

# MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY

## DEPARTMENT OF ELECTRONICS & COMMUNICATION



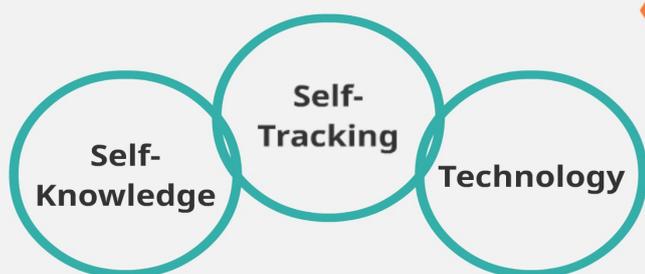
# NEWSLETTER

July-December 2017

## Vision

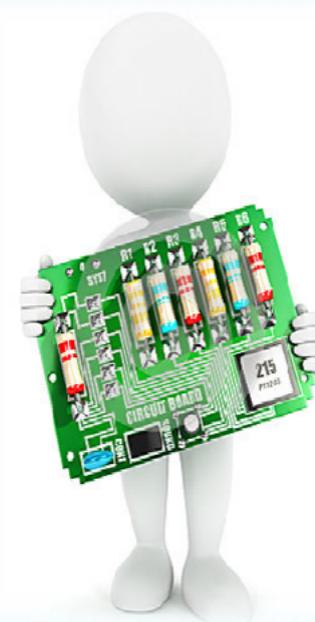
*To create a centre for imparting technical education of international standards and conduct research at the cutting edge of electronics & communication technology to meet the current and future challenges of technological development.*

## Quantified Self



*Reading forces you to be quiet in a world that no longer makes place for that.*

*-John Green*



## 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.*

## NOTABLE PUBLICATIONS

Gurjit Singh Walia, Saim Raza, Anjana Gupta, Rajesh Asthana, Kuldeep Singh, "A novel approach of multi-stage tracking for precise localization of target in video sequences", *Expert Systems with Applications* Volume :78 / 208-224 / 2017

S. Singhal, T. Goel and A. K. Singh, "Hexagonal Tree Shaped Fractal Antenna For UWB Applications", *International Journal of Electronics Letters* Volume :5 / 335-348 / 2017

Amit Kumar Garg, Vijay Janyani, "Adaptive Bandwidth Mechanism Using Dual Rate OLT for Energy Efficient WDM-TDM Passive Optical Network", *Telecommunication Systems* Volume :66 / 657-670 / 2017 ISBN: ISSN:1018-4864

Lintu Rajan, C.Periasamy, Vijayakumar.K, and Vineet Sahula, "An Investigation on Electrical and Hydrogen Sensing Characteristics of RF Sputtered ZnO Thin-Film With Palladium Schottky Contacts", *IEEE Sensors Journal (SCI, Impact Factor: 1.889)* Volume :17 / 14-21 / 2017 ISBN: 1530-437X

Rajvir Kaur, Vijayakumar Krishnasamy, Kaleeswari Muthusamy, Periasamy Chinnamuthan, "A novel proton exchange membrane fuel cell based power conversion system for telecom supply with genetic algorithm assisted intelligent interfacing converter", *Energy Conversion and Management (Elsevier)* Volume :136 / 173-183 / 2017

Niketa Sharma, Sandeep Kumar Dhakad, C. Periasamy and Nidhi Chaturvedi, "Optimization of Ohmic Contacts on Thick and Thin AlGaIn/GaN HEMTs Structures", *Superlattices and Microstructures (Elsevier)(Accepted for Publications)* Volume :1 / 1 / 2017

Shaivalini Singh, Yogesh Kumar, Hemant Kumar, Sumit Vyas, Chinnamuthan Periasamy, Parthasarathi Chakrabarti, Satyabrata Jit, and Si-Hyun Park, "A study of hydrothermally grown ZnO nanorod-based metal-semiconductor-metal UV detectors on glass substrates", *Nanomaterials and Nanotechnology (SCI, Impact Factor: 1.109)*

Volume :7 / 1-5 / 2017

Anup Sharma, Ritu Sharma, Upendra Chaudhary, "Hydrogen-Acetylene Gas Ratio and Catalyst Thickness Effect on the Growth of Uniform Layer of Carbon Nanotubes", *Fullerenes, Nanotubes and Carbon Nanostructures* Volume :2 / 12 / 2017

