Resume of Dr. Neelofer Afzal

Personal Details

Surname: Afzal
First Name: Dr. Neelofer
Designation: Professor
Address: Department of Electronics and Communication Engineering
Faculty of Engineering & Technology
Jamia Millia Islamia (Central University, Government of India)),
New Delhi-110025
Telephone: 91-011-26981284
Mobile No.: 91-9818609096
Email: nafzal@jmi.ac.in

Education and qualifications

Qualification	School / University	Year	Subjects
P.hd	Jamia Millia Islamia (Central govt. Univ.) New Delhi	2009	**Topic**: Digitally Programmable Analog Signal Processing Circuits using CCII
M.Tech	Z.H. College of Engineering & Technology AMU, Aligarh UP	2000	Electronic circuits and System design
B.Tech	Z. H College of Engineering & Technology AMU, Aligarh UP	1997	Electronics Engineering

Courses taught at postgraduate and undergraduate level:

Advanced communication networks at PG level and Analog Electronics-I, Communication Networks, Computer organization & Architecture, Basics of Electronics and communication Engineering, Data communication and computer networks, Communication engineering, Fundamental of computers and programming language, Basic Electronics at UG level

Work

Date	Name and address of the employer
2000 Nov- 2001 Feb	Visiting faculty, Electronics Engineering Department, JMI New Delhi-110025
2002-2007	Lecturer (Permanent) Electronics Engineering Department, JMI New Delhi-110025

2007-2012	Assistant Professor, Electronics Engineering Department, JMI New Delhi-110025.
2012-2015	Sr. Assistant Professor, Electronics Engineering Department, JMI New Delhi-110025
2015-2018	Associate Professor
2018….current	**Professor**

Research activity/(P.hd thesis supervising / supervised)

Date	Scholar name	Thesis title
2011 – 2015	Dr. Devesh Singh	Analog signal processing circuits using digitally programmable current conveyors. (Awarded)
2014 - 2018	Ms Charu Rana	Low voltage low power analog signal processing circuits. (Awarded)
2015-2020	Ms Anu Tonk	Realization of analog modules using current conveyors (Awarded)
2015 – 2021	Ms Seema Jugad	Analog signal processing circuits using CNTFET (Awarded)
2016 - 2024	Mr. Mr Shalinder Bisoya	Reconfigurable analog modules using CDTA. (Awarded)
2017	Suvarna Mujumdar	Design and simulation of CNT based high performance analog signal processing circuits. (submitted)
2021	Ms Neha Mubarak	Steep Subthreshold slope Energy efficient devices
2021	Ms Taranum Parveen	Analog signal processing circuits using GRNFET

Academic and Administrative responsibilities

1	Teaching and Research
2	Dean Students' Welfare
3	Provost, Begum Hazrat Mahal Hall of Girls' Residence
4	Institutional Nodal officer for PM-Vidyalaxmi Scheme
5	Nodal Officer Independence Day Celebration-2025
6	Chairperson University Cultural committee
7	Advisor Cyber Club
8	Chairperson University Film Committee
9	Advisor Gender Champion club
10	External expert for PhD. RDC in the Department of ECE, Integral University, 2024.
11	Member ICC (Internal complaint committee for sexual harassment of Women) (2016-2024)
12	Member GATI (Gender Advancement Transforming Institute)

13	Member BOS Department of Civil Engineering JMI (2021-2024)
14	Member DRC Department of Electronics & Communication Engg. JMI.
15	VC nominee for the interview board of Ph.D admission in Deptt. Of Islamic Studies JMI
16	Former Coordinator B.E, Electronics and Communication Engineering JMI
17	Former Student Advisor in Department of Electronics and Communication Engineering
18	Former Incharge Tour
19	FormerTimetable Incharge
20	Coordinator Universal Human Values (2021-2022)
21	Warden Begum Hazrat Mahal Girls' Hostel (2017-2018)

Participation in Workshops/Conferences/Seminars/Summer/Winter Schools etc.

