

Resume

Dr. SUMAN RANI

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ACADEMIC QUALIFICATION

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Examination	Name of the Board/University	Year of passing	Percentage of Marks obtained	Division/Class/Grade	Subject
High School/Matric	Haryana Board of School Education, Bhiwani.	1999	66.83	1 st	Hindi, English, Math, Social Science, Science, Punjabi
Intermediate (Diploma (Electronics and Communication Engg.))	Govt. Polytechnic for Women Sirsa	2002	71.77	1 st	All ECE subjects
B.E. (Electronics & Communication)	Maharishi Dayanand University (B.R.C.M) Bahal.	2005	77.92	1 st	All ECE subjects
M. Tech (VLSI Design and Embedded System)	Guru Jhambheshwar University, Hisar	2009	8.97 CGPA (Gold-medalist)	1 st	ALL VLSI Subjects
Ph.D. (Electronics and Communication Engg.)	IKG, PTU, Jalandhar	2022		-	“Design and Performance Analysis of Ternary Nano Devices”

➤ Work Experience: 16 Years, 5 Months, 3 days

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- Working as Assistant Professor in Department of Electronics & Communication Engineering at Baba Farid College of Engineering & Technology, Bhatinda (Punjab) since 20th Aug. 2015.
 - Worked as Head of Department & Assistant Professor in Department of Electronics & Communication Engineering at Prannath Parnami Institute of Management & Technology, Hisar (Haryana) from 16th Feb. 2012 to 19th Aug. 2015.
 - Worked as Assistant Professor in Department of Electronics & Communication Engineering at Jan Nayak Ch. Devi Lal College of Engineering, Sirsa (Haryana) from 1st Aug. 2009 to 15th Feb. 2012.
 - Worked as lecturer in Department of Electronics & Communication Engineering at Jan Nayak Ch. Devi Lal College of Engineering, Sirsa (Haryana) from 21 Aug. 2006 to 23 May 2007.
 - Worked as Guest lecturer in Department of Electronics & Communication Engineering at C.D.L.M Engineering College Panniwala Mota Sirsa from 22 Aug. 2005 to 27 Dec.2005.
- **Areas of Interest:** VLSI Designs, Embedded System, Digital Designs, Novel Nano-devices, CNTFETs, Nanotechnology and materials.
- **Research Contribution:** Published 32 Research papers (14 Journal + 9 National & 9 International Conference), 01 Book Chapter, M. Tech Thesis guided 05 research scholars.
- **Research Profile Links:**
- <https://scholar.google.com/citations?user=VTLPBwIAAAAJ&hl=en>
- <https://www.researchgate.net/profile/Suman-Goyal>
- **Professional Society Membership:** Life time Member, ISTE
Life time Member ISSE
- **RESEARCH PAPERS IN REFEREED JOURNALS: 14**
https://drive.google.com/drive/folders/1roGW8so6qJ4f0bDZDG8J5U14vboG-k0u?usp=drive_link

Sr. no.	Author/Authors	Title of the paper	Name of the Journal, Vol.,Page no. year	ISSN No.
1.	Manju Nehra and Suman Rani*	Shaped Comb Fingers for Actuator	Progress in Science and Engineering Research Journal,2014, vol. 2(04/06), pp. 091-094.	2347-6680 (E)
2.	Priti Sindhu and Suman Rani*	Design and Analysis of CMOS J-K Flip-Flop and Basic Adiabatic Circuits	International Journal of Science, Engineering & Computer Technology, 2014, vol. 4, issue 1-2, pp. 49-52 https://www.i-scholar.in/index.php/ijsect/article/view/147742	2231-508X.

