

## Resume of Dr. Dinesh Prasad



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6. Date of Birth: 05/07/1977
7. Date of Joining Service J.M.I.: 15/02/2002
8. Field of Specialization: Electronics and Communication Engineering, Bipolar and CMOS Analog Integrated Circuits, Nanoelectronics
9. Teaching Experience: Twenty Three Years
10. Research Experience : Twenty Years

### Google Scholar Citation:

<https://scholar.google.co.in/citations?user=YcouPHgAAAAJ&hl=en>

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### 11. Employment Profile

Job Title	Employer	From	To
Lecturer	AKGEC, Ghaziabad (U.P.)	10/09/2001	10/02/2002
Lecturer/ Assistant Professor	J.M.I., New Delhi	15/02/2002	14/02/2007
Assistant Professor (with AGP Rs. 7000/-)	J.M.I., New Delhi	15/02/2007	14/02/2012
Assistant Professor (with AGP Rs. 8000/-)	J.M.I., New Delhi	15/02/2012	14/02/2015
Associate Professor	J.M.I., New Delhi	15/02/2015	14/02/2018
Professor	J.M.I., New Delhi	15/02/2018	Till date

## 12. Academic Qualifications:

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D.	J.M.I., New Delhi	2010	-	Realization of Some Analog Signal Processing/ Signal Generation Circuits
M.Tech.	A.M.U., Aligarh	2001	First Division with Honors	Electronic Circuits and Systems Design
B.Tech.	I.E.T., Lucknow, University of Lucknow	1999	First Division	Electronics Engineering
Intermediate	U.P. Board	1994	First Division	Physics, Chemistry, Math, English and Hindi
High School	-do-	1992	First Division	Hindi, English, Science-two, Maths-two, Social Science and Biology

## 13. Research Guidance:

### PhD. Supervised: 11

Name of the PhD Scholar	Title of PhD Thesis
K. L. Pushkar	Some investigations into the Design of Analog Circuits
Mayank Srivastava	Investigations into analog signal processing/ signal generation circuits using new generation current-mode active elements
Ghanshyam Singh	Some investigations into the design of Analog Circuits using Transconductance-type building blocks
Javed Ahmad	Design and Development of Analog Signal Processing/ Generation Circuits
Charu Rana	Realization of Low voltage Low power Analog Signal Processing Circuits
Kuldeep Panwar	Some investigations into the design of Analog Circuits using Current Differencing Differential Input Transconductance Amplifier
Laxya	Carbon Nanotube FETs based current mode/ voltage mode modern active building blocks and their applications
Zainab Haseeb	Realization of immittances using modern active building blocks and their applications
Ravendra Singh	FTFNTA-based Analog Signal Processing/Generation Circuits
Adil Anam	Modeling and Simulation of Novel Nano-transistors
Umaiya Mushtaq	Exploring novel techniques for Designing Energy-Efficient and Robust Nanoelectronic Circuits

### PhD. Guiding: 05

Name of the PhD Scholar	Title of PhD Thesis
Zoya Ali	Design and performance analysis of CNTFET based Analog Circuits
Shyam Kishor Ranjan	Design of Nanosheet FET based circuits for low power applications
Zuber Rasool	Novel semiconductor devices for Spiking neural Networks (SNNs)
Amit Kumar Yadav	Non-Contact Electronics Devices for Healthcare Applications
Mohd Yusuf	Design of Emerging Nanoelectronic Circuits using Modern Devices and its Biomedical Applications

