GURU NANAK DEV UNIVERSITY REGIONAL CAMPUS, FATTU DHINGA

INTRODUCTION

Guru Nanak Dev University Regional Campus, Fattu Dhinga (Sultanpur Lodhi) Distt. Kapurthala was established in year 2011 under the guidance of Vice-Chancellor Prof. (Dr.) Ajaib Singh Brar, for promoting technical education in the rural area of Punjab. This Regional Campus is located in Village Fattu Dhinga, District Kapurthala, Punjab on Kapurthala-Sultanpur Lodhi Road in the Lap of pristine nature which adds to the beauty and glory of the Institution. This campus has a sprawling area of 25 acres of land. Surrounded by lush green land, the campus of the institute extends a beautiful and well developed area with many topographically featured picturesque landscape. The campus presents a spectacle of harmony and natural beauty. The location is well connected with roads having distance of 20 Km from Kapurthala, 7 Km from Goindwal Sahib, 18 Km from Sultanpur Lodhi and 40 Km from Jalandhar. Transport facility is available from Amritsar and others areas to Fattu Dhinga Campus. Presently, this campus is comprised of four departments: Department of Electronics Technology, Department of Computer Engineering and Technology, Department of Computer Science & Applications, and Department of Commerce. These departments are well equipped with laboratories related to different fields of Electronics and Communication Engineering as well as four big computer labs. A Research and Development Lab has been setup at the campus for promotion of quality research in the fields of Wireless Communication, Optical Fibre Communication, Digital Image Processing, Wireless Sensor Networks, Internet of things, Big data etc. This R & D lab is equipped with research oriented software such as MATLAB, OptiSystem, OptiSPICE, NetSim PSPICE, LabView, NI Image processing machine vision hardware module, NS 2, NS 3, Weka, Java, C++, Microsoft SQL etc. All faculty members of the campus are doing their Ph.D. research work in the above mentioned fields. Students of B. Tech (ECE &CSE) and MCA (TYC) are also doing their major projects and six month training project in this lab. Seminars, Lectures by resource persons, awareness camps, debates, quiz competitions, educational tours, women empowerment, Tree plantation drives and capacity building programs are integral part of the study at Regional Campus, Fattu Dhinga (Sultanpur Lodhi). Having been taught by one of the best faculties of the region, the students of RC Fattu Dhinga (Sultanpur Lodhi) have been empowered and groomed to take on the rigorous challenges in their upcoming lives. The Regional Campus is a perfect blend of curricular and extra-curricular activities where the students and teachers freely interact to uplift the standards of education under the aegis of Educational and Cultural Society. Technical Student Forum is active to organize different activities related to enhance the technical and personality development skills of the students. Students are also encouraged to participate in various sports activities. The placement record of B. Tech. (ECE & CSE) final year is also marvellous. Large numbers of final year students are recruited by well-known companies such as Tata Consultancy Services, Tech Mahindra, Cape Gemini, CSC, Videocon etc. Special book bank has been set up for students. Financial aid is also provided to financially weak and needy students in the form of fee concession by Guru Nanak Dev University, Amritsar and different scholarships such as Merit cum means scholarship given by Department of Minority Affairs, Government of India.

FACULTY

OSD : Derick Engles, Ph.D.(Professor)

Assistant Professors : Kuldeep Singh, M.E. (ECE); Jaspreet Kaur, M.Tech. (ECE);
Rajdeep Singh, M.Tech. (Communication Systems);
Rajandeep Singh, M.Tech. Communication Systems);
Amandeep Kaur Cheema, M.Tech (CSE); Gurpreet Singh, M.Tech. (CE)

ACHIEVEMENTS (FELLOWSHIP/HONOURS/AWARDS BY ACCREDITED/PROFESSIONAL BODIES)

