



DR. ZAHID AHMAD BHAT (*Assistant Professor,
Post-Doc Fellow,
Ph. D Electronics, UGC-NET, SET*)
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Google Scholar <https://scholar.google.com/citations?user=L8s4kykAAAAJ&hl=en>

To enhance my skills by working in an environment relevant to my research interests. I have often desired to be part of a team where I would learn and as well contribute immensely to making the future better through excellent research.

EXPERIENCE

11 JUL 2024 – PRESENT

ASSISTANT PROFESSOR, HIGHER EDUCATION DEPARTMENT, J&K, INDIA
Electronics, GDC (Boys), Anantnag

03 JUL 2023 – 31 MAR 2024

POST-DOC FELLOW, SCHOOL OF COMPUTER AND INFORMATION SCIENCES,
UNIVERSITY OF HYDERABAD, TELANGANA, INDIA
Signal Sensing and Characterization using Antennas as Sensors.

01 JUN 2023 – 30 JUN 2023

LECTURER, DEPARTMENT OF ELECTRONICS & IT, UNIVERSITY OF KASHMIR
Teaching subjects of Microwave Engineering, Wireless Communication.

24 FEB 2023 – 30 MAY 2023

LECTURER, GOVT. DEGREE COLLEGE, BARAMULLA
Teaching subjects of Operational Amplifiers, Microprocessor 8085.

19 JULY 2021 – 24 FEB 2023

SENIOR RESEARCH FELLOW, UNIVERSITY OF KASHMIR, SRINAGAR
To simulate and fabricate the antennas and filters for the project titled "Design and Development of Energy Efficient Millimeter Wave Antennas for 5G networks and IoT".

19 JULY 2019 – 18 JULY 2021

JUNIOR RESEARCH FELLOW, UNIVERSITY OF KASHMIR, SRINAGAR
To simulate and fabricate the antennas and filters for the project titled "Design and Development of Energy Efficient Millimeter Wave Antennas for 5G networks and IoT".

EDUCATION

NOVEMBER 2022

DOCTORATE OF PHILOSOPHY (PH.D.) IN ELECTRONICS, UNIVERSITY OF KASHMIR,
SRINAGAR

- **Tech Skills:** Millimeter-wave Communication, HFSS Simulation, Modeling, RF Circuits, VNA, Anechoic Chamber.

- **Presented the work:** Published five SCI and Scopus Peer-reviewed journal papers and also published three publications in IEEE explore library and Springer.
- **Thesis titled** “Design and Development of Efficient and Low-loss 26-40 GHz Band mmWave Filters for 5G Networks”.
- **Advisors:** Dr. Javaid A. Sheikh and Dr. Sharief-ud-Din Khan

2013 - 2015

MASTER’S DEGREE IN ELECTRONICS, UNIVERSITY OF KASHMIR, SRINAGAR

- Achieved the overall percentage of **71.07**.
- Digital Signal Processing, Wireless Communication, Antenna Theory, Analog Electronics, Microwave Devices and Circuits, Computer Networks, Microprocessors, Wireless Networks, and Digital Communication.
- **Published a paper in an international journal.**
- **Project:** KU-Database of Handwritten Arabic Words.
- **Internship:** Advanced Vocational Telecomm project” at Bharat Ratna Bhim Rao Ambedkar Institute of Telecomm Training (BRBRAITT) Jabalpur, Madhya Pradesh, 2015
- Description: Research on Advanced Mobile Communication (Migration to 4G), IP Networking and learn the benefits and limitations of the 4th generation of mobile communication.

2009 - 2012

BACHELOR’S DEGREE IN SCIENCE, UNIVERSITY OF KASHMIR, SRINAGAR

- Core subject: **Electronics**
- Achieved an overall percentage of **62.94**.

