



(Dr.Nupur Mittal)

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[Google scholar](#)

, | [ORCID,Scopus](#) | [WOS](#), | [Research gate](#)
, | [linked](#)

PROFILE

- **Assistant Professor** in Electronics & Communication Engineering Department at Integral University Lucknow from 01-03-2012 to till date.
- **Lecturer** in Electronics & Communication Engineering Department at Integral University Lucknow from 07-03-2008 to 28-02-2012.
- **Lecturer** in Electronics and Communication Department at Saroj institute of Technology and Management, Lucknow, U.P from 06-09-2007 to 06-03-2008
- **Embedded engineer** on the project of design and development of digital hearing aid in Quazar Technology, New Delhi from 06-09-2006 to 05-09-2007.

RESEARCH INTEREST:

- Electronics Circuits and Systems
- Analog Filters
- Current Conveyors
- Signal Processing

SUMMARY OF RESEARCH ACCOMPLISHMENT:

- 2 SCI Research papers
- 4 Scopus Research Papers
- 2 Book chapters
- 2 Patents Published/ Granted
- Reviewed Scopus and reputed Conferences Papers

PROFESSIONAL MEMBERSHIP:

- SESI

- IEEE Women in Engineering (till 2018)

COURSE TAUGHT:

- Basic Electronics
- Digital electronics
- Electronics Devices and Circuits
- Communication System
- Microprocessor
- Computer Networks

ADMINISTRATIVE/DEPARTMENTAL RESPONSIBILITY

- Worked as a Lab Coordinator in Electronics & Communication Engineering Deptt. Integral University, Lucknow from 2019 to till date.
- Worked as a Course Coordinator in Electronics & Communication Engineering Deptt. Integral University, Lucknow from 2016 to till date.
- Worked as Criterion 2 incharge in NAAC Accreditation to till date.
- Technical Programme Co-Chair “First IEEE International Conference on Computational and Characterization Techniques in Engineering & Sciences” (CCTES-18) (IEEE Conference #44023) scheduled on September 14-15, 2018
- Worked as Finance Officer in International Symposium on “Computational and Characterization Techniques in Engineering & Sciences” (CCTES-17) held on March 20, 2017.
- Worked as Co-Organizing Secretary in International Seminar on “Present Scenario & Future Prospectives of Research in Engineering and Sciences” (ISPSFPRES-17) held on January 21, 2017.
- Organizing Committee Member in National Seminar on “Power of Setting Goals” on August 20, 2016.
- Organizing Committee Member in Two Days National Workshop on “Energy Conservation & Energy Audit” ECEA-16 held on February 26-27, 2016.
- Organizing Committee Member in National Workshop on “Entrepreneurship options in the field of engineering and pioneering internet of things” held on January 25, 2016.
- Organizing Committee Member in National Workshop on “Emerging trends In Communication Engineering and Image Processing” held on October 17 , 2015.
- Organizing Committee Member in National Conference Emerging Trends in Non-Conventional Energy Resources (ETNCER-16) held on October 22, 2016.

STUDENTS SUPERVISION

M.TECH DISSERTATION SUPERVISION

- Design and Simulation of Low Power, High gain and High bandwidth CMOS Folded Cascode OTA Using Recycling and g_m/I_D Technique (Sudhakar, Integral University, Lucknow, 2021)

- Low Pass FIR Filter Design using advanced Optimization techniques with Constriction Factor and Inertia Weight Approach (Reema Singh, Integral University,2014)

PUBLISHED/GRANT PATENTS

- **Germany Utility Patent Application No. :20 2022 106 913.1.**
Title of the invention: ELECTRONIC COMMERCE SUPPLY CHAIN MANAGEMENT SYSTEM FOR DECORATIVE MATERIALS USING MACHINE LEARNING
Date of Grant: 9th Day of January 2023
Name of Patent Applicants & Inventors: K. Kumar, S. Kant, I.U. Khan,U.Kumar, **Nupur Mittal**, J.B.Khan, B.K.Pandey, R.Singh
- **UK Design Number:** 6378283
Title of the invention:” Charging Station for Hybrid Electric Vehicles”
Date of Grant : 22 July 2024
Name of Patent Applicants & Inventors: Dr. Mohammad Asif Indravadan Gandhi, Anguraj Ramasamy, Dr. Gudipudi Nageswara Rao, Dr.Mada Venkata Ramana Rao, Mrs. Kiranmayee Jampala, Dr. Neeraj Kumar, Dr. Uma Ravi Sankar Yalavarthy, **Dr. Nupur Mittal**, Anthony Savio Herminio da Piedade Fernandes

PUBLISHED/ACCEPTED SCI/SCOPUS RESEARCH PAPERS

- Mittal, N., Khan, I. U., & Khan, Z. H. (2024). Design a low-power low-pass nano dimension based filter with high linearity for next-generation WSN. *International Journal of Nano Dimension*, 15(4), 1-10. <https://doi.org/10.57647/j.ijnd.2024.1504.27>
- Mittal, N., Khan, I. U., & Misra, N. K. (2023). A low-power, wideband-tunable, nano-dimension based CMOS LC ladder filter designed using GmC. *International Journal of Nano Dimension*, 14(3), 238-256. <https://doi.org/10.22034/ijnd.2023.1986547.2222>
- Mittal, N., Khan, I. U., & Charan, P. (2023). Design and performance analysis of low power fully integrated tunable bandpass filter. *Materials Today: Proceedings*. <https://doi.org/10.1016/j.matpr.2023.03.369>
- “Mittal, N., Khan, I. U., & Charan, P. (2022, January). Design of power-efficient operational transconductance amplifier in the application of low pass filter using 180 nm cmos technology. In *International Conference on Electrical and Electronics Engineering* (pp. 140-151). Singapore: Springer Nature Singapore. http://dx.doi.org/10.1007/978-981-19-1742-4_11
- Siddiqui, Y., Mittal, N., & Khan, I. U. (2021, December). Performance Analysis and Characterization of Double Gate and Gate All Around MOSFET. In *2021 10th International Conference on System Modeling & Advancement in Research Trends (SMART)* (pp. 614-617). IEEE. <http://dx.doi.org/10.1109/SMART52563.2021.9676257>
- Mittal, N., Khan, I. U., & Shukla, S. (2020, December). Comparative Analysis of Reconfigurable Low Pass Filter using Biquad Active, Ladder G m-C and Multiple Loop Feedback Techniques.

