastava, Dwejendra Arya, "Enhance the Band of Microstrip Antenna by Using EBG Structure" in national Conference on "**Technology Innovations through Modern Engineering Sciences (TIMES-1013)**" held on 23- 24 Feb 2013.
- **Ajay Kumar**, D.K.Srivastava and Yash Vardhan Varshney, "Double T-Slot Microstrip Patch Antenna in Dual Band Mode" in **International conference on VLSI, Communication and Networks (VCAN-2011)** at Institute of Engineering & Tech., M.I.A, Alwar-301030, Rajasthan, Sl.No. VCAN-214/A during 24-25 Dec.2011.

International Journals

SCI Journals:

- **AK Gangwar** and MS Alam, A Recent Development on Filtering antenna, "International Journal of RF and Microwave Computer-Aided Engineering" (Under Review Process)

- **A.K. Gangwar** and M.S. Alam, A Dual-Band Reconfigurable Filterina, **International Journal of Electronics and Communications**, Accepted 28 April 2020. (SCI, Impact factor: 2.853)
- **A.K. Gangwar** and M.S. Alam, A Miniaturized Quad-band Antenna with Slotted Patch for WiMAX/WLAN/GSM Applications, **International Journal of Electronics and Communications**, Accepted 5 September 2019, Available online 4 October 2019. (SCI, Impact factor:2.853)
- **A.K. Gangwar** and M. S. Alam, CSRR based Folded Dipole Tri-band Antenna Array and Its System Level Evaluation, **International Journal of RF and Microwave Computer-Aided Engineering**, A Wiley Publication 12 March 2018. (SCI, Impact factor:1.306)
- **A.K. Gangwar** and M. S. Alam, A High FoM Monopole Antenna with Asymmetrical L-slots for WiMAX and WLAN Applications, **Microwave and Optical Technology Letter**, A Wiley Publication 2018, Volume 60, Issue 1, January 2018; Pages 196–202. (SCI, Impact factor:0.948)

Non-SCI Journals:

- **A.K. Gangwar** and M.S. Alam, folded monopole antenna with CSRRS for Tri-bands applications, **International Journal of Engineering & Technology**, 7 (4.5) (2018) Pages 514-517. (Scopus)
- **Ajay Kumar Gangwar** and Sudhakar Singh, “Split Ring Resonator BASED Multi-Band Antenna for WiMAX, WLAN and GSM,” THINK INDIA JOURNAL, Vol-22-Issue-17-September-2019. (UGC)
- Purnima Tripathi, Prashant Upadhyaya, Arun Kumar Mishra and **Ajay Kumar**, “UWB BPF With Uncoupled Symmetric loaded Stubs For Notch Implementation,” International Journal of Scientific Research and Review, Volume 07, Issue 03, March 2019. (UGC)
- Sudhakar Singh and **Ajay Kumar Gangwar**, “Skin Disease Detection in Melanoma Images Using SoftComputing Based Images Processing: A Review,” THINK INDIA JOURNAL, Vol-22-Issue-17-September2019. (UGC)
- **Ajay kumar**, D.K. Srivastava and Gunjan Srivastava, published a research paper Entitled “Band width of micro strip antenna Improved by using Uniplaner EBG Structure” in **International journal of Engineering Research Technology (IJERT)**, (IJERTV1IS6428), Volume 1, Issue 6(August 2012).
- Gunjan Srivastava, **Ajay kumar** and D.K.Srivastava, Published a research paper entitled “Slits in Radiating Patch of Microstrip Antenna with Truncated Ground Plane by same type slits” **International journal of Engineering Research & Technology(IJERT)**, vol.1 Issue 6, August- 2012.

Reviewing of International Journal/ Conferences

- Reviewer of Institution of Electronics and Telecommunication Engineers (IETE) Journal (SCI Journal).
- Reviewer of International Journal of RF and Microwave Computer-Aided Engineering (SCI Journal).
- Reviewer of Microwave and Optical Technology Letter (SCI).
- Reviewer of International Journal of Microwave and Wireless Technologies (SCI).
- Program Committee member of International Conference on Pervasive Computing Advances and Applications (PerCAA-2019) (Elsevier).
- Program Committee member of International conference on Advanced Computation and Telecommunication (ICACAT-2018) (IEEE Conference).