## 14. Publications

### (a) International Refereed Journal: (80)

- [1] Umayia Mushtaq, Md Waseem Akram and **Dinesh Prasad**, Aminul Islam, “An energy and area-efficient spike frequency adaptable LIF neuron for spiking neural networks”, *Computers and Electrical Engineering*, Vol. 119, pp. 109562, 2024.
- [2] Ravendra Singh and **Dinesh Prasad**, “Realization of Filter/Inverse Filter Topologies using single FTFNTA”, *Wireless Personal Communications* 138 (4), 2469-2488, 2024.
- [3] Aadil Anam, S Intekhab Amin and **Dinesh Prasad**, “Novel III-V inverted T-channel TFET with dual-gate impact on line tunneling, with and without negative capacitance”, *Microelectronics Journal* 151, 106-309, 2024.
- [4] Aadil Anam, S Intekhab Amin and **Dinesh Prasad**, “III-V material-based junction-free L-shaped gate normal line tunneling FET for improved performance”, *Semiconductor Science and Technology*, Vol. 39, No. 9, pp. 095004, 2024.
- [5] Aadil Anam, S Intekhab Amin and **Dinesh Prasad**, “Optimizing InGaAs/GaAsSb Staggered Bandgap U-Gate Line TFET with  $p^+$ -Pocket Implant and Negative Capacitance for Enhanced Performance”, *IEEE Transactions on Nanotechnology*, Vol. 23, 584 - 590, 2024.
- [6] Aadil Anam, S Intekhab Amin and **Dinesh Prasad**, “Exploring Intertwined quantum and cryogenic behaviour in ultra-scaled 10 nm MOSFET: a NEGF quantum ballistic simulation”, *Physica Scripta*, 99 (6), 065931, 2024.
- [7] Aadil Anam, S Intekhab Amin and **Dinesh Prasad**, “Raised Ge-Source with  $n^+$  pocket and recessed drain line TFET: A proposal for biosensing applications”, *Materials Science and Engineering: B*, Vol. 306, pp. 117456, 2024.
- [8] Umayia Mushtaq, Md Waseem Akram and **Dinesh Prasad**, Aminul Islam, “INDIDO: A novel low-power approach for domino logic circuits”, *Physica Scripta*, Vol. 99, No. 7, pp. 075914, 2024.
- [9] Mayank Srivastava, Ajay Kumar, Kapil Bhardwaj, Devesh Kumar Srivastava, Ramendra Singh and **Dinesh Prasad**, “New All-Optical Implementation of Fredkin Gate Suitable for Compact and Ultrafast Reversible Computing Applications”, *Indian Journal of Pure & Applied Physics (IJPAP)*, Vol. 62, No. 6, PP. 451-463, 2024/5/27.
- [10] A Anam, SI Amin, **Dinesh Prasad**, N Kumar and S Anand, “Analysis of III-V material-based dual source T-channel junction-less TFET with metal implant for improved DC and RF performance”, *Micro and Nanostructures* Vol. 181, September 2023, 207629
- [11] A Anam, SI Amin, **Dinesh Prasad**, N Kumar and S Anand, “Undoped vertical dual0bilayer TFET with a super-steep sub-threshold swing: proposal and performance comparative analysis”, *Semiconductor Science and Technology*, 38, 075005, 2023.
- [12] Z Ali, M Nizamuddin and **Dinesh Prasad**, “Design, simulation and comparative analysis of CNTFET based Astable Multivibrator”, *Analog Integrated Circuits and Signal Processing*, 1-15, 2023.
- [13] U Mushtaq, MW Akram and **Dinesh Prasad**, “Energy Efficient and Variability Immune Adder Circuits using Short Gate FinFET INDEP Technique at 10nm technology node”, *Australian Journal of Electrical and Electronics Engineering*, April 2022.

