




Title	Dr.	First Name	Monika	Last Name	Bhattacharya	Photograph
Designation	Assistant Professor (Adhoc)					
Address	A2/701, Printers Apartments, Sector-13, Rohini, New Delhi-110085					
Phone No Office	9873491079					
Residence	9873491079					
Mobile	9873491079					
Email/ Web-Page	monikabhattacharya@andc.du.ac.in					
Educational Qualifications						
Degree	Institution				Year	
Ph.D.	Delhi University				2014	
M.Sc. Electronics	Delhi University				2009	
B.Sc.(H) Electronics	Delhi University				2007	
XII	CBSE				2004	
X	CBSE				2002	
Career Profile						
TEACHING EXPERIENCE						
❖ Assistant Professor (Adhoc) at Acharya Narendra Dev College, University of Delhi Duration: August 2017-till date						
Subjects taught:						
<ul style="list-style-type: none"> • Basic Circuit Theory and Network Analysis • Artificial Intelligence • Data Engineering & Analytics • Data Visualization • Numerical Analysis • Applied Physics • Electromagnetic Theory • Embedded Systems • Robotics • Signals and Systems 						

❖ **Assistant Professor (Adhoc) at Keshav Mahavidyalaya, University of Delhi**

Duration: August 2014-May 2017

Subjects taught:

- C++ & Data Structures
- Electronic Instrumentation
- Numerical Methods
- Embedded Systems
- Computer Networks
- Semiconductor Fabrication and Characterization
- Electrical Technology

❖ **Assistant Professor (Adhoc) at Sri Guru Tegh Bahadur Khalsa College, University of Delhi**

Duration: July 2013-April 2014

Subjects taught:

- Analog Communication
- Digital Communication
- Optics and Optical Electronics
- Analog Electronics
- Applied Physics
- Engineering Mathematics

RESEARCH EXPERIENCE

Area of Research: *VLSI Design and Device Modeling; Microelectronics*

Ph.D. from Semiconductor Device Research Laboratory, Department of Electronic Science, Delhi University, South Campus

Thesis Title: **Modeling, Simulation and Characterization of Noise in InAlAs/InGaAs Tied-geometry Double-gate High Electron Mobility Transistor for Millimeter wave Applications**

Year of Award of Degree: March 2014

Areas of Interest / Specialization

- Semiconductor Device Modeling and Simulation
- Embedded Systems
- Robotics

Subjects Taught

- Basic Circuit Theory and Network Analysis
- Robotics
- Artificial Intelligence
- Data Engineering & Analytics
- Data Visualization

- Electromagnetic Theory
- Embedded Systems
- Applied Physics
- Signals and Systems
- C++ & Data Structures
- Electronic Instrumentation
- Numerical Methods
- Computer Networks
- Semiconductor Fabrication and Characterization
- Electrical Technology
- Analog and Digital Communication
- Optics and Optical Electronics
- Analog Electronics
- Applied Physics
- Engineering Mathematics

ADMINISTRATIVE ASSIGNMENTS

Contributed and worked as a member of the following Staff Council Committees of the Acharya Narendra Dev College (2017-2023)

- I. T. Committee – Website Distribution/ Maintenance help of laptops (2017-2018)
- Theatre Society (2017-2018, 2018-2019)
- Editorial I – Magazine + Annual Report (2018-2019) (2020-2021) (2021-2022) (2022-2024)
- Editorial – Magazine (2019-2020)
- Editorial II – Prospectus (2022-2024)
- Women Students Affairs Committee (SASHAKT) (2019-2020) (2022-2024)
- Environment Society (2022-2024)
- Committee for Mentorship and Counselling (2022-2024)

DETAILS OF PUBLICATIONS IN JOURNALS/CONFERENCE PROCEEDINGS

Publication	International	National
Journal	14	-
Conference Proceeding	14	1

- (i) Paper Title: “*Scattering parameter based Modeling and Simulation of symmetric tied gate InAlAs/InGaAs DG-HEMT for millimeter wave applications*”, **Monika Bhattacharya**, Jyotika Jogi, R.S Gupta and Mridula Gupta, **Solid State Electronics**, Vol.63, No.1, pp.149-153, **(September) 2011**.
<https://doi.org/10.1016/j.sse.2011.05.025> Impact Factor(2013): 1.397
- (ii) Paper Title: “*An Accurate Charge Control Based Approach for Noise Performance Assessment of a Symmetric Tied-gate InAlAs/InGaAs DG-HEMT*”, **Monika Bhattacharya**, Jyotika Jogi, R.S Gupta and Mridula Gupta, **IEEE Transactions on Electron Devices**, Vol. 59, No. 6, pp. 1644-1652, **(June) 2012**.