3	Parmeela Pachar, Suman Rani* and Jai Parkash Godara	Design & Analysis of Half Subtractor using GDI technique	International Journal of Science, Engineering & Computer Technology, 2014, vol. 4, issue 1-2, pp. 20-23 https://www.proquest.com/openview/e872d29f6b826c3813ed15f94ddc81d0/1?pg-origsite=gscholar&cbl=2032130	2231-508X.
4.	Monika, Suman Rani*	A review on design & implementation of compensated frame prediction & reconstruction	International journal of Engineering & Technical Research (IJETR), vol. 3, issue 2, pp. 138-141, February 2015. https://www.erpublication.org/published_paper/IJETR031346.pdf	2321-0869
5.	Sunita, Suman Rani*	Design & implementation of Adaptive Filtering Algorithm using NLMS having different targets	International journal of Engineering & Technical Research (IJETR), vol. 3, issue 2, pp. 145-148, February 2015. https://www.erpublication.org/published_paper/IJETR031348.pdf	2321-0869
6.	Agrakshi Mehta, Suman Rani*	Low Power Design Techniques in CMOS circuits :A Review	International Journal for research in applied science & Engineering Technology (IJRASET), vol. 3, issue 11, pp. 330-335, February 2015. https://www.ijraset.com/fileserve.php?FID=1700	2321-9653
7	Agrakshi, Suman Rani*	Implementation & Analysis of low power techniques on basic gates in Nanoscale technology	International Journal of Research in Management, Science & Technology, vol. 3, issue 2, pp. 118-125, April 2015.	E-ISSN: 2321-3264
8.	Agrakshi Mehta, Suman Rani*	Design & Analysis of low power 2-bit & 4-bit digital comparator in 45nm & 90 nm CMOS technologies	International Journal of Engineering and Technical Research (IJETR) vol. 3, Issue 5, pp. 278-284, May 2015 https://www.erpublication.org/published_paper/IJETR032280.pdf	2321-0869
9.	Suman Rani* , Balwinder singh,	Investigation of Schottky Barrier, Conventional and Tunnel Carbon Nanotube Field Effect Transistor for Low Power Design	Journal of Nano electronics and Optoelectronics, Manuscript number: 17-1369, SCI Journal. Vol. 13, Number 1, January 2018, pp. 76-82(7), Publisher: American Scientific Publishers, DOI: https://doi.org/10.1166/jno.2018.2169 . (Impact factor-1.069) https://www.ingentaconnect.com/content/asp/jno/2018/00000013/00000001/art00010	1555-130X(Print)

10	Suman Rani* , Gagandeep kaur and Balwinder singh	Ternary Logic Design Approach: From CMOS to CNTFET	Journal of Nanoscience, Nanoengineering and Applications, STM Journals., vol 8, issue 2., pp-20-31, UGC serial number of the Journal: - 47084, July 2018, http://techjournals.stmjournals.in/index.php/JoNSNEA/article/view/140	ISSN:2231-1777(Online), ISSN:2321-5194(Print)
11	Anjana kumari, Suman Rani* and Balwinder singh	Parameterized Comparison of Nano transistors based on CNT and GNR Materials: Effect of Variation in Gate oxide thickness and Dielectric Constant	Journal of Electronic Material, 48(5), pp-3078-3085, (2019). (SCIE/Scopus, Springer US (Cross Mark), Impact factor: - 1.774, DOI:- https://doi.org/10.1007/s11664-019-07062-4 https://link.springer.com/article/10.1007/s11664-019-07062-4	ISSN No: - Print ISSN0361-5235, Online ISSN1543-186X,
12	Suman Rani* , Anjana Kumari and Balwinder Singh	Effect of Chirality and High -K dielectric on Carbon Nanotube Vs Nanowire Field Effect Transistor	Journal of Advanced Science, Engineering and Medicine, vol. 11, Number 8, August 2019, pp. 734-740(7), American Scientific Publishers, DOI: https://doi.org/10.1166/asem.2019.2417 , https://www.ingentaconnect.com/content/asp/asem/2019/00000011/00000008/article00007%3bjsessionid=5or8huo9nc9er.x-ic-live-03	2164-6627 (Print), 2164-6635 (Electronic)
13	Suman Rani* and Balwinder singh	CNTFET Based 4-Trit Hybrid Ternary Adder-Subtractor for low Power & High-Speed Applications	Silicon (2021). https://doi.org/10.1007/s12633-020-00911-6 . Pp. 689-702. (SCIE/Scopus), Vol 14, Springer, Impact factor: - 2.941, published on 6 Jan 2021. https://link.springer.com/article/10.1007/s12633-020-00911-6	ISSN: 1876-9918. Print ISSN: 1876-990X.
14	Suman Rani, Balwinder singh and Rekha Devi	CNTFET Based Ternary 1-Trit & 2-Trit Comparators for Low Power High-Performance Applications	Transactions on Electrical and Electronic Materials, DOI-10.1007/s42341-021-00292-6, The Korean Institute of Electrical and Electronic Material Engineers. (SCIE/Scopus), Springer, published on 15 Feb 2021, Vol 22, pp. 734-749, Impact factor: - 1.5 https://link.springer.com/article/10.1007/s42341-021-00292-6	Print ISSN 1229-76075, Online ISSN 2092-7592