- [14] U Mushtaq, M W Akram, **Dinesh Prasad** and BC Nagar, "LCINDEP: a novel technique for leakage reduction in FinFET based circuits." *Semiconductor Science and Technology* 38, no. 1: 015003, 2022.
- [15] A Anam, N Kumar, SI Amin, **Dinesh Prasad**, S Anand, "Charge-plasma based symmetrical-gate complementary electron-hole bilayer TFET with improved performance for sub-0.5 V operation", *Semiconductor Science and Technology* 38 (1), 015012, 2022.
- [16] U Mushtaq, M W Akram, **Dinesh Prasad** and BC Nagar, "A Novel Energy Efficient and Process Immune Schmitt Trigger Circuit Design Using FinFET Technology", *Indian Journal of Pure & Applied Physics*, Vol. 60, pp. 387-394 May 2022.
- [17] Ravendra Singh and **Dinesh Prasad**, "Electronically Tunable SIMO type Mixed-mode Biquadratic Filter using Single FTFNTA" *Indian Journal of Pure and Applied Physics*. Vol. 59, No. 8, pp. 629-637, September 2021.
- [18] Ravendra Singh and **Dinesh Prasad**, "Electronic Tuneable Grounded and Floating FDNR using FTFNTA", *Australian Journal of Electrical and Electronics Engineering*, pp. 209-215, July 2021 <https://doi.org/10.1080/1448837X.2021.1948725>.
- [19] Mayank Kumar, **Dinesh Prasad**, Md. W Akram, "Fractional quadrature oscillator using VDTAs with grounded capacitors", *Indian Journal of Physics*, **96**, pages 1141–1152 (2022).
- [20] Ravendra Singh and **Dinesh Prasad**, "Novel Current-Mode Universal Filter using single FTFNTA" *Indian Journal of Pure and Applied Physics*. Vol. 58, No. 8, pp. 599-604, 2020.
- [21] **Dinesh Prasad** and Ravendra Singh, Ashish K. Ranjan and T.K. Huirem "Grounded Capacitors Single Resistance Controlled Oscillator using single FTFNTA", *Indian Journal of Pure and Applied Physics*. Vol. 58, No. 7, pp. 525-530, 2020.
- [22] Ravendra Singh and **Dinesh Prasad**, "Comment- An Active Inductor Employing A New FTFNTA", *International Journal of Electronics*, pp. 1-8, 2020.
- [23] Zainab Haseeb, **Dinesh Prasad**, Mainuddin, MW Akram, "Tunable Floating Resistor Based on Current Inverting Differential Input Transconductance Amplifier", *Circuits and Systems*, Vol. 11, No. 5, pp. 51-56, 2020.
- [24] **Dinesh Prasad**, Divyam Tayal, Ayesha Yadav, Laxya Singla, Zainab Haseeb, "CNTFET Based OTRA and its Application as Inverse Low Pass Filter", *International Journal of Electronics and Telecommunications*, Vol. 65, No. 4, pp. 665-670, 2019.
- [25] Amber Khan, Mariam Nida Usmani, Nashrah Rahman and **Dinesh Prasad**, "Pre-Processing Images of Public Signage for OCR Conversion", *Journal of Signal and Information Processing*, Vol. 10, pp. 1-11, 2019.
- [26] **Dinesh Prasad**, Mayank Kumar, Md Waseem Akram, "Current mode fractional order filters using VDTAs with Grounded capacitors", *Int. J. of Electronics and Telecommunication*, vol. 65, no. 1, pp. 11-17, 2019.