doi: 10.1109/TED.2012.2190738. Impact Factor(2013): 2.318

- (iii) Paper Title: *"Temperature Dependent Analytical Model for Microwave and Noise Performance Characterization of $\text{In}_{0.52}\text{Al}_{0.48}\text{As}/\text{In}_m\text{Ga}_{1-m}\text{As}$ ($0.53 \leq m \leq 0.8$) DG - HEMT"* **Monika Bhattacharya**, Jyotika Jogi, R.S Gupta and Mridula Gupta, **IEEE Transactions on Device and Material Reliability**, Vol.13, No.1, pp.293-300, **(March) 2013**.
doi: 10.1109/TDMR.2013.2243913. Impact Factor(2013): 1.543
- (iv) Paper Title: *"Gate-to-Drain Capacitance Dependent Model for Noise Performance Evaluation of InAlAs/InGaAs Double-gate HEMT"*, **Monika Bhattacharya**, Jyotika Jogi, R.S Gupta and Mridula Gupta, **Journal of Semiconductor Technology and Science**, Vol. 13, No. 4, pp. 331-341, **(March) 2013**.
<http://dx.doi.org/10.5573/JSTS.2013.13.4.331> Impact Factor(2013): 0.52
- (v) Paper Title: *"Impact of Temperature and Indium composition in the channel on the Microwave performance of single-gate and double-gate InAlAs/InGaAs HEMT"*, **Monika Bhattacharya**, Jyotika Jogi, R.S Gupta and Mridula Gupta, **IEEE Transactions on Nanotechnology**, Vol. 12, No. 6, pp. 965-970 **(August) 2013**.
doi: 10.1109/TNANO.2013.2276415. Impact Factor(2013): 2.29
- (vi) Paper Title: *"Gate-length and Donor-layer characteristics Optimization of InAlAs/InGaAs DG-HEMT for improved RF and Noise Performance"*, **Monika Bhattacharya**, Jyotika Jogi, R.S Gupta and Mridula Gupta, **Invertis Journal of Science and Technology**, Vol. 6, No. 4, pp. 244-248 **(October) 2013**.
- (vii) Paper Title: *"Evaluation of Noise Coefficients for Separate Gate InAlAs/InGaAs Double Heterostructure DG-HEMT"*, Parveen, **Monika Bhattacharya** and Jyotika Jogi, **International Journal of Engineering Research and Development (IJERD)**, Vol. 10, No.8, pp. 01-11, **(August) 2014**.
e-ISSN: 2278-067X, Impact Factor(2013): 1.09
- (viii) Paper Title: *"Modeling of InAlAs/InGaAs/InAlAs DG-HEMT Mixer for Microwave Application"*, Parveen, **Monika Bhattacharya** and Jyotika Jogi, **IOSR Journal of Electronics and Communication Engineering (IOSR-JECE)**, Volume 10, Issue 4(II), pp. 21-27, **(July) 2015**
e-ISSN: 2278-2834
- (ix) Paper Title: *'Influence of gate leakage current induced shot noise on the Minimum Noise Figure of InAlAs/InGaAs double-gate HEMT'*, **Monika Bhattacharya**, Jyotika Jogi, R.S. Gupta and Mridula Gupta, **Superlattices and Microstructures (Elsevier)**, pp. 13-22, **September (2017)**
<https://doi.org/10.1016/j.spmi.2017.02.026>. Impact Factor(2017): 2.117
- (x) Paper Title: *"Polarization dependent charge control model for microwave performance assessment of AlGaIn/GaN/AlGaIn double heterostructure HEMTs."*, Nisha Chugh, **Monika Bhattacharya**, Manoj Kumar, S. S. Deswal, and R. S. Gupta, **Journal of Computational Electronics (Springer)**, pp. 1229-1240, September (2018)
<https://doi.org/10.1007/s10825-018-1190-0>. Impact Factor(2018): 1.637