➤ **BOOK CHAPTER**

[https://drive.google.com/file/d/192Fsj0wT9IWtZ9cCKZNFfUJQIH9t3l6e/view?usp=drive link](https://drive.google.com/file/d/192Fsj0wT9IWtZ9cCKZNFfUJQIH9t3l6e/view?usp=drive_link)

Sr. no.	Author Name	Chapter Title	Name of the Book, page no, publisher, DoI, copy right	ISBN/ISSN No.
1	Suman Rani and Balwinder Singh	CNTFET based Ternary Logic Gates: Design & Analysis Approach	Major Applications of Carbon Nanotube Field-Effect Transistors (CNTFET) (pp. 72-92). Publisher:- Hershey, PA: IGI Global, Published in the United States of America by IGI Global Engineering Science Reference. Doi :- 10.4018/978-1-7998-1393-4, Web site:- http://www.igi-global.com , Copyright © 2020 by IGI Global. https://www.igi-global.com/gateway/book/232750	ISBN13: 9781799813934

➤ **P.G DISSERTATION**

[https://drive.google.com/drive/folders/1vOTSursDCzJqB5uVjMW-U_vAnWW63J_i?usp=drive link](https://drive.google.com/drive/folders/1vOTSursDCzJqB5uVjMW-U_vAnWW63J_i?usp=drive_link)

Name of Candidate	Title of Thesis	Status	University
Parmeela Pachar	Design and Analysis of Full Subtractor using GDI techniques.	2014 (Awarded)	Guru Jambheshwar University of Science & Technology Hisar
Manju Nehra	Design & Analysis of New Comb Geometrics & Structural Materials of Electrostatic Actuators for Micro-Tweezer Applications.	2014 (Awarded)	Guru Jambheshwar University of Science & Technology Hisar
Priti Sindhu	Design & Analysis of Adiabatic Flip-Flops.	2014 (Awarded)	Guru Jambheshwar University of Science & Technology Hisar
Agrakshi Mehta	Design of Low power Digital Comparator based on 45nm & 90nm technology.	2015 (Awarded)	Guru Jambheshwar University of Science & Technology Hisar
Koram Singh	Content Based Image Retrieval using DWT and Modified K-Means Algorithms.	2018 (awarded)	PTU Jalandhar

➤ **PAPER PRESENTED IN INTERNATIONAL/NATIONAL CONFERENCES**

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[https://drive.google.com/drive/folders/1iwdbFCQ3AQOhZ-jWe60WjBDxGbA98pa?usp=drive link](https://drive.google.com/drive/folders/1iwdbFCQ3AQOhZ-jWe60WjBDxGbA98pa?usp=drive_link)