- [27] **Dinesh Prasad**, Zainab Haseeb, Mainuddin, Md. W. Akram, "Realization of resistorless floating inductor using modified CDTA", Indian Journal of Pure and Applied Physics, vol. 57, pp. 29-32, 2019. (SCI Listed Journal).
- [28] Laxya, **Dinesh Prasad**, Mainuddin, S. S. Islam "Current mode biquad filter using CNTFET based ZC-CITA", Indian journal of pure & applied physics. Vol. 57 PP. 90-94, Feb 2019.
- [29] Mohd Ashraf, Gaurav Baranwal, **Dinesh Prasad**, Saima Idris and Mirza Tariq Beg, "Performance Analysis of ASK and PSK Modulation Based FSO System Using Coupler-Based Delay Line Filter under Various Weather Conditions", Optics and Photonics Journal, Vol. 8, No. 8, pp. 277-287, 2018.
- [30] Laxya, **Dinesh Prasad**, Mainuddin, S. S. Islam "Low Power Low Voltage CNTFET-based VDIBA and its Application as Biquad Filter", Journal of engineering and technology. Vol. 7, pp. 383-393, 2018.
- [31] Chandra Ketu Yadav, **Dinesh Prasad**, Zainab Haseeb, Laxya and Mayank Kumar, "CM-Biquad Filter Using Single DO-VDBA", Circuits and Systems, vol. 9, pp. 133-139, 2018.
- [32] Mayank Kumar, **Dinesh Prasad** and M. W. Akram, "Current mode fractional order band pass and band reject filter using VDTAs", Indian J. Pure and App. Phy., Vol. 56, Issue 7, pp. 533-537, Jul 2018.
- [33] **Dinesh Prasad**, C. Rana and N. Afzal, "A Compact Tunable Floating Gate MOSFET based Resistor", J. on Electron. Engg, Vol. 8, Issue 3, pp. 1-4, 2018.
- [34] Kuldeep Panwar, **Dinesh Prasad**, Mayank Srivastava and Zainab Haseeb, "New Current Mode lossy Integrator Employing CDDITA", Circuits and Systems, vol. 9, pp. 117-123, 2018.
- [35] Charu Rana, **Dinesh Prasad** and Neelofer Afzal, "Low Voltage Low Power Current Differencing Transconductance Amplifier using FGMOS", Journal of Semiconductors, Vol. 39, no.9, 2018, pp. 1-18.
- [36] **Dinesh Prasad**, Javed Ahmad and Mayank Srivastava, "A novel grounded to floating admittance converter with electronic control", Indian Journal of Physics, Vol. 92, Issue 1, pp.49-56, Jan 2018, DOI 10.1007/s12648-017-1077-0.
- [37] Charu Rana, **Dinesh Prasad** and Neelofer Afzal, "High Performance Programmable Grounded Resistor and Its Applications", Automatika. DOI: 10.1080/00051144.2018.1498206.
- [38] Charu Rana, Neelofer Afzal and **Dinesh Prasad**, "Low Power Analog Computational Blocks Based On High Performance Floating Gate MOSFET Resistor", International Journal of Electronics, doi.org/10.1080/00207217.2018.1519858. (SCI Listed Journal).
- [39] Mayank Srivastava, **Dinesh Prasad** and D. R. Bhaskar, "New electronically tunable grounded inductor simulator employing single VDTA and one grounded

- capacitor', Journal of Engineering Science and Technology (Malaysia), 2017, vol. 12, no. 1, pp. 113-126.
- [40] Kuldeep Panwar, **Dinesh Prasad**, D. R. Bhaskar and Mayank Srivastava, "Novel single resistance controlled oscillator employing MCDDITA", Journal of Engineering Technology, Vol. 6, Issue 2, July, 2017, pp.352-358.
- [41] **Dinesh Prasad**, "Current Conveyor based RC Oscillators-A Review & Bibliography", International Journal of Electronics Engineering, vol. 9, issue 2, pp. 179-185, December 2017.
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- [43] 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).
- [44] Charu Rana, Neelofer Afzal and **Dinesh Prasad**, "A High Performance Bulk Driven
- [45] Quasi Floating Gate MOSEFT Based Current Mirror", Procedia Computer Science, vol. 79, pp. 747-754, 2016.(Scopus)
- [46] D. R. Bhaskar, **D. Prasad**, R. Senani, M. K. Jain, V. K. Singh and D. K. Srivastava, 'New Fully-Uncoupled Current-Controlled Sinusoidal Oscillator Employing Grounded Capacitors', American Journal of Electrical and Electronic Engineering (USA), vol. 4, no. 3, pp. 81-84, June 2016.
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- [56] **Dinesh Prasad**, Mayank Srivastava and D. R. Bhaskar, “Transadmittance - type universal current-mode biquad filter using voltage differencing transconductance amplifiers”, ISRN, vol. 2014, Article ID 762845, 4 pages.
- [57] **Dinesh Prasad**, D. R. Bhaskar and A. K. Singh, “Current Mode Biquad Filters using CFOAs: additional new realizations”, Journal of Active and Passive Electronic Devices (USA), JAPED, vol. 9, pp. 339-346, 2014.
- [58] Mayank Srivastava, **Dinesh Prasad** and D. R. Bhaskar, “Voltage mode quadrature oscillator employing single VDTA and grounded passive elements”, Contemporary Engineering Sciences, HIKARI, vol. 7, no. 27, pp. 1501-1507, 2014.
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- [61] **Dinesh Prasad**, D. R. Bhaskar and K. L. Pushkar, “Electronically controllable sinusoidal oscillator employing CMOS VD-DIBAs”, ISRN Electronics (USA), vol. 2013, Article ID 823630, 6 pages, <http://dx.doi.org/10.1155/2013/823630>
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- [63] K. L. Pushkar, D. R. Bhaskar and **Dinesh Prasad**, “ A new MISO-type voltage-mode universal biquad using single VD-DIBA” ISRN Electronics (USA), Volume 2013 (2013), Article ID 478213, 5 pages, <http://dx.doi.org/10.1155/2013/478213>.
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(b) **International Conference: (27)**