- (xi) Paper Title: "*Analysis of $Al_{0.15}Ga_{0.85}N/GaN/Al_{0.15}Ga_{0.85}N$ DH-HEMT for RF and Microwave Frequency Applications*", Nisha Chugh, Manoj Kumar, **Monika Bhattacharya** and R. S. Gupta, **Semiconductors (Springer)**, Vol. 53(13), pp. 1784–1791, **December (2019)**
<https://doi.org/10.1134/S1063782619130050>. Impact Factor(2018): 0.691

- (xii) Paper Title: "*Sheet carrier concentration and current–voltage analysis of $Al_{0.15}Ga_{0.85}N/GaN/Al_{0.15}Ga_{0.85}N$ double heterostructure hemt incorporating the effect of traps*", Nisha Chugh, Manoj Kumar, **Monika Bhattacharya** and R. S. Gupta, **Microsystem Technologies**, pp. 1-12 **Jan (2019)**,
<https://doi.org/10.1007/s00542-019-04322-5> Impact Factor(2018): 1.513

- (xiii) Paper Title: "*Extraction of admittance parameters of symmetrically doped AlGaIn/GaN/AlGaIn DH-HEMT for microwave frequency applications*", Nisha Chugh, Manoj Kumar, **Monika Bhattacharya** and R. S. Gupta, **Microsystem Technologies**, Vol. 27(11), pp. 4065-4072, **March (2020)**
<https://doi.org/10.1007/s00542-019-04322-5> Impact Factor(2021): 2.012

- (xiv) Paper Title: "*Applicability of field plate in Double channel GaN HEMT for radio-frequency and power-electronic applications*", Nisha Chugh, Manoj Kumar, Subhasis Haldar, **Monika Bhattacharya** and R. S. Gupta, **Silicon**, 14(3), pp.1029-1038, **Feb (2022)**.
<https://doi.org/10.1007/s00542-019-04322-5> Impact Factor(2022): 2.941

LIST OF PUBLISHED/ACCEPTED PAPERS IN CONFERENCES

- (i) **IEEE TENCON 2010** (21-24 Nov 2010, Fukuoka, Japan)
 Paper Title: "Impact of Doping concentration and Donor- layer thickness on the dc characterization of symmetric Double-gate and Single-gate InAlAs/InGaAs/InP HEMT for nanometer gate dimension-A comparison", Monika Bhattacharya, Jyotika Jogi, R.S Gupta and Mridula Gupta, **IEEE TENCON 2010 Conference Proceedings**, Pg. 134-139. doi: 10.1109/TENCON.2010.5685856

- (ii) **ICMARS 2010** International Conference on Microwave, Antenna and Remote Sensing (14-17 Dec 2010, Jodhpur, Rajasthan, India).
 Paper Title: "An Analytical study of Enhanced Microwave Performance of symmetric Double-gate InAlAs/InGaAs/InP HEMT over Single-gate InAlAs/InGaAs/InP HEMT for nanometer gate dimension", Monika Bhattacharya, Jyotika Jogi, R.S Gupta and Mridula Gupta

- (iii) **ICSSA-2011** International Conference on Signal, Systems and Automation (24-25 Jan 2011, Anand, Gujrat, India)
 Paper Title: "Analytical Modeling of Intrinsic Y-parameters to study the enhanced microwave performance of symmetric tied-gate InAlAs/InGaAs/InP DG-HEMT", Monika Bhattacharya, Jyotika Jogi, R.S Gupta and Mridula Gupta, **Proceedings of Second International Conference on Signal, Systems and Automation**, Pg. 497-502. ISBN: 978-1-6123-3002-0

- (iv) **ISMOT-2011** (13th International Conference on microwave and Optical technology), (June 20-23, 2011, Prague, Czech Republic, EU).
 Paper Title: "A Comprehensive Analytical Approach for drain-noise source and gate-noise

source modeling of InAlAs/InGaAs DG-HEMT”, Monika Bhattacharya, Jyotika Jogi, R.S. Gupta and Mridula Gupta