Duration	Title of workshops/ seminars/ conferences	Organized by	Venue
06/05/03 To 04/06/03	Orientation Programme	UGC-ASC, JMI. Delhi.	Academic staff college JMI
07/12/06 To 28/12/06	Refresher Course in Computer Science	UGC-ASC, JMI. Delhi.	Computer Science Department JMI
06/02/09 To 12/02/09	Short term training programme on Applications of solar Energy and earned carbon credits.	I.I.T Delhi. sponsorship by AICTE	I.I.T Delhi
09/07/09 To 15/07/09	Short term training programme on Learning and Sustainability for Engg. Education.	I.I.T Delhi. sponsorship by AICTE	I.I.T Delhi
04/02/10 To 10/02/10	Short term training program on Alternative sources of energy.	I.I.T Delhi. sponsorship by AICTE	I.I.T Delhi
08/02/11 To 14/02/11	Short term training program on Building integrated photovoltaic thermal system.	I.I.T Delhi. sponsorship by AICTE	I.I.T Delhi
09/12/11 To 11/12/11	Staff Development Programme on Recent advances in electrical power & energy systems.	JMI. Delhi Sponsored by AICTE	Electrical Engineering Deptt. JMI
09/12/14 To 15/12/14	Short term training program on Advances in solar energy technologies.	I.I.T Delhi. sponsorship by AICTE	I.I.T Delhi
27/02/15 To 12/03/15	Faculty development Programme on Mechatronics &Robotics in Manufacturing Industries.	JMI, Sponsored by AICTE	Faculty of Engg. JMI

SESSION CHAIRS

1. Session Chair REEDCON 2023, 01-03 May 2023, International conference on Recent Advances in Electrical, Electronics & Digital Healthcare Technologies 2023. Department if Electrical Engineering, JMI.

2. Session chair, ETEC-2017, 27-28 January, ETEC-2017, AKGEC, Ghaziabad.

3. Session Chair, INDICON 2015, 17-20 December, Department if Electrical Engineering, JMI.

RESEARCH PUBLICATIONS

1. Seema Jogad, Hend I. Alkhammash, **Neelofer Afzal** and and Sajad A. Loan, "CNTFET based active grounded inductor using positive and negative current conveyors and applications" , International Journal of Numerical Modelling: Electronic Networks, Devices and Fields., April 2021. doi:10.1002/jnm.2895.

2. Shailendra Bisariya, **Neelofer Afzal**, "Design and implementation of CCTA for low power applications: a review", Recent Advances in Electrical & Electronic Engineering, 14, 4, pp. 406-414, (2021) https://doi.org/10.2174/2352096514999201217144502 [ESCI & Scopus].

3. Jogad, S., Loan, S. A., **Afzal, N**., & Alharbi, A. G. (2020). CNTFET based class AB current conveyor II : Design, analysis and waveform generator applications". International Journal of Numerical Modelling: Electronic Networks, Devices and Fields. May 2020.
   doi:10.1002/jnm.2783.

4. Shailendra Bisariya, **Neelofer Afzal**, "Design and implementation of CDTA: a review", Sadhana (Springer), 45, 282 pp. 1-24, (2020) https://doi.org/10.1007/s12046-020-01511-1 [SCI].

5. Tonk, A. & **Afzal, N**. New low-voltage universal filters using bulk-driven second generation current conveyors. IEIE Korea, Journal of Semiconductor Technology & Science , Nov. 2019. Accepted with revision (SCIE).

6. Tonk, A. & **Afzal, N**. A New Low-Voltage Universal Filter Realization Using Bulk-driven Second Generation Current Conveyors. Taylor & Francis, Australian J. Electrical and Electronics Engineering, volume. 16, issue 4, pp. 256-265, Aug. 2019. (ESCI, Scopus).

7. Tonk, A. & **Afzal, N**. Second Generation Fully Differential Current Conveyor based Analog Circuits. IOP, Journal of Semiconductors, volume 40, issue 4, 042401, Apr. 2019. (ESCI, Scopus).