[1] Aadil Anam, S Intekhab Amin, **Dinesh Prasad**, “InSb Source-Based Heterojunctionless Nanowire Tunneling FET for Biosensing Application: Design and Analysis”, 2024 IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI), Vol. 2, 2024.

[2] Aadil Anam, S Intekhab Amin, **Dinesh Prasad**, “Performance Analysis of InSb Source-Based Heterojunctionless Nanowire TFET for Low-Power Application: Design and Simulation”, 2024 IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI) Vol. 2, pp. 1-6, 2024.

[3] D Ashique, MW Akram, **Dinesh Prasad**, “ Temperature Variation Comparative Characterization of Nanosheets based FET”, 2022 5th International Conference on Multimedia, Signal Processing and Communication Technologies (IMPACT), 2022.

[4] Ruchin Sharma, Dinesh Prasad and Ravendra Singh, “An Electronically Tunable Digitally Controlled Current Mode Quadrature Oscillator using DC-VDTA”, SIGMA-2022, NSUT, Delhi.

[5] A Anam, SI Amin and **Dinesh Prasad**, “Simulation study and comparative analysis of proposed novel hybrid DG-TFET with conventional TFETs structures for improved performance”, 2021 IEEE International Symposium on Smart Electronic Systems (iSES)(Formerly iNiS), pp. 311-315, Dec 2021.

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- [7] Ravendra Singh and **Dinesh Prasad**, “Grounded Lossy Inductance Simulator Using Single FTFNTA”, IEEE conference INDICON-2020, NSIT, New Delhi, 11-13 December, 2020.
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- [9] Zainab Haseeb, **Dinesh Prasad**, Mainuddin, MW Akram, “A Revolution Towards Current-Mode Circuits and Realization of A Novel Lossless Floating Inductor Using MCDCC”, IEEE International Conference on Intelligent Engineering and Management (ICIEM), pp. 110-114, 2020.
- [10] Kuldeep Panwar, Kapil Bhardwaj, Mayank Srivastava and **Dinesh Prasad**, “Grounded Parallel R-L impedance Simulator using CDDITA”, 2<sup>nd</sup> International Conference on Entrepreneurship, Innovation and leadership, Amity University, Noida, 2019.
- [11] Kapil Bhardwaj, **Dinesh Prasad**, Mayank Srivastava, Ajay Roy and Kuldeep Panwar, “Grounded Series R-L impedance Simulator using CDDITA”, 5<sup>th</sup> International conference on signal processing and communication, JIIT, Noida, March 2019.
- [12] Laxya, **Dinesh Prasad**, Mainuddin, S. S. Islam, “CNTFET based realization of voltage differencing transconductance amplifier” IOP conf. Series: materials science and engineering 225 (2017) 012253 doi:10.1088/1757-899x/225/1/012253.
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- [14] **Dinesh Prasad**, Javed Ahmad and Mayank Srivastava, “New CM/VM 3<sup>rd</sup>-Order Quadrature Oscillator using VDCCs”, Int. Conference on Applied System Innovation, Sapporo Japan, 13-17 May, 2017.
- [15] **Dinesh Prasad**, Laxya, Mainuddin and S.S. Islam, “Low Power low voltage CNFET-based Current Differencing Buffered Amplifier”, Int. conference on Signal Processing and Integrated Networks (SPIN-2017), Amity university, Noida, 2-3 Feb., 2017.
- [16] **Dinesh Prasad**, M. Srivastava, Laxya, F. Jabin, G. Fatima, S.A. Khan and S. Tanzeem, “Novel active PID controller employing VDTAs”, 16<sup>th</sup> IEEE International Symposium on Signal Processing and Information Technology (ISSPIT-2016), Limasol, Cyprus, 12-14 Dec. 2016.
- [17] Mayank Kumar, **Dinesh Prasad**, Laxya and Ghanshyam Singh, “A New Simulator for Realizing Floating Resistance/Capacitance with Electronic Control”, Int. Conference on Micro-electronics and Telecommunication Engineering (ICMETE-2016), SRM Univ., Ghaziabad, 22-23 Sept, 2016.
- [18] Mayank Kumar, **Dinesh Prasad**, Laxya and A. K. Sharma, “Novel Active Circuit for Realizing Variable Grounded Passive Elements “, Int. Conference on Micro-electronics