- (v) **IS-MMSe-2011**, (International Symposium on Models and Modeling Methodologies in Science and Engineering)(July 19-22, 2011, Orlando, Florida, USA).
Paper Title: “An Analytical study of the impact of gate-bias on the scattering parameters of a symmetric tied-gate InAlAs/InGaAs DG-HEMT”, Monika Bhattacharya, Jyotika Jogi, R.S. Gupta and Mridula Gupta
- (vi) **IEEE TENCON 2011** (Nov 21-24, 2011, Bali, Indonesia)
Paper Title: “A Comprehensive Analytical approach for the evaluation of the P,R and C noise coefficients of InAlAs/InGaAs DG-HEMT”, Monika Bhattacharya, Jyotika Jogi, R.S. Gupta and Mridula Gupta., IEEE TENCON 2011 Conference Proceedings, Pg-1131-1134. doi: 10.1109/TENCON.2011.6129288
- (vii) **IWPSD 2011** (The XVI International Workshop on the Physics of Semiconductor Devices) (December 19-22, 2011, IIT Kanpur, Kanpur, India).
Paper Title: “A comprehensive charge control based analysis of the effect of Donor-layer doping and donor-layer thickness on the P, R and C noise coefficients of a symmetric tied-gate InAlAs/InGaAs DG-HEMT”, Monika Bhattacharya, , Jyotika Jogi, R.S. Gupta and Mridula Gupta, Proc. of SPIE, Vol. 8549.
- (viii) **NANOCON 2012** (2nd International Conference on Nanotechnology - Innovative Materials, Processes, Products and Applications) (October 18-19, 2012, Pune, India).
Paper Title: “Temperature and Channel Indium Composition Sensitivity Analysis of the Small-Signal Equivalent Circuit Parameters of SG- and DG- InAlAs/InGaAs HEMT”, Monika Bhattacharya, Jyotika Jogi, R.S. Gupta and Mridula Gupta. Proc. of NANOCON 2012, pp. 1199-1208.
- (ix) **ICEE 2012** (International Conference on Emerging Electronics) (December 15-17, 2012, IIT Bombay, Powai, Mumbai, India).
Paper Title: “Impact of Noise Temperature Constant and Diffusion Coefficient on the Minimum Noise Figure and Minimum Noise Temperature of InAlAs/InGaAs DG-HEMT”,Monika Bhattacharya, Jyotika Jogi, R.S. Gupta and Mridula Gupta. Proc. of ICEE 2012, pp. 11-14. doi: 10.1109/ICEmElec.2012.6636226
- (x) **NCRDE-2013** (National Conference on Recent Developments in Electronics) (January 18-20, 2013, Department of Electronic Science, University of Delhi, South Campus).
Paper Title: “Gate-length and Donor-layer characteristics Optimization of InAlAs/InGaAs DG-HEMT for improved RF and Noise Performance”, Monika Bhattacharya, Jyotika Jogi, R.S. Gupta and Mridula Gupta, Proc. of NCRDE-2013.
- (xi) **IEEE TENCON 2015** (November 1-4, 2015, Macao, China)
Paper Title: “A Novel Separate Gate InAlAs/InGaAs/InAlAs DG-HEMT Heterogenous Mixer”, Parveen, Neha Verma, Monika Bhattacharya and Jyotika Jogi., IEEE TENCON 2015 Conference Proceedings, Pg-978-981. doi:10.1109/TENCON.2015.7373028
- (xii) **IEEE UPCON 2017** (October 26-28, 2017, Mathura (U.P.), India)

Paper Title: "Sheet carrier concentration and threshold voltage modeling of asymmetrically doped AlGa_N/Ga_N/AlGa_N double heterostructure HEMT.", Nisha Chugh, Monika Bhattacharya, Manoj Kumar, R. S Gupta, 4th IEEE Uttar Pradesh Section International Conference on Electrical, Computer and Electronics (UPCON), 2017, IEEE Explore, pp. 446-451. doi: 10.1109/UPCON.2017.8251089.

- (xiii) **IWPSD 2017** (December 11-15, 2017, IIT Delhi (Delhi, India) Paper Title: "Impact of Temperature and Al composition on the threshold voltage and sheet-carrier concentration of AlGa_N/Ga_N/AlGa_N Double Heterostructure HEMT", Nisha Chugh, Monika Bhattacharya, Manoj Kumar; R. S Gupta. Proceedings of XIX International Workshop on The Physics of Semiconductor Devices (IWPSD), IIT Delhi (Delhi), December 11-15, 2017.