Sr. no.	Title of the paper	Proceedings

1	Comparative study and analysis of various stages of CMOS Ring oscillator based on 0.35 μ m and 1.5 μ m technology	National conference on Application Specific Trends of Electronic Devices Circuits and Systems (ASTECS -09), organized by Department of Electronics and Communication Engineering held at Lingaya's University Faridabad on 6-7 Feb, 2009.
2	Propagation delay measurement of different gates using R.O based on 0.35 μ m technology	National conference on Recent Trends and Advancements in Computing (RTAC -09) organized by J.C.D.M COE Sirsa on 27-28 Feb, 2009.
3	Designing with low power perspective- at different level of abstraction	4 th National conference on Innovative Development in Engineering Applications (IDEA- 09) organized by Bhai Gurdas Institute of Engineering & Technology, Sangrur on 26 – 27 th march, 2009.
4	Study of dynamic full adders using 0.35 μ m & 0.18 μ m technology”	4 th National conference on Innovative Development in Engineering Applications (IDEA- 09) organized by Bhai Gurdas Institute of Engineering & Technology, Sangrur on 26 – 27 th march, 2009.
5	Design of CMOS based on Ring Oscillator with different approaches based on 0.35 μ m technology	International Conference on Innovative Technologies (ICIT-09): Research and Development in Science, Technology and Management, Organized by PDM College of Engineering, Bahadurgarh, poster-381, on June 18, 19 2009.
6	Technology of Future – MEMS	International Conference on Innovative Technologies (ICIT-09): Research and Development in Science, Technology and Management Organized by PDM College of Engineering, Bahadurgarh, poster-286, on June 18, 19 2009.
7	E- Waste management- Helpful to save Environment	AICTE sponsored National conference EDECR -2010 on Environmental degradation: Effects, Challenges & Remedies on 25-27 Feb, 2010 at J.C.D.M.C.O.E Sirsa, Haryana, pp. 71-75.
8	Design of 3-Stage combined Ring VCO in 0.35 μ m CMOS technology	In proceeding of National Conference on Contemporary Techniques & Technologies in Electronics Engineering, TEQIP Sponsored (in technical collaboration with IEEE-EMBS/IMS), organized by ECE department, Deenbandhu Chhotu Ram University of Science and Technology, Murthal (Haryana) dated on 13-14march 2013, pp. 121-123.
9	GDI- A new design technique –A review	3 rd International Conference on Evaluation in Science & Technology & Eyne on Educational Methodologies, March 8-9,2014 ESTEEM 2014 PPIMT, HISAR Page no.101-104.
10	An appraisal on MEMS & its application	3 rd International Conference on Evaluation in Science & Technology & Eyne on Educational Methodologies, March 8-9,2014 ESTEEM 2014 PPIMT,HISAR Page no.101-104.

11	Review of low -power C-MOS op-amp	3 rd International Conference on Evaluation in Science & Technology & Eyne on Educational Methodologies, March 8-9-2014 ESTEEM 2014 PPIMT, HISAR Page no.101-104.
12	A-Review- Adiabatic Flip-Flop- & Sequential circuit	3 rd International Conference on Evaluation in Science & Technology & Eyne on Educational Methodologies, March 8-9-2014 ESTEEM 2014 PPIMT, HISAR Page no.101-104.
13	A Review of the concept of SSMED & its Importance in Service sector	4 th National Conference on Issues & Innovation in Service Sector: Implication of Management & Engineering Sciences organized by Baba Farid College of Management and Technology, Bathinda, on September 24-25, 2015, pp-1-3.
14	Study & Analysis of CMOS Based Ring Oscillator based on 1.5 μ m Technology	IKGPTU sponsored National seminar on Trends & Innovations in Management, Engineering, Education & Science (TIMEES-2015), During November 6-7, 2015, Rayat Institute of Engineering & Information Technology, Railmajra.
15	Review On CMOS Adiabatic Logic Techniques	4 th International conference on Advancements & Futuristic Trends in Mechanical and Materials Engineering (AFTMEE 16), on 25-27 Feb 2016, organized by BFCET Bathinda, pp. 67.
16	I-V Characteristics analysis of Carbon Nanotube Field effect transistor and Graphene Nanotube Field effect transistor	International conference on Recent Innovation in Elecrical, Electronics & communication Engineering, ICREECE-18 KIIT Bhuwbneswer, 27-28 July 2018.
17	Comparative Analysis of CMOS and CNTFET based Ternary Universal Gates	DSIR Sponsered conference on Agri-Smart 2018 using IoT for Driving Smart Agriculture organized by C-DAC Mohali, pp. 46, 19-20 November 2018.
18	Performance Analysis of CMOS and CNTFET based Ternary Adder	Springer International conference on Intelligent Machines ICIM'19, organized by BFCET Bathinda 15-16 March 2019.