and Telecommunication Engineering (ICMETE-2016), SRM Univ., Ghaziabad, 22-23 Sept, 2016.

- [19] Javed Ahmad, **Dinesh Prasad**, Mayank Srivastava and Laxya, “New VDVTA Based Electronically Tunable Floating Inductor Simulator”, 2016 IEEE 1st International Conference on Power Electronics, Intelligent Control and Energy Systems, DTU, Delhi, 4-6 July 2016, **DOI:** 10.1109/ICPEICES.2016.7853466.
- [20] Charu Rana, N. Afzal and **Dinesh Prasad**, “A high performance bulk driven quasi floating gate MOSFET based current mirror”, 7<sup>th</sup> Int. Conf. on Comm., Computing and Virtualization, Procedia Computer Science 79, 747-754, 2016.
- [21] Ghanshyam Singh, **Dinesh Prasad**, Data Ram Bhaskar and Mayank Srivastava, “A Novel VDVTA based configuration for realizing grounded inductor”, ICICCD-2016, UPES Dehradun.
- [22] **Dinesh Prasad**, Anwar Ahmad, Mayank Srivastava, Abhinav Shukla, Apratim Mukhopadhyay, Bharat Bhushan Sharma, “Novel VDCC Based Low-Pass and High-Pass Ladder Filters”, 2015 Annual IEEE India Conference (INDICON-2015), 1-3.
- [23] Mayank Srivastava, **Dinesh Prasad**, Gaurav Chitranshi, Prateek Senger and Mamta Saini, “Novel Current Mode Electronically Tunable lossless Integrator Employing VDTA”, 2015 Annual IEEE India Conference (INDICON-2015), 1-4.
- [24] Neeraj Kumar, Anwar Ahmad and **Dinesh Prasad**, “Survey of Downlink Control Channel Resource Allocation Techniques in LTE”, 2015 Annual IEEE India Conference (INDICON-2015), 1-5.
- [25] Vandana Pundir, Anwar Ahmad and **Dinesh Prasad**, “Study of some Peak-to-Average Power Ratio Reduction Techniques in MIMO-OFDM system”, 2015 Annual IEEE India Conference (INDICON-2015), 1-6.
- [26] M Srivastava, G Chitranshi, P. Sengar, **Dinesh Prasad**, “Novel current mode electronically tunable lossless integrator employing VDTA”, 2015 Annual IEEE India Conference (INDICON-2015), 1-4.
- [27] Mayank Srivastava, **Dinesh Prasad** and D. R. Bhaskar, “New parallel R-L impedance using single VDTA and its high pass filter application”, International conference on Signal Processing and Integrated Network (SPIN) 2014, 20-21 Feb., Amity University, Noida.

(c) **National Conference:**

- [1] **Dinesh Prasad**, T. Ajmal and M. Rehman, “A Novel optical fiber-based temperature measuring system”, National Seminar on Advanced Instrumentation (NSAI-2001), Jan 29-31, 2001, CSIO Chandigarh.