- Reviewer of International Conference on Multimedia, Signal Processing and Communication Technologies (IMPACT 2017) (**IEEE Conference**).
- Reviewer of IEEE Uttar Pradesh Section International Conference on Electrical, Computer and Electronics Engineering (UPCON 2016, 2019) (**IEEE Conference**).
- Reviewer of International conference on innovation in cyber physical systems (ICICPS-2020) (**Springer Conference**).
- Reviewer of International Conference on Computing, Communication, and Intelligent Systems (ICCCIS 2021) (**IEEE Conference**).

References

- **Prof. M.S. Alam**

Department of Electronics Engineering
 Aligarh Muslim University, Aligarh (U.P.)
 Email: msalam.el@amu.ac.in Mob.
 No: 9411003236

- **Prof. Ekram Khan**

Department of Electronics Engineering
 Aligarh Muslim University, Aligarh (U.P.)
 Email: ekhan.el@amu.ac.in
 Mob.No: 9457110112

- **Prof. D.K.Srivastava (Head of Department)**

Department of Electronics & Communication Engineering
 Bundelkhand Institute of Engineering and Technology, Jhansi (U.P.)
 Email: dks@bietjhs.ac.in
 Mob.No: +91-8299724789

Personal details:

Date of Birth	11-06-1988
Gender	Male
Marital Status	Married
Nationality	Indian
Father's Name	Mr. Nand kishore
Mother's Name	Mrs. Rekha

Achievements during session 2019-2020

- ‘**Departmental NBA Co-Ordinator**’ at HMR Institute of Technology and Management, Hamidpur (New Delhi)
- **A.K. Gangwar and M.S. Alam**, A Miniaturized Quad-band Antenna with Slotted Patch for WiMAX/WLAN/GSM Applications, International Journal of Electronics and Communications, Accepted 5 September 2019, Available online 4 October 2019. (**SCI, Impact factor: 2.853**)
- **A.K. Gangwar and M.S. Alam**, A Dual-Band Reconfigurable Filterina, International Journal of Electronics and Communications, Accepted 28 April 2020. (**SCI, Impact factor: 2.853**)
- A short term courses on “**Practical Skills in Technical Education**” organized by National Institute of Technical Teachers Training & Research (NITTTR) on **25 Nov-29 Nov 2019**.
- One Week Online Faculty Development Program on “**PHYSICS OF MATERIALS**” organized by Department of Physics, Kalasalingam Academy of Research and Education from **08-14 June 2020**.
- Faculty Development Program on “**Research Methodology: Tools and Techniques**” Organized by IILM college of Engineering and Technology from **18th May to 22nd May 2020**.
- Attended a webinar on “**Waveguide Modes and Antennas**” conducted by Bennett University association with Numeregion Pvt. Ltd. On 26 May 2020.

Achievements during session 2020-2021

- **A.K. Gangwar and M.S. Alam**, Recent development in filtering antennas, International Journal of Electronics and Communications, (**Communicated**).
- Attended One-week Webinar on “**Advanced antenna design and development for RF Communication systems**” held during 20th to 25th July 2020.
- Ajay Kumar, A comprehensive study on transparent antennas for wireless applications, **International conference on innovation in cyber physical systems (ICICPS-2020)**, 22-23 Oct 2020, HMRITM, New Delhi (**Best paper Award**).
- **Organized 5 days’ online workshop** based on “**Advanced design in RF**” at HMR Institute of Technology and Management, New Delhi from 16 Nov to 20 Nov 2020.
- **Delivered Expert Lecture** based on “**Reconfigurable Multi-Band Antennas for Wireless Applications**” at HMR Institute of Technology and Management, Hamidpur, New Delhi (India) dated on 18th November 2020.
- **Work as a member of “Technical Program committee”** in the International Conference on Innovation in Cyber Physical System (ICICPS 2020) organised by HMRITM, New Delhi, India (**Springer Conference**).
- **Work as a member of “Organizing committee”** in the International Conference on Innovation in Cyber Physical System (ICICPS 2020) organised by HMRITM, New Delhi, India (**Springer Conference**).
- **Delivered Expert Lecture** based on “**Multi-band Antennas for Wireless Applications**” at **Anand International College of Engineering, Jaipur (Rajasthan), India** dated on 22nd January 2021.
- **Organizing 5 days’ online Faculty Development Program (FDP)** based on “**Recent Technologies in the Fields of RF and IoT**” at HMR Institute of Technology and Management, New Delhi from 22 March to 26 March 2021.