8. Tonk, A. & **Afzal, N**. Realization of Analog Circuits using Bulk-driven Second Generation Current Conveyors, ASEE, Journal of Engineering Technology, volume 9, issue 1, pp. 281-210, Jul. 2019. (SCIE).

9. Tonk, A. & **Afzal, N**. Ultra-low voltage operable bulk-driven second generation current conveyor based filters with single-input and single-output, Taylor's University, Journal of Engineering Science and Technology, volume 4, issue 1, pp. 216-226, Feb. 2019. (ESCI, Scopus).

10. Tonk, A. & **Afzal, N**. On advance towards sub-sampling technique in phase locked loops- A review. Elsevier, Integration-the VLSI journal, volume 59, pp. 90-97, Sep. 2017. (SCI).

11. Charu Rana, **Neelofer Afzal**, Dinesh Prasad, "A high performance grounded voltage controlled positive Resistor", Journal of Engineering Technology. (SCIE– to be published in December 2017 as journal is biannual).

12. Charu Rana, **Neelofer Afzal**, Dinesh Prasad, "A Low Voltage Low Power High Performance FGMOS based Current Mirror", *Contemporary Engineering Sciences*, Vol. 10, no. 6, 263 – 271, 2017. (Scopus) JOURNAL.

13. Charu Rana, **Neelofer Afzal**, Dinesh Prasad, "High performance voltage controlled positive resistor", *Journal of Engineering and Technology*, 2017 (SCIE – to be published in December 2017 as journal is biannual).

14. Charu Rana, **Neelofer Afzal**, Dinesh Prasad, "A Simple FGMOS Based Programmable Resistor Simulator and Its Application", *International Journal of Intelligent Systems and Applications*.

15. **N. Afzal**, "Carbon Nanotube based circuit designing: Review" International Journal of Engineering research and Development. Volume 13, issue 1 (January 2017) pp- 56-61.

16. N. Afzal, "Hardware Implementation of Fuzzy Processors: A Review." International Journal of Engineering research and Development Volume 13 issue

2 (February 2017) pp. 55-61

17. N.Afzal, “Digitally Programmable Versatile Grounded Multiplier using CCII” Volume 13 issue 2 (February 2017) pp. 62-66, International Journal of Engineering research and Development.

18. N. Afzal, CNTFET Based Analog and Digital Circuit Designing: A Review International Journal of Modern Engineering Research, Volume 7, Issue 2 Feburary 2017, pp. 17-23.

19. N. Afzal, Design and Development of Fuzzy Processors and controllers, International Journal of Modern Engineering Research volume 7 issue 2 Feburary 2017

20. D. Singh and **N. Afzal**, “Digitally programmable mixed mode universal filter using followers-A minimal realization,” Analog Integrated Circuits& Signal Processing (Springer), Published online 26th Nov. 2015. DOI 10.1007/s10470-015-0664-2 (IF-0.468).

21. **N. Afzal**, “Digitally Programmable Versatile Grounded Multiplier using CCII”, International Journal of Engineering research and Development Volume 13 issue 2 February 2017, pp. 62-66.

22. D. Singh and **N. Afzal**, D. Prasad, R. Srivastava, K. Panwar“ Digitally programmable voltage mode universal filters-A minimal realization”, Circuit & Systems (Scientific Research Publishing), vol. 6, pp. 213, 223, Oct. 2015. DOI: 10.4236/cs.2015.610022 (IF-0.82).

23. D. Singh and **N. Afzal**, “Fully digitally programmable Generalized mixed mode universal filter configuration,” Circuits System & Signal Processing (Springer), Published online 21st Jul. 2015. DOI: 10.1007/s00034-015-0125-2. (IF-1.118).

24. D. Singh and **N. Afzal**, “Fully digitally programmable voltage mode universal filter,” Analog Integrated Circuits & Signal Processing (Springer), vol. 81, no. 3, pp. 741-750. Dec. 2014. DOI 10.1007/s10470-014-0418-6 (IF-0.468).