(d) **Design Article published in Magazine**

- [1] **Dinesh Prasad**, Fahad Ahmed and Mansoor Ahmed, “Design Article “Infrared video tracking system design using a model-based approach”, [www.videsignline.com/howto/20180804321](http://www.videsignline.com/howto/20180804321) September, 2007.

**Invited Talks:**

- [1] Analog Signal Processing – Gm-C Approach 10<sup>th</sup> Feb 2015, HMR Institute of Technology and management, Hamidpur, Delhi.
- [2] Analog Signal Processing using Modern Active Building Blocks, 11<sup>th</sup> March 2015, JK Laxmipat University, Jaipur.
- [3] Signal Processing using Operational Amplifiers and other Active Building Blocks, 16<sup>th</sup> Feb 2018 at 7<sup>th</sup> IEEE National conference on Emerging Trends in Engineering and Technology, SBIT, Sonipat, Haryana.
- [4] Realization of Inductors and their applications in Analog Signal Processing, 21<sup>st</sup> June 2018 as a part of FDP organized by D/o ECE, IPEC, Ghaziabad.
- [5] Realization of Inductors and their Application in Analog Signal Processing, 11 July 2018 as a part of the Faculty Development Program (FDP) on “Recent Trends in Electronic Circuits and Systems” organized by the Department of Electronics and Communication Engineering, I.T.S Engineering College, Greater Noida.
- [6] Analog Signal Processing using Basic Analog Building Blocks, 15<sup>th</sup> November 2018 in D/o ECE, GCET, Knowledge Park-III, Greater Noida, UP.
- [7] Simulation of Inductors using Modern Active Building Blocks and its Applications, 13-15<sup>th</sup> February 2019 in NIT Manipur.
- [8] Realization of Inductors and Their Applications Using Modern Active Building Blocks, ATAL Faculty Development Programme (AICTE Sponsored) on "Nano-Electronics and RF Engineering" from 6<sup>th</sup> to 10<sup>th</sup> September 2021, SRM Institute of Science and Technology, Delhi NCR Campus, Ghaziabad, India.

**Session Chairs:**

- [1] Session Chair, INDICON 2015, 17-20 December INDICON 2015, D/o Electrical Engineering, JMI
- [2] Session Chair, ICANN 2016, 4-5 November, ICANN-2016, Centre for Nanoscience and technology, JMI
- [3] Session Chair, ETEC-2017, 27-28 January, ETEC-2017, D/o ECE, AKGEC, Ghaziabad

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

<b>Date (s)</b>	<b>Title of Workshops/ Conferences/ Seminars</b>	<b>Organized by</b>	<b>Venue</b>
29/01/2001 to 31/01/2001	National Seminar on Advanced Instrumentation (NSAI-2001)	CSIO, Chandigarh and C.I.L., Punjab Univ., Chandigarh	CSIO Chandigarh
08/6/ 2004 to 05/7/2004	Orientation Programme	UGC-ASC, J.M.I., New Delhi	Academic Staff College, J.M.I., New Delhi
19/3/2007 to 23/3/2007	Waste Management Hazardous	University Polytechnic, JMI, New Delhi, Sponsored by AICTE	University Polytechnic, JMI, New Delhi

26/3/2007 to 30/3/2007	Artificial Intelligence-Virtual Instrumentation	D/o E&C, AIT, Vasuntkunj, New Delhi, sponsored by AICTE-ISTE	D/o E&C, AIT, Vasuntkunj, New Delhi
20-21 Feb, 2017	Visvesvaraya PhD Scheme for Electronics & IT/ITES Second Workshop for presentation of research Work	Media Lab Asia, Ministry of Electronics and Information Technology, Govt. of India	IISc Bengaluru
28 July 2017	Visvesvaraya PhD Scheme for Electronics & IT/ITES One day workshop of Young Faculty Research Fellows (YFRF)	Media Lab Asia, Ministry of Electronics and Information Technology, Govt. of India	IISc Bengaluru
28- 29 May 2018	Technical Planning & Evaluation Meet and Workshop of Young Faculty Research Fellows (YFRFs) of the Visvesvaraya PhD Programme	Media Lab Asia, Ministry of Electronics and Information Technology, Govt. of India	MNIT, Jaipur
02-06 August 2021	AICTE Incorporating Universal Human Values in Education	AICTE	Online