Deepak Bharti, Vivek Raghuwanshi, Ishan Varun, Ajay Kumar Mahato, and Shree Prakash Tiwari, "Photo-response of a low voltage flexible TIPS-pentacene field effect transistors", *IEEE Sensors Journal* Volume :17 / 3689-3697 / 2017

Anatoliy Andrushchak, Oleh Buryy, Zenon Hotra, Nazariy Andrushchak, Orest Sushynskyi, Ghanshyam Singh, Vijay Janyani, Ivan Kityk, "The General Method of Extreme Surfaces for Geometry Optimization of the Linear Electro-Optic Effect on Example of LiNbO<sub>3</sub>:MgO Crystals", *Applied Optics (SCI Journal, IF: 1.649)* Volume :56 / 6255-6262 / 2017

Girraj Sharma, Ritu Sharma, "Performance Evaluation of Distributed CSS with clustering of Secondary users fading Channels", *International Journal of Electronics Letters* Volume :1 / 14 / 2017 ISBN: 2168-1724

Ajay Yadav, Sweta Agrawal, R.P. Yadav, "SRR and S-shape slot loaded triple band notched UWB antenna", *AEU - International Journal of Electronics and Communications* Volume :79 / 192-198 / 2017 ISBN: 1434-8411

Shashi Kant Sharma, B. Bhowmik, Vipin Pal and C Periasamy, "Electrical and Low Temperature Methanol Sensing Properties of RF Sputtered n-ZnO/p-Si Heterojunction Diodes", *IEEE Sensors Journal (SCI, Impact Factor: 1.889)* Volume :158 / 1-8 / 2017

Jain, Prateek, and Amit Mahesh Joshi, "Low leakage and high CMRR CMOS differential amplifier for biomedical application", *Analog Integrated Circuits and Signal Processing* Volume :93 / 71-85 / 2017

Raju Patel, Manishkumar Patel, Dharmendar Boolchandani, Kamaljit Rangra, "FEM modeling of solidly mounted film bulk acoustic resonator and gas sensor using PIB-sensitive layer", Journal of Micro/Nanolithography, MEMS, and MOEMS Volume :16 / 025002-1-7 / 2017 ISBN: 1932-5150

K. Dimple, D. K. Kotary, S. J. Nanda, "An Incremental RLS for Distributed Parameter Estimation of IIR Systems Present in Computing Nodes of a Wireless Sensor Network", Procedia Computer Science, Elsevier Volume :115 / 699-706 / 2017 ISBN: ISSN: 1877-0509

S. Singhal and A. K. Singh, "CPW-Fed Octagonal Super Wideband Fractal Antenna With Defected Ground Structure", IET Microwaves, Antennas & Propagation Volume :11 / 370-377 / 2017

Kamayani Shrivastav, Prof. R.P.Yadav, "Characterization of MUI for OFDMA Uplink in presence of Transceiver Phase Noise", International journal of Future Generation Communication and Networking Volume :10 / 23-32 / 2017 ISBN: 6

Dinesh K. Vishwakarma, Kuldeep Singh, "Human Activity Recognition Based on Spatial Distribution of Gradients at Sublevels of Average Energy Silhouette Images", IEEE Transactions on Cognitive and Development Systems Volume :9 / 316-327 / 2017

S. Singhal and A. K. Singh, "Asymmetrically CPW-Fed Hourglass Shaped UWB Monopole Antenna With Defected Ground Plane", Wireless Personal Communication Volume :94 / 1685-1699 / 2017

N.D. Gupta and V. Janyani, "Analysis of Light Trapping in thin film GaAs solar cells using 2D Photonic Crystal Structures at front surface", IEEE Journal of Quantum Electronics Volume :53 / 4800109 / 2017 ISBN: ISSN: 0018-9197

J. B. Sharma, K.K. Sharma, S D Purohit, Abdon Atangana, "Hybrid Water marking Algorithm using Finite Radon and Fractional Fourier Transform", Fundamenta Informaticae Volume :151 / 523-543 / 2017

S. J. Nanda, N. Jonwal, "Robust Nonlinear Channel Equalization using WNN trained by Symbiotic Organism Search Algorithm", Applied Soft Computing, Elsevier Volume :57 / 197-209 / 2017 ISBN: ISSN: 1568-4946