ACHIEVEMENTS

- **Qualified National Eligibility Test (NET)** conducted by University Grants Commission for Lectureship, December 2021 and June 2022 (merged cycles).
- **Qualified Jammu & Kashmir State Eligibility Test (JKSET)** conducted by University of Jammu, Jammu for Lectureship, 2022.

TECHNICAL SKILLS

- Computer Literate,
- Advanced Digital Simulation (ADS)
- MATLAB,
- Ansoft HFSS
- CST
- Microsoft Office
- Well-Versed in Microsoft VISIO

RESEARCH INTERESTS

- Millimeter-Wave Communication
- RF/Microwave Devices,
- Antennas
- Filters
- Meta-materials
- Printed Antennas
- Wireless Sensors
- MIMO Antennas
- Artificial Intelligence.

MEMBERSHIPS

- IEEE Student Member

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- *IEEE MTT-S*
- *IAENG*
- *Technical Member, CEEPE*

PUBLICATIONS

A. JOURNAL PUBLICATIONS (12)

- 1) **Bhat, Z. A.**, Sheikh, J. A., Khan, S. D., Bashir, I., & Rehman, R. (2021). A Compact and Reconfigurable Dual-Mode Configuration Substrate Integrated Waveguide Dual-Band Bandpass Filter for 5G and Millimeter-Wave Communications. *Progress In Electromagnetics Research Letters*, 99, 93-101.
- 2) **Bhat, Z. A.**, Sheikh, J. A., Khan, S. D., Rehman, R., & Ashraf, S. (2021). Compact and novel coupled line microstrip bandpass filter based on stepped impedance resonators for millimeter-wave communications. *Frequenz*, 75(5-6), 147-152.
- 3) **Bhat, Z. A.**, Sheikh, J. A., Khan, S. D., Bashir, I., Parah, S. A., & Ashraf, S. (2022). A New Method of Isolation Enhancement of Dual Band Band-pass Filter using Composite mode coplanar waveguide structure for 5G and Body Centric Applications. *Iranian Journal of Science and Technology, Transactions of Electrical Engineering*, 1-10.
- 4) **Bhat, Z. A.**, Sheikh, J. A., Rehman, R., Khan, S. D., Bashir, I., & Ashraf, S. (2023). A Survey on Substrate Integrated Waveguide Filters; Design Challenges and Miniaturizing Techniques for the 5G. *International Journal of High Speed Electronics and Systems*, 32(01), 2140006.
- 5) Hafiz, A. M., **Bhat, Z. A.**, Jan, M., Bhat, M. U., Sofi, I. B., Tantray, I. A., & Bhat, G. M. (2016). KU–Database of Handwritten Arabic Words. *International Journal of Engineering and Future Technology*.
- 6) Ashraf, S., Sheikh, J. A., & **Bhat, Z. A.** (2022). A High Gain Multi Slotted and Compact Planar Microstrip Millimeter Wave Antenna for 5G Networks. *Progress In Electromagnetics Research M*, 108, 175-186.
- 7) Ashraf, S., Sheikh, J. A., Khan, U., & **Bhat, Z. A.** (2022). A low-Profile High Gain U Slotted Wide Band Micro-Strip Antenna for 5G Applications. *International Journal of Electronics*. 1-17.
- 8) Balkhi. Altaf A., Sheikh, J. A., Sofi. Ishfaq B., **Bhat, Z. A.**, Mir. G. M. (2023) Minimization of Handover Decisions with Quality of Service using Fuzzy Logic Prediction Model. *Journal of Communications*, vol. 18, no. 2, pp. 129-134, February 2023.
- 9) Balkhi. Altaf A., Sheikh, J. A., Sofi. Ishfaq B., **Bhat, Z. A.**, Mir. G. M. (2023) A new method of Intelligent Handover management in 5G Communication Networks- IHMCN. *Journal of Communications*.
- 10) Sheikh, J. A., Rehman, R., **Bhat, Z. A.**, Masoodi, I. S., Ashraf, S., & Parah, S. A. (2024). Miniaturized planar defected ground structure antenna enabled with Yagi directors for enhanced gain performance in mm-wave 5G applications. *Journal of Electromagnetic Waves and Applications*, 38(13), 1419-1434.
- 11) Masoodi, I. S., Sheikh, J. A., **Bhat, Z. A.**, Ashraf, S., & Parah, S. A. (2023). Asymmetric Coplanar Strip-(ACS-) Fed Side Edge Panel MIMO Antenna for IoT and 5G