In 2020 9th International Conference System Modeling and Advancement in Research Trends (SMART) (pp. 398-401). <http://dx.doi.org/10.1109/SMART50582.2020.9336804>

- Nupur Mittal “Multifunction Filter based on Current Controlled Conveyor (DOCCCII)”, Indian Journal of Science and Technology, (ISSN (Online) : 0974-5645), Volume 11, Issue 6, February 2018. <https://dx.doi.org/10.17485/ijst/2018/v11i6/117628>

- **PAPER PUBLISHED IN INTERNATIONAL CONFERENCES**

- I. U. Khan, M. A. Ansari and N. Mittal “Performance Evaluation of Deblocking Filter for H.263 Video Codec and Proposed Algorithm for Deblocking Filter and Entropy Coding for MPEG-4 Video Codec” is presented and published in “IEEE International Conference on Computational Intelligence & Communication 7 Technology (CICT-2015)” from 13 -14 February, 2015. Technically Sponsored by the IEEE UP Section at ABES Engineering College Ghaziabad, India.
 - Nupur Mittal, Firdaus Majeed, HasinAlam, “A Novel Simple Current Amplifier and Voltage Amplifier based on 350nm”, International Conference On VLSI, MEMS &NEMS VMN-2012, ECE Deptt., Amity School of Engineering & Technology, Amity University, Uttar Pradesh , Noida.
 - Firdaus Majeed , Nupur Mittal , HasinAlam, “Redesign of Current Controlled Conveyor (CCCII) and its Digital Application in 350nm CMOS Technology” International Conference on Emerging Trends in Engineering and Technology College Of Engineering, Teerthanker Mahaveer University.
 - I. U. Khan, N. Mittal, H. Yaquin&S.H.Saeed“Context Adaptive Binary Arithmetic Coding Algorithm for H.264/AVC Video Code and Overview of H.265” is presented and published to International Conference on Electrical,Electronics,Computers,Communication, Mechanical and Computing (EECCMC) at Priyadarshini Engineering College, Chettiyappanur, Vaniyambadi - 635751, Vellore District, Tamil Nadu, India.Conference ID: 43456XP
 - Y.Siddiqui,Nupur Mittal, I. U. Khan, “Performance Analysis and Characterization of Double Gate and Gate All Around MOSFET” Presented and Published in “2021 10th IEEE International Conference on System Modeling & Advancement in Research Trends (SMART)”, held on 10-11 December, 2021.
 - N. Mittal, I. U. Khan, S. Shukla, “Comparative Analysis of Reconfigurable Low Pass Filter using Biquad Active, Ladder Gm-C and Multiple Loop Feedback Techniques” Presented and Published in “2020 9thInternational Conference System Modeling and Advancement in Research Trends (SMART)”, held on 04-05 December 2020.
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PUBLISHED NON-SCI-SCOPUS BUT PEER REVIEWED RESEARCH PAPERS

- Nupur Mittal ,Piyush Charan and Firdaus Majeed, “**A Novel Tunable High Frequency Sinusoidal Oscillator Based on the Second Generation Current Controlled Conveyor**”

(CCCII)", International Journal of Scientific and Research Publications, Vol. 3 Issue 9, Sep'2013.

- Nupur Mittal and Reema singh ,” **Adjustable PSO Based FIR Filter Design Using Advanced Error Function Approach Of Minimizing Frequency Response Ripples**”, International Journal of Emerging Technology & Advanced Engineering (ISSN 2250-2459, ISO 9001:2008 Certified Journal), Volume 3, Issue 10, October 2013.
- Sudhakar,KhanI. U. and Mittal N., “Design and Simulation of Low Power, HighGain and High Bandwidth CMOS Folded Cascode OTA Using Recycling and gm/IDTechnique” published in International Research Journal of Computer Science(IRJCS),Volume8,Issue03,March 2021.DOI:<https://doi.org/10.26562/irjcs.2021.v080>.
- Nupur Mittal ,Piyush Charan and Firdaus Majeed“**All Pass tunable Universal Filter based on second generation dual output Current Controlled Conveyor(DOCCCII)**”, International Journal of Electronics Communication and Computer Engineering, Volume 5, Issue 5, ISSN(online): 2249-071X, ISSN(print) : 2278-4209 (2014).
- International Journal of Technical Research and Applications-“**Performance Evaluation of the second generation Current Controlled Conveyor(CCCII)** in year 2014.

BOOK CHAPTERS

- “Design of power-efficient operational transconductance amplifier in the application of low pass filter using 180 nm CMOS technology,” in Innovations in Electrical and Electronic Engineering Volume 1. Springer, 2022, pp. 140–151.
 - “Applications of VLSI Design in Artificial Intelligence and Machine Learning” in MACHINE LEARNING TECHNIQUES FOR VLSI CHIP DESIGN, scrivener publishing partner with Wiley
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