

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY



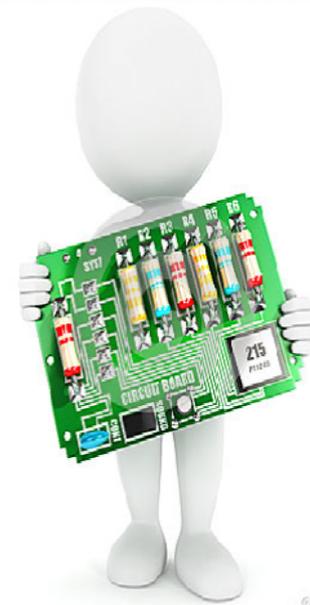
DEPARTMENT OF ELECTRONICS & COMMUNICATION

NEWSLETTER

January-March 2019

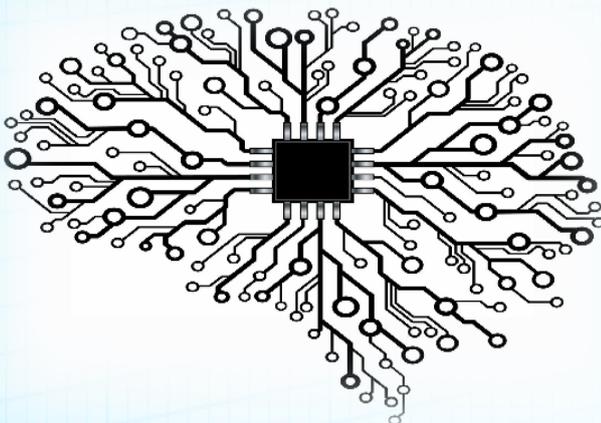
Vision

To create a centre for imparting technical education of international standards and conduct research at the cutting edge of electronics & communication technology to meet the current and future challenges of technological development.



Mission

To create technical manpower for meeting the current and future demands of industry and academia: to recognize education and research in close interaction with electronics & communication & related industry with emphasis on the development of leadership qualities in the young men and women entering the portals of the institute with sensitivity to social development and eye for opportunities for growth in the international perspective.



A Reader lives a thousand lives before he dies.

The man who never reads lives only one.

-George R R Martin

NOTABLE PUBLICATIONS

Arathy Varghese, C. Periasamy, and Lava Bhargava , "Fabrication and Charge Deduction based Sensitivity Analysis of GaN MOS-HEMT Device for Glucose, MIG, c-erbB-2, KIM-1 and PSA Detection" , IEEE Transactions on Nanotechnology (SCI: 2.857 Impact Factor) Accepted for Publication Volume :4 / 1-8 / 2019 ISBN: 978-1-4673-0635-5

R. Gupta, S. J. Nanda and U. P. Shukla , "Cloud detection in satellite images using multi-objective social spider optimization" , Applied Soft Computing Volume :79 / 203-226 / 2019 ISBN: ISSN: 1568-4946

Nawaz Shafi, Chitrakant sahu, and C.Periasamy , "Fabrication and pH Sensitivity Analysis of in-situ Doped Polycrystalline Silicon Thin Film Junctionless BioFET" , IEEE Electron Device Letters Volume :4 / 1-3 / 2019 ISBN: 1558-0563

Shanky Saxena Ritu Sharma, B. D. Pant , "Design Optimization in geometry of seismic mass for MEMS based cantilever type Peizoelectric energy harvester for motor vibration" , Indian Journal of Pure and Applied physics Volume :57 / 334-337 / 2019

Hemant Kumar Meena, S.D. Joshi , K.K. Sharma , "Facial expression recognition using graph signal processing on HOG" , IETE Journal of research Volume : 10.1080 / 7 / 2019

K. P. Jaiprakash, S. J. Nanda , "Classifying Physical Actions of Human Models using Multi-objective Clustering based on Elephant Herding Algorithm" , Procedia Computer Science, Elsevier Volume :152 / 84-91 / 2019 ISBN: ISSN: 1877-0509

A.Yadav, M.D.Sharma and R.P.Yadav , "A CPW FED CSRR and Inverted U Slot Loaded Triple Band Notched UWB Antenna" , Progress in Electromagnetics Research Journal Volume :89 / 221-231 / 2019

Arathy Varghese, C. Periasamy, Lava Bhargava , "Dielectric Modulated Underlap based AlGaN/AlN/GaN MOS-HEMT for Label Free Bio-detection" , Nanoelectronics and Optoelectronics Volume :2 / 1-8 / 2019

Ashish Kumar, Mahant Prasad, Vijay Janyani, R.P.Yadav , "Design, fabrication and reliability study of piezoelectric ZnO based structure for development of MEMS acoustic sensor" , Microsystem Technologies Volume :4 / 01-11 / 2019 ISBN: MITE-D-19-00125R1

Ankur Saharia, Jalil Ali, Preecha P. Yupapin, Ghanshyam Singh , "An Elementary Optical Logic Circuit for Quantum computing: A Review" , Optical and Quantum Electronics (SCI, I.F.: 1.168) Volume :51 / 1-13 / 2019 ISBN: 0306-8919