Applications. *International Journal of RF and Microwave Computer-Aided Engineering*, 2023(1), 4814376.

- 12) **Bhat, Z. A.**, Sheikh, J. A., Udgata, Siba, & Parah, S. A., (2023). A Single Layer Wideband Filtering Antenna with E-Shaped Slots for 5G and B5G Millimeter-Wave Communications. *Frequenz*, (0).

B. CONFERENCE PUBLICATIONS (05)

- 1) **Bhat, Z. A.**, Sheikh, J. A., Rehman, R., Parah, S. A., Amin, M. U., & Khan, S. D. (2019, November). Compact microstrip bandpass filter using stepped-impedance resonators and stepped-lumped resonators for 5G Wi-Fi and WLAN applications. In *2019 International Conference on Power Electronics, Control and Automation (ICPECA)* (pp. 1-4). IEEE.
- 2) **Bhat, Z. A.**, Sheikh, J. A., & Khan, S. D. (2021). Microstrip Spiral Resonator Bandpass Filter With Defected Ground Structure (DGS) For Sub-6 GHz Communication Systems., *International Conference on multi-disciplinary research studies and education*, Nov. 2020.
- 3) Rehman, R., Sheikh, J. A., & **Bhat, Z. A.** (2020, February). A Novel High Gain Two Port Antenna for Licensed and Unlicensed Millimeter-Wave Communication. In *2020 International Conference on Emerging Trends in Information Technology and Engineering (ic-ETITE)* (pp. 1-5). IEEE.
- 4) Rehman, R., Sheikh, J. A., Shah, K. A., **Bhat, Z. A.**, Parah, S. A., & Malik, S. A. (2021). Compact Millimeter-Wave Low-Cost Ka-Band Antenna for Portable 5G Communication Gadgets. In *Proceedings of Second International Conference on Computing, Communications, and Cyber-Security* (pp. 53-65). Springer, Singapore.
- 5) Balkhi, Altaf A., Sheikh, J. A., **Bhat, Z. A.**, Mir, G. M., Efficient Call Management Between Congested Neighboring Cells using Fuzzy Logic. *Second International Conference on "Innovation in IoT, Robotics, and Automation, (IIRA-2022), India.*

C. BOOKS EDITED (01)

- 1) RF, Communications and Signal Processing for 5G and B5G Networks, (2023). CRC Press, Taylor and Francis Group. (*Accepted*)

D. BOOK CHAPTERS (02)

- 1) Bashir, J., Sheikh, J.A., **Bhat, Z.A.** (2023). Intelligent and Reliable Cognitive 5G Networks Using Whale Optimization Techniques. In: Biswas, A., Kalayci, C.B., Mirjalili, S. (eds) *Advances in Swarm Intelligence. Studies in Computational Intelligence*, vol 1054. Springer, Cham. https://doi.org/10.1007/978-3-031-09835-2_10.
- 2) **Bhat, Z. A.**, Sofi, I. B., & Masoodi, I. S. (2024). Smart Energy-Saving Solutions Based on Artificial Intelligence and Other Emerging Technologies for 5G Wireless and Beyond Networks Communications. *Intelligent Signal Processing and RF Energy Harvesting for State of art 5G and B5G Networks*, 77-95.