**Book:**

1. Basics of Analog Electronics, Scitech Publication India Pvt. Ltd., ISBN: 9789385983610.

**Book Chapter:**

2. Charu Rana, N. Afzal and **Dinesh Prasad**, Low voltage low power FGMOS based third generation current conveyor in *Advances in power systems and energy management (ETAEEERE-2016)*, SPRINGER.
3. Umayia Mushtaq, Md Akram and Dinesh Prasad. "Design and Analysis of Energy-Efficient Logic Gates Using INDEP Short Gate FinFETs at 10 nm Technology Node." In *Advances in Micro-Electronics, Embedded Systems and IoT*, pp. 19-28. Springer, Singapore, 2022.
4. Umayia Mushtaq, Md Waseem Akram and Dinesh Prasad. "FinFET: A Revolution in Nanometer Regime." *Emerging Electronics and Automation: Select Proceedings of E2A 2021*. Singapore: Springer Nature Singapore, 2022. 403-417.
5. Umayia Mushtaq, Md Waseem Akram, Dinesh Prasad, and Bal Chand Nagar, "A Novel D-Latch Design for Low Power and Improved Immunity" COMSO 2022, Springer Singapore (Accepted for publication)

**Awards:**

1. Best Paper Award in IATMSI-2024, Gwalior, India, 14-16 March 2024.
2. Best Paper Awards in ICMEET-2021, Bhubaneswar, India, August 27-28, 2021
3. Best Paper Award in ICASI-2017, Sapporo, Japan.
4. Best Conference Paper Awards in ICASI-2017, Sapporo, Japan.
5. Bharat Vikas Award by Institute of Self Reliance on 19<sup>th</sup> Nov. 2017, Bhubaneswar, India.
6. EET CRS 6<sup>th</sup> Academic Brilliance Award, 28<sup>th</sup> Jan. 2018 at Education Expo TV, Noida.

**Country Visited:**

1. Cyprus
2. UAE
3. JAPAN

**Administrative Responsibilities in JMI:**

1. Hony. Addl. Director, FTK-Centre for Information Technology (02.08.2017-till date)
2. Ex Dy. Director, Centre for Innovation and Entrepreneurship (03.08.2017-25.07.2018)
3. Ex Nodal Officer IQAC
4. Ex NBA Coordinator D/o ECE

**Details of Academic Work at J.M.I., New Delhi**

- (i) Curriculum Development  
Student Advisor of B. Tech (E&C), since 2002, Organized many subject association programs for the students in the department, Coordinator: “BE (Electronics and Communication Engineering)”, 2007-2008, Organizing committee member of a two days National Conference on Advances in Mechanical Engg (AIME-2006), Serving as Assistant Superintendent of Exams of the team in conducting the Jamia B.Tech. Entrance Test since last 08 years, established and developed experimental setup of following Laboratories in the Dept. of Electronics and Communication Engineering, J.M.I., New Delhi:
  - (a) Analog Integrated Circuit Lab.
  - (b) Digital Signal Processing Lab.
  - (c) Microwave Engineering Lab.
- (ii) Courses taught at Postgraduate and Undergraduate levels:  
Advanced Signal Processing, VLSI Design, Control Systems, Signals and Systems at PG levels and Advanced Analog Signal Processing, Analog Filters and Signal Processing, Digital Signal Processing, Signals and Systems, Antenna and Wave Propagation, Microwave Engineering, Control Systems Engineering, Basics of Electronics and Communication Engineering, Optical Fiber Communication, Microelectronics, Circuit Analysis and Synthesis at UG level.

**Academic/Administrative Responsibilities outside the University**

1. BOG Member, IIIT, Sonapat.
2. BOS member, D/o ECE, GBPIET, Pauri Garhwal
3. DRC member D/o ECE, Amity University, Noida

**(Dr. Dinesh Prasad)****24/03/2025**