Arathy Varghese, Periasamy, Lava Bhargava, Surani Bin Dolmanan and Sudhiranjan Tripathy , "Linear and Circular AlGaN/AlN/GaN MOS-HEMT based pH Sensor on Si Substrate: A Comparative Analysis (Accepted for Publication)" , IEEE Sensors Letters Volume :3 / 1-5 / 2019

Girraj Sharma, Ritu Sharma , "Cluster based distributed cooperative spectrum sensing over Nakagami fading using diversity reception" , IET networks Volume :10 / 10 / 2019

U. P. Shukla, S. J. Nanda , "Designing of a Risk Assessment Model for Issuing Credit Card Using Parallel Social Spider Algorithm" , Applied Artificial Intelligence, Taylor & Francis Volume :33 / 191-207 / 2019 ISBN: ISSN: 0883-9514

Ajay Kumar Mahato, Vivek Raghuvanshi, Deepak Bharti, Ishan Varun, Narottam Prasad, Mahesh Saran Roy, and Shree Prakash Tiwari, "TIPS-pentacene/Copper (II) phthalocyanine bi-layer photo-sensitive organic field-effect transistors, " , Synthetic Metals Volume :248 / 110-119 / 2019

Workshops/Short Term Courses STCs/FDPs

Kamayani Shrivastava, R.P.Yadav, K.C.Jain , "Joint MAP Detection for OFDM in Presence of Phase Noise from Free Running and Phase Locked Loop Oscillator" , An International Journal of Wireless Personal Communication Volume :80 / 01-14 / 2019 ISBN: ISSN 0929-6212

Lintu Rajan, C. Periasamy, Vineet Sahula , "An In-Depth Study on Electrical and Hydrogen Sensing Characteristics of ZnO Thin Film with Radio Frequency Sputtered Gold Schottky Contacts" , IEEE Sensor Journal Volume :1 / 1-8 / 2019

Gurjit Singh Walia, Tarandeep Singh, Kuldeep Singh,, Neelam Verma , "Robust multimodal biometric system based on optimal score level fusion model" , Expert Systems with Applications Volume :116 / 364-376 / 2019

Amit Kumar Garg, Vijay Janyani, Ghanshyam Singh, Tawfik Ismail, Hossam Selmy , "Dedicated and Broadcasting Downstream Transmission with Energy-Efficient and Latency-Aware ONU Interconnection in WDM-PON for Smart Cities" , Optical Fiber Technology (SCI, I.F.: 1.35) Volume :52 / 1-9 / 2019 ISBN: 101949

Jaiverdhan, Ashok Kumar, Mahendra Mohan Sharma, Rajendra Prasad Yadav , "Dual wideband circular polarized CPW - fed strip and slots loaded compact square slot antenna for wireless and satellite applications" , International Journal of Communication Volume :108 / 181-188 / 2019 ISBN: 1434-8411

National Short Term Course on Advances in Optical Communication at SKIT , Jaipur, India from 09-02-2019 to 14-02-2019

National Short Term Course on "Machine Learning and IoT" at NIT, sponsored by E&ICT Academy IIIT Jabalpur, at NIT Raipur, India from 11-03-2019 to 15-03-2019

National Short Term Course on E & ICT academy sponsored FDP on New Waves in Communications & Networks at MNIT, Jaipur, India from 15-03-2019 to 19-03-2019

National Short Term Course on One Week Faculty Development Program on Signal Processing and Data Mining Techniques for Research using MATLAB at Electronics and ICT Academy, MNIT, Jaipur, India from 27-03-2019 to 31-03-2019

Seminars/Conferences/Symposia organized

International Conference on Optical and Wireless technologies (OWT-19) at department of electronics and communication, MNIT, Jaipur, India from 16-03-2019 to 17-03-2019.

Gate achievements

Name : Mahima fogat

Rank : AIR377

Success Mantra: The minute you think of giving up, think of the reason why you held on so long.

Placement Data

Highest package offered to UG students was 32.5 LPA

Highest package offered to PG students was 8 LPA.

Average package for UG students was 10 LPA.

Average package for PG students was 4.9 LPA.

IOT: Internet of Things

The Internet of Things, or IoT, refers to the billions of physical devices around the world that are now connected to the internet, collecting and sharing data. A light bulb that can be switched on using a smartphone app is an IoT device, as is a motion sensor or a smart thermostat in your office or a connected streetlight.



The term IoT is mainly used for devices that wouldn't usually be generally expected to have an internet connection, and that can communicate with the network independently of human action..

Table 1: IoT Units Installed Base by Category (Millions of Units)

Category	2016	2017	2018	2020
Consumer	3,963.0	5,244.3	7,036.3	12,863.0
Business: Cross-Industry	1,102.1	1,501.0	2,132.6	4,381.4
Business: Vertical-Specific	1,316.6	1,635.4	2,027.7	3,171.0
Grand Total	6,381.8	8,380.6	11,196.6	20,415.4

Source: Gartner (January 2017)

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