E. WORKSHOPS/CERTIFICATIONS

- 1) Participated in One-Week Workshop on Communication and Antenna Design for IoT (CADIT-2017) at Motilal Nehru National Institute of Technology Allahabad.
- 2) Participated in the Ph.D. initiative Program, IEEE MTT-S International Microwave and RF Conference (IMaRC-2018) held at Kolkatta.

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- 3) Participated and Presented a Paper at the “International Conference on Power Electronics, Control and Automation” (ICPECA-2019) organized by Jamia Millia Islamia, University, New Delhi.
- 4) Participated and Presented a Paper on “On the Study of Micro-Strip Bandpass Filters for Ultra-Wide Band Applications” in the National Seminar “SEEDS-2018” organized by the University of Kashmir, Srinagar.
- 5) Participated and presented a Paper on “On the Study of Tunable Microwave Filters for Ultra-Wideband (UWB) Communications” in the National Conference “JK Science Congress 2018” organized by the University of Kashmir, Srinagar.
- 6) Participated in A National Level One Week Online Workshop for Students on “Fundamentals of MATLAB and Programming” organized by the Department of Electronics and Communication Engineering, Kakatiya Institute of Technology and Science, Warangal – India.
- 7) Participated in workshop on "Advances in Microwave and Antenna Technology" held from 11th September 2021 to 13th September 2021 at Muffakham Jah College of Engineering & Technology, Hyderabad.
- 8) Participated in and attended the workshop entitled "Communication System Design and Signal Processing using Software Defined Radio: A Hands-on Approach" conducted by The Department of Electrical Engineering Indian Institute of Technology Jammu, India, and IEEE Microwave Theory and Techniques Society Student Branch Chapter, IIT Jammu from 21 June 2021 to 26 June 2021.
- 9) Participated in One Week Faculty Development Program on “Modelling, Measurement, and Research trends in Microstrip Patch Antenna” conducted from 20.07.2020 to 25.07.2020 organized by the Department of Electronics and Communication Engineering in association with IETE Student Forum-Hyderabad and MTT-S, Kerala Chapter.
- 10) Participated in the “2015 International Conference on Advances in Computers, Communication and Electronic Engineering” (COMMUNE-2015) Organized by the Post Graduate Department of Electronics and Instrumentation Technology, University of Kashmir.
- 11) Participated in workshop on “AI Master Class using Matlab” at Pantech Prolabs India Pvt, Ltd.
- 12) Attended IEEE R10 sponsored three days’ workshop on “IoT and Wearable Technologies” (online mode), organized by IEEE Gujarat section and hosted by IEEE SCET Student Branch, during 25 – 27 August 2021.
- 13) Participated in One-Week Workshop on “Recent Trends and Research Scope in Antenna Domain”, held during 27th to 31st July, 2020 Jointly Organized by Department of ECE & ECM, Vignan’s Institute of Information technology, Vishakhapatnam.
- 14) Participated in Two-Day Online Workshop on “5G Noma Communications”, held during 12th to 13th August, 2022 organized by Department of ECE, CVR College of Engineering, Ibrahimpatan, Hyderabad, Telengana.
- 15) Participated in 5 days Online Elementary FDP on “The Trends of Research and Development of Electronics and Communication Area” from 17/01/2022 to 21/01/2022 at National Institute of Technology, organized by AICTE Training and Learning Academy (ATAL).
- 16) Participated in 5 days Online Elementary FDP on “Recent Trends of Emerging Research Advances in Design Aspects and Innovative Modeling Techniques with Miniaturization for Electronics Devices and Circuits” from 24/01/2022 to 28/01/2022 at Engineering Degree