➤ **Work-shops/ FDP/ Webinar/ Seminar Attended:**

1. Participated in a one-day workshop on “Contemporary Communication Technologies” organized by ECE Department, GJU S& T Hisar, in Collaboration with SPTL, Indore on 4 March 2008.

2. Participated in Indian Association for Radiation Protection- Public Awareness Programme on “Atom for Peace” Organised by the department of Environmental Science and Engineering, GJU S& T Hisar, in association with the IARP, Trombay, Mumbai on 15-17 April 2008.
3. Participated in a two weeks Staff Development Program on “Pedagogy in Technical Education” from 7th June to 20th June, 2012, at PPIMT, Hisar. (Powered by; WOW Factors under NIESBUD (Ministry of Micro, Small & Medium Enterprises, Govt. of India).
4. Participated in a two weeks ISTE Workshop on “Analog Electronics” at OITM Hisar, conducted by IIT Kharagpur, under the National mission on Education through ICT (MHRD), from 4-14 June 2013.
5. Participated in AICTE recognized short term course on “Induction Training Program Through ICT” from 20/01/2014 to 24-01-2014 at PPIMT, Hisar certified by NITTTR Chandigarh, MHRD India.
6. Participated in 2 days Faculty Development program on “NAAC Accreditation & Filling the SSR” at Baba Farid College of Engineering & Technology, Bathinda, from 21 Dec 2015 to 22 Dec 2015.
7. Participated in Short Term Course on Nanotechnology for Electronic & Photonic Devices (Nano Dev-2016) organized by Department of Electronics & communication Engineering, PEC University of Technology, Chandigarh from 11-16 July 2016.
8. Participated in 10 days’ workshop on Embedded system & Robotics, in collaboration with Innovate Skills (NITTTR CHD Start-Up) Organized by BFCET Bathinda, on 21st Dec -31st Dec 2016.
9. Participated in DST-SERB, Govt. of India sponsored 2 day’s workshop on “Futuristic Trends of Nano-Electronics, MEMS and NEMS” conducted from 22nd & 23rd June 2017 at C-DAC Mohali.
10. Participated in DST-SERB, Govt. of India sponsored 2 day’s workshop on “Futuristic Trends of Nano-Electronics, MEMS and NEMS” conducted from 18 & 19 Sep 2018 at C-DAC Mohali.
11. Participated in 5 day’s workshop on “VLSI Devices & Technology” organized by Electronics & ICT Academy IIT Roorkee conducted from 8-12 Jan 2018 at C-DAC Mohali.
12. Participated in 1-day National seminar on “Semiconductor Technology: Trends & Challenges in technical collaboration with IEEE & ISSE Chandigarh chapter sponsored by Technical Education Quality improvement programme (TEQIP)-18, organized by Department of Electronics & communication Engineering, PEC (Deemed to be University), Chandigarh on 12 May 2018.
13. Participated in 6 day FDP on outcome based Education- Teaching learning skill in Digital Age from 16th to 21st July 2018, organized by Department of Mechanical Engineering, Baba Farid College of Engineering and Technology, Bathinda, Punjab.
14. Participated in two weeks FDP sponsored by All India Council for Technical Education (AICTE), New Delhi on “Futuristic Trends in FPGA & ASIC Design” (**10th – 21st December, 2019**) at CDAC Mohali.
15. Participated in Online AICTE Recognized Faculty Development Programme on “Internet of Things” from 10/04/2020 to 14/04/2020 (One Week) Organized by Computer Science and Engineering Department NITTTR Chandigarh, MHRD, Govt. of India.
16. Participated in the Online AICTE Recognized Faculty Development Programme on “Low Power VLSI Design” Conducted by Electronics and Communication Engineering Department from 20/04/2020 to 24/04/2020 (One Week) at NITTTR, Chandigarh, MHRD, Govt. of India.
17. Participated in the Online AICTE Recognized Faculty Development Programme on “Research Trends in VLSI Design” Conducted by Electronics and Communication Engineering