Tanushree Sharma, K K Sharma, "QRS Complex Detection in ECG signals Using Locally Adaptive Weighted Total Variation Denoising, Accepted for publication", Computers in biology and Medicine Volume :87 / 187-199 / 2017

Sourabh Sahu, Jalil Ali, Ghanshyam Singh, "Refractive index biosensor using sidewall gratings in dual-slot waveguide", Optics Communications (Elsevier B.V., SCI Journal) Volume :402 / 408-412 / 2017

Deepak Bharti, Vivek Raghuwanshi, Ishan Varun, Ajay Kumar Mahato, and Shree Prakash Tiwari, "Directional solvent vapor annealing for crystal alignment in solution processed organic semiconductors," ACS Applied Materials and Interfaces Volume :9 / 26226 / 2017

Girraj Sharma, Ritu Sharma, "Performance comparison of centralised and distributed CSS over fading channels in cognitive radio", cogent engineering Volume :4 / 12 / 2017

Tarun Varma, C. Periasamy and Dharmendar Boolchandani, "Performance analyses of Schottky diodes with Au/Pd contacts on n-ZnO thin films as UV detectors", Superlattices and Microstructures Volume :112 / 151-163 / 2017 ISBN: ISSN: 0749-6036

Tarun Varma, C.Periasamy and D Boolchandani, "Performance Analyses of Schottky Diodes with Au/ Pd Contacts on n-ZnO thin films as UV detectors", Superlattices and Microstructures (Elsevier)(Accepted for Publications) Volume :3 / 1 / 2017

S. Kapoor, I. Zeya, C. Singhal, S. J. Nanda, "A Grey Wolf Optimizer Based Automatic Clustering Algorithm for Satellite Image Segmentation", Procedia Computer Science, Elsevier Volume :115 / 415-422 / 2017 ISBN: ISSN: 1877-0509

## Workshops/Short Term Courses STCs/FDPs

National Short Term Course on "The 2nd STTP on MACHINE LEARNING" at NIT Raipur, Raipur, India from 18-12-2017 to 22-12-2017

National Short Term Course on E & ICT Academy Sponsored FDP on Photonic Integrated Devices & Systems at MNIT, Jaipur, India from 22-11-2017 to 26-11-2017

National Short Term Course on Photonic integrated devices and systems at MNIT, Jaipur, India from 22-11-2017 to 26-11-2017

National Workshop on Photonic Integrated Devices & Systems at MNIT Jaipur, Jaipur, India from 22-11-2017 to 26-11-2017

National Short Term Course on "Two Week Faculty Development Program on Advanced Optimization Techniques (AOT-2017)" at Electronics and ICT Academy, MNIT Jaipur, Jaipur, India from 06-10-2017 to 15-10-2017

International Short Term Course on GIAN Course on Research Challenges in Wireless Technologies for 5G at MNIT Jaipur, JAIPUR, India from 28-08-2017 to 01-09-2017

National Short Term Course on MACHINE LEARNING at NIT Raipur, Raipur, India from 28-08-2017 to 01-09-2017

National Workshop on Review Meeting (Commission for Scientific & Technical Terminology, MHRD, New Delhi) at MNIT Jaipur, Jaipur, India from 31-07-2017 to 04-08-2017

National Short Term Course on Modelling and simulation tools at MNIT, Jaipur, India from 03-07-2017 to 07-07-2017

## Seminars/Conferences/Symposia organized

National Conference on Advanced Communication Technologies and networks at MNIT, Jaipur, India from 24-10-2017 to 25-10-2017

International Conference on Computer, Communications and Electronics (COMPTHELIX-2017) at Manipal University, Jaipur, India from 01-07-2017 to 02-07-2017

## STUDENTS CORNER

### PHD Awarded

2013REC9549	ASHISH	KUMAR
	GHUNAWAT	
2012REC9047	MONIKA MATHUR	
2012REC9041	MUKESH KUMAR GUPTA	
2013REC9024	PRAVEEN KUMAR JAIN	
2009REC102	SUDHIR KESHARI	
2012REC9056	VINAY KANUNGO	

### PLACEMENT DATA

Highest package offered to UG students was 32 LPA.

Highest package offered to PG students was 14.5 LPA.

Average package for UG students was 9.47 LPA.

Average package for PG students was 7.65 LPA.

designed and edited by:

Lalit Agrawal

2018uec1778

2<sup>nd</sup> year, ECE, MNIT jaipur