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- Division, Institute of Engineering and Rural Technology, Prayagraj, organized by AICTE Training and Learning Academy (ATAL).
- 17) Participated in 5 days Online Elementary FDP on “Hands-On Workshop on Software Defined Radios” from 07/03/2022 to 11/03/2022 at Shiv Nadar University, organized by AICTE Training and Learning Academy (ATAL).
 - 18) Participated in One-Week Online International Faculty Development Program on “Computational Techniques for Electromagnetics” organized by Department of ECE, DTU, India in collaboration with Xiangshan Laboratory (XSL), Zhongshan Institute of CUST, China and ARK Infosolutions Pvt. Ltd. India during December 27-31, 2021.
 - 19) Attended the Orientation/Refresher Program on “Artificial Intelligence in Corporative Nema (5G) Networks” organized by Poornima College of Engineering during 21-12-2021 to 27-12-2021.
 - 20) Attended three days Winter School on “Advances in Deep Learning for Multimedia Signal Processing” jointly organized by IEEE Signal Processing Society GS, IEEE Computer Society GS, IEEE Geoscience & Remote Sensing Society GS in association with IEEE SCET Student Branch arranged during 3rd to 5th March 2022.
 - 21) Attended AICTE, MOE’s IIC One Week Faculty Development Program on “Entrepreneurship, Innovations & Digital Skills in New Era of AI” organized by MIT Moradabad from 25th July to 29th July 2022.
 - 22) Participated in One-week Faculty Development Program on “Amazon Web Services” During the period of 22nd August 2022 to 27th August 2022 Organized by RV Institute of Technology & Management, Bangalore in collaboration with Brainovision Solutions India Pvt. Ltd & All India Council for Technical Education – AICTE.
 - 23) Participated in Expert Lecture on “Designing and Analysis of Equivalent Circuits in ADS Tool” conducted by IEEE Delhi Section Antenna & Propagation Society (APS) Chapter-Jaipur in association with IEEE RFID Student Chapter, MNIT Jaipur on 20 July, 2022.
 - 24) Participated in the “Impact Lecture Session” organized by Institution's Innovation Council of Sreyas Institute of Engineering and Technology, Hyderabad on 28th June, 2022 with financial support from the MoE Innovation cell and AICTE, New Delhi.
 - 25) Participated in the one-week Short-Term Course on “Microwave and beyond: Present and Futuristic Wireless Communication Systems” organized by Dept. of Electronics and Telecommunication Engineering, Kalimpong Government Polytechnic during 4th -8th April 2022.
 - 26) Participated in "One Week online Faculty Development Program on Integration of Renewable Energy and Smart Grids for Smart Cities” organized by Department of Electrical Engineering, Bansal Institute of Engineering and Technology Lucknow (U.P.) India during 07th March to 12th March 2022.
 - 27) Participated in one-week Faculty Development Program on “Advancement on Antenna Technologies for Future Applications” organized by ECE Department, Velagapudi Ramakrishna Siddhartha Engineering College during 14th – 19th Feb 2022.
 - 28) Participated in two days’ “COMSOL Multiphysics Simulation Workshop” organized by Centre for Nano Science and Engineering, Indian Institute of Science, Bengaluru on 06th and 07th October 2022.
 - 29) Participated in three days International Faculty Development Programme on “Disruptive Technologies for Next Gen Computing” organized by Department of Electronics and

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TRAINING AND INTERNSHIP

- 1) Three months Certificate Course on Computer Concepts (DOEACC Society)
March, 2010
- 2) One Year Diploma in Information and Advance Technology (Rastriya Institute Technical Education, Jammu).
January 2019
- 3) Six weeks internship in Advanced Vocational Telecomm project” at Bharat Ratna Bhim Rao Ambedkar Institute of Telecomm Training (BRBRAITT) Jabalpur, Madhya Pradesh,
February 2015

PERSONAL DETAILS

Full Name: Zahid Ahmad Bhat

Father’s Name: Ali Muhammad Bhat

Date of Birth: April-10, 1992

Gander: Male

Marital Status: Married

Passport: Hold valid Passport

Permanent Address: HN-200, Pachhar Chandoosa, Baramulla J&K-193221

LANGUAGES KNOWN

English, Hindi, Urdu and Kashmiri

Location: Barmulla



Zahid Ahamd Bhat