Department from 25/05/2020 to 29/05/2020 (One Week) at NITTTR, Chandigarh, MHRD, Govt. of India.

18. Participated in Online AICTE & ISTE approved One Week Faculty Development Program on "Enhancing Research Capabilities" from 1st to 5th June, 2020, organized by Society of Materials and Mechanical Engineers (SOMME) Bathinda.
19. Participated in One Week Online Short Term Course on "Nanotechnology for Electronic and Photonic Devices" (NanoDev 2020), 15-19 June 2020 organized by Department of Electronics & communication Engineering, PEC (Deemed to be University), Chandigarh.
20. Participated in 5-Days Online University approved Faculty Development Programme on "Emerging Trends in Engineering & Technology" (ETET-2020), 6th -10th July, 2020 organized by Department of Electronics & communication Engineering in collaboration with Department of Textile Engineering at GSCCET, MRSPTU, Bathinda.
21. Participated in International Webinar on "21st Century: WOMANAGERS Challenges and Strategies" organized by Women Development Cell Baba Farid College of Engineering and Technology, Bathinda on 30th June 2020.
22. Participated in National Webinar on "Emotional Intelligence is a Challenge or Opportunity for Woman Empowerment" organized by Women Development Cell, Baba Farid College of Engineering and Technology Bathinda on 15th July 2020.
23. Participated in the AICTE-ISTE approved Orientation/Refresher Programme on "Recent Developments in AI and Robotics" organized by Baba Farid College of Engineering and Technology, Bathinda, Punjab held during 07.12.2020 to 12.12.2020.
24. Participated in Online Short Term Course on "Integrated Optics", 18th -22nd Jan, 2021 organized by Electronics & communication Engineering department, Punjab Engineering college (Deemed to be University) Chandigarh supported by Technical Education Quality Improvement Programme (TEQIP-III).
25. Participated in AICTE & MRSPTU approved One Week (6-Day) Short Term Training Program on "Internet of Things & its Applications" from 15th-20th February 2021, organized by Department of Electronics & Communication Engineering, Giani Zail Singh Campus College of Engineering & Technology, Maharaja Ranjit Singh Punjab Technical University, Dabwali Road, Bathinda.
26. Participated in the AICTE-ISTE approved Orientation/Refresher Programme on "Recent Developments in AI and Robotics" organized by Baba Farid College of Engineering and Technology, Bathinda, Punjab held during 22.03.2021 to 27.03.2021.
27. Participated in the Webinar on "How to Publish a Quality Technical Paper" organized by I. K.G P.T. U Jalandhar, in collaboration with IEEE Advanced Technology for humanity on 20 May 2021.
28. Participated AICTE Training And Learning (ATAL) Academy online Elementary FDP on "Nano-technology for Electronics and Photonics Devices (NanoDev-2021) from 12th July 2021 to 16th July 2021.
29. Participated in Online AICTE Recognized Faculty Development Programme on "Digital and Analog VLSI Design" from 13/09/2021 to 17/09/2021 (One Week) Organized by Electronics and Communication Engineering Department NITTTR Chandigarh, MHRD, Govt. of India.
30. Participated in Online AICTE sponsored QIP Short Term Course on "Visual Cognition" from 4/10/2021 to 9/10/2021 (One Week) Organized by Electronics and Communication Engineering Department NITTTR Chandigarh, Ministry of Education, Govt. of India.
31. Participated in Online AICTE Sponsored Faculty Development Programme on "Trends and Issues in VLSI and Communication Engineering" from 25/10/2021 to 30/10/2021 (One Week) Organized by Department of Electronics and Communication Engineering, GJU S & T Hisar.