- (xiv) **ICDCS 2018 (March 16-17, 2018, Karunya Institute of Technology and Sciences , Coimbatore, India)**
 Paper Title: "RF Performance comparison of Dual Material Gate (DMG) and Conventional AlGa_N/Ga_N High Electron Mobility Transistor", Nisha Chugh, Manoj Kumar, **Monika Bhattacharya** and R. S Gupta. Proceedings of Fourth International Conference on Devices, Circuits and Systems (ICDCS), Karunya Institute of Technology and Science, Coimbatore, March 16-17, 2018, pp. 137-142-212. doi: 10.1109/ICDCSyst.2018.8605122

- (xv) **EDKCON 2018 (November 24-25, 2018, Science City, Kolkata, India)**
 Paper Title: "Impact of Donor Layer Thickness, Doping Concentration and Gate-Width on Gate-Capacitance of AlGa_N/Ga_N Single and Double Heterostructure HEMT for Microwave Frequency Applications", Nisha Chugh, **Monika Bhattacharya**, Manoj Kumar and R. S Gupta. Proceedings of IEEE Electron Devices Kolkata Conference (EDKCON), November 24-25, 2018, pp. 207-212.
 doi: 10.1109/ICDCSyst.2018.8605122

LIST OF WORKSHOPS/SEMINARS/FDPs ATTENDED/ORGANISED (2009-2022)

- (i) Completed fifteen days **Online National Refresher Course on 'Python: Essentials, Programming and Analytics (FDP-102) & Big Data Analytics (FDP-106)** jointly organized by University of Delhi and Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) of Ministry of Education from October 27, 2022 to November 11, 2022 with **A+ Grade**
- (ii) Attended workshop on **Science & Society** organized by Value Addition Courses Committee (University of Delhi) in collaboration with Mahatma Hansraj Faculty Development Centre, Hansraj College on October 20, 2022
- (iii) Attended **MATLAB Workshop** for Faculty Members organised by FOSS Club, Department of Computer Science, Acharya Narendra Dev College, University of Delhi on December 20, 2022
- (iv) Attended **Virtual Mini Colloquia (MQ)** on 75th Anniversary of Transistor Invention organised by IEEE EDS Delhi Chapter (New Delhi, India) from August 22- 29, 2022
- (ix) Attended One Week Online Workshop on **Recent Development in the Field of Electronics**

	(RDFE-2022) organised by Department of Electronic Science, University of Delhi, in collaboration with IEEE EDS and IEEE APS & CRFID Delhi Chapter from July 25-29, 2022
(v)	Resource Person in National Workshop on Skill Enhancement of Non-Teaching Staff (NWSSENS-2022) organised by Acharya Narendra Dev College from July 13-20, 2022
(vi)	Attended Biotech Startup Expo – 2022 ,Biotech Startup Innovations: Towards Aatma Nirbhar Bharat,organised by DBT,Ministry of Science and Technology, Government of India, at Pragati Maidan, New Delhi from June 9-10, 2022
(vii)	Attended Virtual Mini-Colloquia (MQ) on Advances in II-N Devices and Systems organised by IEEE, Electron Devices Society (EDS), Delhi Chapter from June 1-4, 2022
(viii)	Online International Workshop on Statistical Data Analysis using SPSS organised by Aryabhata Institute of Academic and Research Science Tech Institute, Lucknow from May 21-27, 2022
(x)	One Week Online Faculty Development Program On Advanced Research Methodology Applicable in New Education Policy organised by Digvijai Nath Post Graduate College Gorakhpur & Science Tech Institute, Lucknow from June 22 - 28, 2022
(xi)	Resource Person: One-Day interaction programme Science Adda , organized under the DBT Star College Scheme by Acharya Narendra Dev College, held on December 20, 2021
(xii)	Attended Faculty Development Programme & National Webinar entitled ICT Enabled Higher Education in India: Challenges and Opportunity organised by Guru Angad Dev Teaching Learning Centre SGTB Khalsa College, University of Delhi (under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching of MHRD on April 15 2020
(xiii)	Attended Online Summer School-cum-Faculty Development Program on Advances in Signal Processing and Machine Learning jointly organised by MHRD- Institution Innovation Council, DDUC Chapter, Deen Dayal Upadhyaya College, University of Delhi (Under the aegis of DBT Star College Program), Department of Electronic Science, University of Delhi & National Academy of Sciences India (NASI) – Delhi Chapter and supported by IEEE Electron Device Society (EDS), Delhi, July 20-26, 2020
(xiv)	Participated in One day workshop on Machine Learning using Python organized by Department of Computer Science, Acharya Narendra Dev College, University of Delhi on March 4, 2020
(xix)	Member of the Organizing committee: One-day inter-disciplinary exhibit presentation on 'New Frontiers in Science' organized by Acharya Narendra Dev College under the aegis of DBT STAR College Scheme on October 22, 2019
(xv)	Participated in UGC sponsored National Level Faculty Development Program on Embedded System Design using AVR and Digital System Design using programmable Logic Devices , organised by Department of Electronics, Keshav Mahavidyalaya in collaboration with CEDT, NSIT, Delhi from November 1-2, 2017