25. **N. Afzal** and D. Singh, “Reconfigurable Mixed Mode Universal Filter,” Active and Passive Electronic Components (Hindawi Publishing corporation), Article ID 769198, pages-14, 2014. DOI:10.1155/2014/769198 (Scopus Indexed).

26. D. Singh and **N. Afzal**, “Digitally Programmable Current Conveyor Based Mixed Mode Universal Filter, ”International Journal of Electronics Letters (Taylor & francis) vol. 3, no. 3, pp. 170-185, 2015. DOI: 10.1080/21681724.2014.917714 (IF-0.459)

27. N. Afzal, “Digitally programmable four phase quadrature oscillator in current mode” International Journal of Electronics Communication and computer Technology. Vol 5, issue 2, march 2015.

28. N. Afzal, “Digitally programmable grounded impedance multiplier” International Journal of Engineering research and Development Vol. 11, issue 2, pp 24-25, Feb. 2015.

29. D. Singh and **N. Afzal**, “Digitally programmable high-Q voltage mode universal filter,” Radioengineering, vol. 22, no. 4, pp. 995-1006, Dec. 2013. (IF-0.653).

30. **N.Afzal**, “Digitally Programmable Floating Impedance Multiplier Using DVCC,” International Journal of Electronics Comm. and Computer technology. Issue 1, Vol. 3, Jan 2013.

31. **N. Afzal**, I.A. Khan, “Digitally Programmable Voltage Mode Quadrature Oscillator Using Current Conveyors” International Journal of Engineering research and Development Pp 55-61 vol. 5, Issue 8, Jan 2013.

32. Archna Agarwal, **N. Afzal**, Characteristics of Power Line Channel & Their Effects on Designing of Communication System. International journal of Advanced Engineering & Applications Pp. 135-137. Jan 2011.

33. A. Khan, **N. Afzal**, M. R. Khan, ”Digitally Programmable Impedance Multiplier using CCIIs with High Resolution Capability,”. Journal of Active and Passive Electronic Devices (USA) Vol. 8, pp - 247-257, 2009.

34. A. Khan, M. R. Khan, **N. Afzal**,”Digitally Programmable multifunctional current mode filter using CCIIs,” Journal of Active and Passive Devices. (USA) Vol.1, pp.- 213-220, 2006.

CONFERENCES

1. Shailendra Bisariya, **Neelofer Afzal**, "Sinusoidal oscillator using CCCCTA" In: 5th International Conference on SOFT COMPUTING AND SIGNAL PROCESSING (ICSCSP-2023) June 24, 25 2022, Springer book: Smart innovation, system & technologies, publication date: June 01, 2023.

2. Shailendra Bisariya, **Neelofer Afzal**, "Current-Mode Full-Wave Rectifier Based on Trans-conductance Boosted Bulk driven CDTA and Two Diodes", 2nd International Conference on Signals, Machines, and Automation (SIGMA) 2022, 05th - 06th August 2022;30-34, Springer book: Lecture Notes in Electrical Engineering series.

3. Jogad, S., **Afzal, N,** Loan, S. A. Selected for best paper in the track on " Design, Simulation and Comparative Evaluation of Active Filters Using 32-nm CNTFET-OTA". International Conference on Emerging Trends in Information Technology and Engineering (ic-ETITE) at VIT, Vellore. April 2020. Pp. 1-6
   D0i: 10.1109/ic-ETITE47903.2020.96. (**Best paper award**).

4. Jogad, S., **Afzal, N,** Loan, S. A. Presented and selected for best paper in the track on "A 32-nm CNTFET OTA based Integrator" JTACON 2020, Jamia Millia Islamia, New Delhi. Pp. 1-2. (**Best Paper Award**).

5. Jogad, S., **Afzal, N,** Loan, S. A. " Design and Simulation of Resistor Less Active Filter Using 22-nm CNTFET-Current Conveyor-II" 2019 IEEE. International WIE Conference on Electrical and computer Engineering (WIECON-ECE), Bangalore, India, march 2020, pp 1-5.
   Doi:10.1109/WIECON-ECE48653.2019.9019947.