32. Participated in one-day Workshop on “Funding Opportunities in Electronics Engineering” in collaboration with IEEE Chandigarh Subsection, on 26/11/2021 Organized by Department of Semiconductor Research Center, Department of Electronics and Communication Engineering, Punjab Engineering college (Deemed to be University), Chandigarh.
33. Participated in Online AICTE Sponsored Faculty Development Programme on “Advances in Optoelectronics, Devices and Communication” from 17th January, 2022 to 22th January, 2022 organized by Department of Electronics and Communication Engineering, Guru Jambheshwar University of Science & Technology, Hisar, Haryana.
34. Participated in Online AICTE Recognized Faculty Development Programme on “Nano-electronics: Materials, Devices and Circuits” from 24/01/2022 to 28/01/2022 (One Week) Organized by Electronics and Communication Engineering Department NITTTR Chandigarh, Ministry of Education, Govt. of India.
35. Participated in One Week Online Event “Enhancing Emotional immunity” under Student Faculty Exchange Program during 21st February to 25th February, 2022 organized by Jaipur Engineering College & Research Centre, Jaipur, Rajasthan.
36. Participated in Online AICTE Recognized Faculty Development Programme on “Industry Oriented STC on VLSI Design Tools” from 21/03/2022 to 25/03/2022 (One Week) Organized by Electronics and Communication Engineering Department NITTTR Chandigarh, Ministry of Education, Govt. of India.
37. Participated in Staff Development Programme on [Microsoft Office](#) from 04th August, 2022 to 08th August, 2022 organized by the [Baba Farid College of Engineering and Technology, Bathinda \(Punjab\)](#).
38. Participated in Online one week “Meditation Course” organized by Spiritual Research cell, Jaipur Engineering college and Research center, Jaipur from 19 September 2022 to 26 September 2022.
39. Completed Faculty Development Programme from 18th October 2022 to 21th October 2022 on “Communication and Employability Skill” under “LifeSkills” program organized by Rubicon at [Baba Farid College of Engineering and Technology, Bathinda, Punjab](#).
40. Participated in the 'Faculty Development Program' on “Research Methodology”, jointly organized by the Department of Computer Science & Engineering and Department of Computer Applications, under aegis of Institution's Innovation Council, in 2 phases: Phase1: 31st march 2023- 2April 2023 and Phase 2: 7th April-9th April 2023 from Echelon Institute of Technology Faridabad.
41. Participated in Webinar on “How to Master a new Skill” on the occasion of “National Civil Service Day” dated on 20th April 2023 by Shiksha Mandali Foundation.
42. Attended one day National Seminar sponsored by Haryana State Council of Science, Innovation and Technology (Directorate of Science & Technology), Govt. Of Haryana on the occasion of National Technology Day (NTD)-2023 on “Understanding New Technologies for Sustainable Development” dated on 11th May 2023.
43. Participated in One-week National Faculty Development Program on Cloud Infrastructure (AWS) organized by Dept. of CSE, JNTUK University college of Engineering Narasaraopet, Andhra Pradesh in Collaboration with Brainovision Solution India Pvt. Ptd and AICTE dated on 21st to 25th August 2023.

44. Participated in the AICTE Recognized Faculty Development Programme on MATLAB for Engineering and Science Teachers Conducted by Applied Science Department from 16/10/2023 to 20/10/2023 (One Week) at CDLSIET, Panniwala Mota (Sirsa).
45. Participated in the Short-Term Course on “Modern VLSI Design and EDA Tools Hands-on” Organized by the Department of Electronics and Communication Engineering from 2nd to 8th November, 2023 at NIT Delhi.
46. Participated in Faculty development program on “Emerging Tech for Educators: AI, IoT, Robotics, & AR/VR supported by Meity, Govt. of India, conducted by Electronics and ICT Academy, C-DAC Mohali, from 5th August 2024 to 9th August 2024.