- (xvi) Participated in **One Day Workshop on PCB Designing and Fabrication** organised by Keshav Mahavidyalaya, University of Delhi on March 8, 2017
- (xvii) Participated in Two Day **Professor Summit on Embedded System Design using ATMEL 8-bit and 32-bit based MCU** organised by Department of Electronics, Maharaja Agrasen College, University of Delhi and ATMEL India University Program from January 7-8, 2016
- (xviii) Participated in Workshop on **Embedded Systems** organised by Department of Physics and Electronics, Hansraj College, University of Delhi under the aegis of DBT STAR College Program from January 15-16, 2016.
- (xx) Completed a course on **Nanotechnology Journey from Quantum Physics to Nanoengineering** jointly organised by 'Department of Electronic Science, University of Delhi and IEEE EDS Delhi Chapter, January 28, 2014
- (xxi) Attended Two day workshop on **Microcontroller 8051** conducted by Department of Electronics, SGTB Khalsa College, December 19-20, 2013
- (xxii) Attended one Day Workshop on **Recent Advances in Microwave and Photonic Devices** conducted by Department of Electronics and Communication Engineering, Maharaja Agrasen Institute of Technology, Delhi on October 4, 2012
- (xxiii) Attended Mini-Colloquia on **Compact Modeling Techniques for Nanoscale Devices and Circuit Analysis** organised by IEEE EDS Delhi Chapter and held at S.P. Jain Centre Auditorium, University of Delhi, South Campus from March 14-15, 2012.
- (xxiv) Participated in National Seminar on **Recent Advances in Microelectronic Devices** held at **Maharaja Agrasen Institute of Technology**, Delhi from August 19-20, 2011
- (xxv) Participated in two day workshop on **VLSI TCAD for Device Research and Development** conducted by Ambedkar Institute of Technology in collaboration with Synopsis, India from March 12-13, 2010
- (xxvi) Attended **National Workshop on Recent Trends in Semiconductor Devices and Technology** held in Deen Dayal Upadhyaya College, University of Delhi during February 12-13, 2010
- (xxvii) Participated in **The 18th WIMNACT-MQ3-New Delhi, India – Workshop and IEEE EDS Mini-colloquium on 'Nanometer CMOS Technology, Mini-Colloquia on Compact Modeling and Fabrication Techniques of Advance MOSFET and HEMT structures**, held at University of Delhi, South Campus, during June 4-5, 2009.

RESEARCH GUIDANCE

Mentored undergraduate students for the following DBT STAR projects and other projects undertaken by them under **DBT STAR ELITE (Education in a Lively Innovative Training Environment) Summer Internship Research Program** of Acharya Narendra Dev College:

DBT STAR PROJECTS (2017-2023)			
S.No.	PROJECT TITLE	STUDENTS	MENTORS
1.	Smart Dustbin (Sensobin)	Rahul Chawla, Aditya Raj Singh and Amit Rana (B.Sc(H) Electronics III Year)	Dr. Ravneet Kaur Dr. Monika Bhattacharya
2.	Solar Piezoelectric Charger	Abhishek Bhadana and Avinash Kumar Lal (B.Sc(H) Electronics III Year)	Dr. Ravneet Kaur Dr. Monika Bhattacharya
3.	Automatic Titrator	Aman Tyagi, Yash Varshney and Abhishek Udiya. (B.Sc(H) Electronics II Year)	Dr. Ravneet Kaur Dr. Monika Bhattacharya
ELITE ROJECTS (2018-2019)			
S.No.	Project Name	Students	Mentors
1.	Blind Assistance Toolkit (B.A.T)	Rajat Mann and Lokender B.Sc(H) Electronics III Year	Dr. Ravneet Kaur, Dr. Monika Bhattacharya Ms. Gauri Ghai
2.	Door Access Control Based on Face Recognition	Pranjal Singh and Rohit Saini B.Sc(H) Electronics III Year	Dr. Ravneet Kaur, Dr. Monika Bhattacharya Ms. Gauri Ghai
3.	Laser Security & Music System	Akshansh Jha B.Sc(H) Electronics III Year	Dr. Ravneet Kaur Dr. Monika Bhattacharya
4.	Android Application Based Repository (PUSTAK)	Ashutosh Singh and Vikram Bhardwaj B.Sc(H) Electronics III Year	Dr. Ravneet Kaur Dr. Monika Bhattacharya
ELITE ROJECTS (2019-2020)			
5.	Piezoelectric Energy Generator	Abhishek Bhadana and Avinash Kumar Lal , B.Sc.(H) Electronics III Year	Dr. Monika Bhattacharya Ms. Gauri Ghai
6.	Real Time Passenger Counter	Yash Varshney and Abhishek B.Sc(H) Electronics II Year	Dr. Monika Bhattacharya Mr. Dinesh Kumar
7.	Gesture Controlled Robot	Pushkar Baranwal and Phulender B.Sc(H) Electronics II Year	Dr. Anju Agrawal Dr. Monika Bhattacharya
ELITE ROJECTS (2020-2021)			
8.	Virtual Lab for Electronics: To design a 3-dimensional virtual laboratory to carry out experiments of circuit theory	Ashutosh Mani Tripathi	Dr. Ravneet Kaur Dr. Monika Bhattacharya

	and semiconductor devices lab.		
ELITE ROJECTS (ONGOING PROJECTS 2023)			
9.	Obstacle Avoidance Robotic Vehicle	Dev Panchal, Anshu Kumari Saurabh Kaushik B.Sc. (H) Electronics , II Year	Dr. Monika Bhattacharya Dr Ravneet Kaur
10.	Sunlight Sensitive Smart Roof with Rainfall Protection	Aman, Muskan kumar Sharma Vishal Gupta B.Sc. (H) Electronics , II Year	Prof. Anju Agrawal Dr. Ravneet Kaur Dr. Monika Bhattacharya
11.	Fourier transform applications in image processing	Prachi Dubey B.Sc. (H) Electronics, II Year	Dr. Vishal Dhingra Dr. Monika Bhattacharya
12.	A comparative study of Esports and Traditional sports: Analysis of Audience and Revenue Generation	Harsh Singh, Tanmay Sharma, Vansh B.Sc. (H) Electronics , I year Aayush Sarkar PMCS, I Year	Dr. Monika Bhattacharya Prof. Anju Agrawal

Mentored B.Tech Electronics undergraduate students in the following projects in 2016

S.No.	Project Title	Students	Mentors
1.	Bluetooth Controlled Robotic Arm	Aastha Jain, Akshay Himanshu Vijay Singh Munda, Vishal Yadav B.Tech Electronics , III Year	Dr. Jyoti Anand Dr. Monika Bhattacharya
2.	Credit Card with Fingerprint	Aayush Grover, Deepanshu Panwar, Samiksha Jain, Vikram Singh Dalal B.Tech Electronics , III Year	Dr. Jyoti Anand Dr. Monika Bhattacharya
3.	RFID: Application in Retail Chains	Rahul, Avik and Deepanki Sareen B.Tech Electronics , III Year	Dr. Jyoti Anand Dr. Monika Bhattacharya

Awards and Distinctions

- ❖ **UGC NET JRF** Qualified (June 2009)
- ❖ Qualified **GATE 2009** : Percentile: 89.18

Association With Professional Bodies

IEEE Member
Membership ID: 90852218

ACTIVITIES RELATED TO CURRICULUM DEVELOPMENT AND OTHER ACADEMIC ACTIVITIES (2020-2022)

- ❖ Member of Syllabus Drafting committee (for new UGCF framework under NEP) for the following subjects:
 - Artificial Intelligence & Machine Learning (DSE)
 - PCB Designing and Fabrication (SEC)
 - CAD Designing (SEC)
 - Signal Processing and Machine Learning
 - Embedded Systems
 -
- ❖ Expert Reviewer for IT related Vocational Education courses at Bhartiya Shiksha Board (BSB), Subject: Machine Learning (class IX-X)

MonikaBhattacharya

Dr. Monika Bhattacharya