6. Jogad, S., **Afzal, N,** Loan, S. A. Presented paper on " Sinusoidal Oscillator using 32-nm CNTFET-OTA " International conference on Electrical, Electronic Networks, Devices and Fields., April 2021 (UPCON'2019), AMU, Aligarh, India, Nov. 2019, pp 1-4. Doi:10.1109 UPCON47278.2019.8980199

7. Tonk, A. & **Afzal, N**. Bulk driven second generation current conveyor based all-pass section for low voltage operation. In proc. of IEEE conf. GUCON 2018 at Galgotia University, Greater Noida, Sep. 2018.

8. Charu Rana, **Neelofer Afzal** , Dinesh Prasad , Low voltage low power FGMOS based third generation current conveyor, ETAEERE DEC 5-6, 2016. Proceedings are published in Book chapter of springer book series: lecture notes in electrical engineering. Scopus.

9. Charu Rana, **Neelofer Afzal** , Dinesh Prasad, "A High Performance Bulk Driven Quasi Floating Gate MOSEFT Based Current Mirror", Proceedings of International Conference on Communication, Computing and Virtualization (ICCCV) january 2016 SCOPUS.

10. Charu Rana, **Neelofer Afzal**, "Advances in sensor networks using analog signal processing circuits" Recent Advances in Engineering and Computational Sciences (RAECS), 2014 Date of Conference: 6-8 March 2014 IEEE

11. D. Singh, **N. Afzal**, P. Choudekar and S. K. Yadav, "Digitally programmable grounded inductor," Int. Conf. Signal Process. and Integrated Networks (SPIN), Noida, India, 2014, pp. 492-496, , DOI: 10.1109/SPIN.2014.6777003.

12. D. Singh, **N. Afzal**, D. Asija and S. K. Yadav "Low Frequency Digitally Programmable Universal Filter for Communication System," Int. Conf. Signal Process. and Integrated Networks (SPIN), Noida, India, 2014, pp. 311-315. DOI:10.1109/SPIN.2014.6776969

13. I. A. Khan, **N. Afzal**, M. R. Khan, "Digitally Programmable Generalised Impedance Multiplier Using CCII". Proc. International Conference on Robotics, Vision, Information and Signal Processing- ROVISP (Nov. 28-30)2007, pp. 322-324, Penang Malaysia.

14. I.A. Khan, **N. Afzal**, M. R. Khan, "Digitally Programmable current mode four phase quadrature oscillator using CCIIs with high resolution capability",National Conference on Modern Trends in Electronics and Communication Systems. Pp. 207-209, March 8-9. 2008 (MTECS-2008). Organised by Department of Electronics. Faculty of Engg & Tech. AMU and IETE Aligarh India.

15. I.A. Khan, **N. Afzal** , "Digitally Prgrammable R, L, C Parameters" National Symposium & Expedetion on Modern Instrumention- Challenges & Vision (MICV-98) Pp. 85-89, 27-28 Feb 1999. Organised by Department of Electronics. Faculty of Engg & Tech. AMU and IETE

Book Chapter

1. Charu Rana, **Neelofer Afzal**, Dinesh Prasad , "Low voltage low power FGMOS based third generation current conveyor", *Book Chapter in Advances in Power Systems and Energy Management ETAEERE 2016*, Springer.(Scopus)

2. Tonk, A. & Afzal, N. Realization of analog filters for bio-signal processing using bulk-driven current conveyor based grounded inductance. Advanced Communication & Computational Technology, NIT KUK. 2019. Springer Lecture Notes in Electrical Engineering

3. Rana, C., Afzal, N., Prasad D. & Tonk, A. Low-Voltage Low-Power FGMOS-Based Current Conveyor III. Advances in Power Systems and Energy Management. Lecture Notes in Electrical Engineering, volume 436, Springer, Singapore. Nov. 2017 .