➤ **MOOC Course attended**

- Completed 12 Weeks online Course on “Introduction to Semiconductor Devices” from IIT Hyderabad NPTEL Swayam (Funded by MoE, Govt of India) from July- Oct 2022.
- Completed 12 Weeks online Course on “Digital Electronic Circuits” from IIT Kharagpur NPTEL Swayam (Funded by MoE, Govt of India) from Jan- April 2023.
- Completed 12 Weeks online Course on “Digital System Design” from IIT Madras NPTEL Swayam (Funded by MoE, Govt of India) from Jan- April 2024.
- Completed 12 Weeks online Course on “Digital Circuits” from IIT Kharagpur NPTEL Swayam (Funded by MoE, Govt of India) from Jul- Oct 2024

➤ **Expert Lecture delivered**

- Delivered an Expert lecture on "Recent Trends in Nanotechnology- Investigation ON CNT" in OITM Hisar dated on 23/9/2017.
- Delivered an Expert lecture on "Nano Scale devices-CNT, NWFET & GNRfet" in CDAC Mohali dated on 11/1/2018.
- Delivered an Expert lecture on "Futuristic Trends of Digital Electronics-Binary to Ternary Logic" in PPIMT Hisar dated on 01/10/2018.

➤ **Question paper setup:**

- Question paper set for May-june 2023 for Guru Gram University Haryana
- Question paper set for Aug Dec 2023, May-june 2023 for MRSPTU Bathinda
- Question paper set for Aug Dec 2024 for MRSPTU Bathinda

➤ **Responsibilities held / Participation in other Academic Activities**

- Member, BOS ECE Dept. M.R.S.P.T.U Bathinda. (2020-26)
- Academic In-charge Department of Electronics & Communication Engineering, BFCET

Bathinda.

- R & D Co-coordinator of Department of Electronics & Communication Engineering, BFCET Bathinda.
- Co-coordinator, B. Tech Admission Cell of the College (2016-18) in BFCET.
- Head of the Department of Electronics & Communication Engineering, PPIMT Hisar.
- An Active Member of Women grievance cell, PPIMT Hisar.
- An active member of Mentorship club in PPIMT Hisar.
- Coordination in National Level Techno fest ,2005
- An active member of National Level Techno fest, 2004

➤ **ACHIVEMENTS**

- Gold –Medalist M. Tech (2007-2009) Batch from G.J.U S &T, Hisar, 16-02-2011.
- Approved from Kurukshetra University, Kurukshetra. Vide no. CBA-258B/2011/2481 Dated 23-Feb-2011.
- Certificate of Appreciation Session (2009-2011) as An Active Member Of Women Cell from JCDCOE, Sirsa.
- Best Teacher Award in BFCET for the session Aug 2016-2017 on the occasion of teacher day celebration on 5th Sep 2017.
- Best Researcher Award in BFCET for the session Aug 2018-2019 on the occasion of teacher day celebration on 5th Sep 2019.
- Certificate of appreciation for outstanding contribution in BFGI Promotion the session on 24th April 2019.
- Certificate of appreciation for outstanding contribution in BFGI admission for the session on 2023-24.
- Got a grant of Rs. 2 lakh for AICTE VAANI sponsored 2 day workshop on 6-7 June 2024.

➤ **Tools Proficiency:** Mentor Graphics Tools, Micro-wind, MATLAB, Tanner, Spice, TCAD-ViDES, FET-Toy.

➤ **Personal Details**

- Husband Name Er. Manik Goyal
- Date of Birth 27th September 1984
- Marital Status Married
- Language Known English, Hindi & Punjabi
- Nationality Indian

➤ **Declaration:**

I certify that the above information provided by me is true to my knowledge and belief.

Place:

Date:

(Dr. Suman Rani)