1. Er. Jatin Sharma (a Student of B.Tech ECE, 2012-2016 batch) has been recruited as Lieutenant in Indian Army.

PAPERS PUBLISHED IN PEER REVIEWED JOURNALS

1. M Kaur, RS Sawhney, and D Engles. (2016), Probation of Charge Transport with Chalcogens as linker group for C 20 fullerene, Materials Today: Proceedings 3 (6), ISSN:1304-1310.
2. R. Kumar and D. Engles (2016), Anatomizing the Impact of High Dielectric Gate Material on the charge transport in Graphene Field effect Transistor, Materials Today, Proceedings 3 (6), ISSN:1933-1938.
3. Milanpreet Kaur, Ravinder Singh Sawhney, Preet Bhullar and Derick Engles. (2016), Design of Fullerene based Biomarker for Detection of Lead Impurities, ICT Express, 2016.
4. Milanpreet Kaur, Ravinder Singh Sawhney, and Derick Engles. (2016), Transport in Fullerene Device Coupled to Cu, Ag and Au electrodes, Molecular Physics Journal: 1-10.
5. Rupan Preet Kaur, Ravinder Singh Sawhney and Derick Engles. (2016), Unravelling the Electrical Conduction of C-40 Quasi-Fullerene Molecular Junction, International Journal of Computational Material Science and Engineering, Vol. 05, No. 02, 1650009.
6. Kaur, Milanpreet; Kaur, Rupan Preet; Sawhney, Ravinder; and Engles, Derick. (2016), Non-Invasive Cancer-detection using Molecular Device based on Aromatic Molecules, Journal: Information & Communications Technology Express ICT Express, (ICTE_2016_88_R1) 2016 ISSN: 2405-9595.
7. Mani Arora, Sandeep Sharma and Derick Engles. (2016), Parametric comparison of EMDS algorithm with some Symmetric Cryptosystems, Egyptian Informatics Journal.
8. Rupan Bhullar; Ravinder Singh Sawhney and Derick Engles (2016), Fullerene as Alligator Clips for Electrical Conduction through Anthracene Molecular Junctions, Pramana-Journal of Physics, Indian Academy of Sciences.
9. Milanpreet Kaur, Ravinder Singh Sawhney, and Derick Engles (2016), Non-equilibrium tunneling through Au, C20, Au Molecular Bridge using density functional theory, non-equilibrium Green function approach, Journal of Materials Research, Vol. 31, Issue 14: 2025-2034.
10. Milanpreet Kaur, Ravinder Singh Sawhney, and Derick Engles. (2016), Ab-initio implementation of C20 fullerene under distinctive miller planes, IEEE Journal of Quantum Electronics, ref. No. JQE-134359-2016.
11. Rupan Preet Kaur, Ravinder Singh Sawhney and Derick Engles. (2016), Effect of asymmetric molecule, Electrode Coupling and Molecular Bias on rectification in Molecular Junctions' Journal of Applied Physics A, Material Science and Processing, 122 (12) 1029.
12. Kaur, Rupan Preet; Sawhney, Ravinder Singh and Engles, Derick. (2016), Conduction of Organic molecular Junction-A review, Reviews in Theoretical Science, American Scientific Publishers, Vol. 4, No. 3: 287-301(15).
13. Derick Engles and Shivindu P. (2016), Dependence of Ambient Refractive Index sensitivity with grating period of LPFG, Microwave and Optical Technology Letters.
14. Kaur, Milanpreet; Kaur, Rupan Preet; Sawhney, Ravinder, Engles, Derick. (2016), Non-Invasive Cancer-detection using Molecular Device based on Aromatic Molecules, Journal: Information & Communications Technology Express ICT Express, (ICTE_2016_88_R1) 2016 ISSN: 2405-9595.
15. Kaur, Rupan Preet; Sawhney, Ravinder Singh and Engles, Derick. (2016), Asymmetric Molecule-Electrode coupling and Molecular bias on Rectification, Molecular Junctions Applied Physics A. 122(12) 1029.
16. Kaur, Rupan; Sawhney, RavinderSingh and Engles Derick. (2016), Electrical Characterization of Quasi Fullerene Junctions formed with Different Metallic Electrodes, Journal of Materials Research, Cambridge University Press, Vol. 31, Issue 17, JMR-2016-0408.R2 31 (17) 2649-2661.
17. Mani Arora, Sandeep Sharma and Derick Engles. (2016), Efficient key Mechanism and Reduced Cipher text technique for secured data communication, International Journal of Systems, Control and Communications, Vol. 7, Issue 2:186-196.
18. Kaur, Rupan; Sawhney, RavinderSingh and Engles Derick. (2016), Effect of Gold Electrode Crystallograohic Orientation on charge transport through Aromatic Molecular Junction, Molecular Physics, 114(15)2289-2298.

19. Kuldeep Singh. (2016), Fuzzy Logic Based Modified Adaptive Modulation Implementation for Performance Enhancement in OFDM Systems, International Journal of Intelligent Systems and Applications, Vol. 8, No. 5, ISSN: 2074-904X (Print), ISSN: 2074-9058 (Online).
20. Harshwardhan Kakkar, Jaspreet Kaur, Amandeep Singh (2016), Detection of Good Quality wheat Grains Using Image Processing' International Journal of Engineering Sciences, Vol. 17, ISSN No. 2229-6913(Print), ISSN No. 2320-0332 (online).
21. Rajandeep Singh and Maninder Lal Singh. (2016), Silica based Wideband RAMAN-TDFA hybrid amplifier yielding flat gain in S-band, Optik, International Journal for Light and Electron Optics, Vol. 127, Issue 2: 876-877.
22. Rajandeep Singh and Maninder Lal Singh. (2016), Gain Evaluation of Silica based Thulium doped fibre Amplifier with triple Pump 1050nm+1400nm+800nm configuration for different values of doping concentrations and doping radius, Optoelectronics and Advanced Materials, Rapid Communications, Vol. 10, No.11-12.
23. Amandeep Singh and Maninder Lal Singh. (2016), Performance Evaluation of various Classifiers for Color prediction of Rice Paddy Plant Leaf, Journal of Electronic Imaging, 25(6), 061403.
24. Amandeep Singh and Maninder Lal Singh. (2016), Evaluation Measure Selection for Performance Estimation of Classifiers in Real Time Image Processing Applications, International Journal of Engineering Sciences, ISSN: 2320-0332.
25. Gurpreet Singh and Nishan Singh. (2016), MANET-A Review, International Journal of Advanced Research in Computer and Communication Engineering, Vol. 5, Issue 4.
26. Gurpreet Singh and Lovepreet Singh. (2016), WAN OPTIMIZATION-A Review, International Journal of Advanced Research in Computer and Communication Engineering, Vol. 5, Issue 5.
27. Rashmi Sharma, Dinesh Gawande, Chander Mohan and Rajesh Kumar Goel. (2016), Synthesis and Anticonvulsant Activities of Functionalized 5-(isoindole-1,3-dione)-pyrimidinones, Medicinal Chemistry Research, Vol. 25, Issue 7: 1420-1424.
28. Rashmi Sharma & Chander Mohan. (2016), A facile and Chemoselective synthesis of novel pyrimido[5,4-b][1,4]thiazines by exo-dig iodocyclization reactions, Journal of Heterocyclic Chemistry.
29. Prabhpreet Singh, Harminder Singh, Rashmi Sharma, Gaurav Bhargava, and Subodh Kumar (2016), Diphenylpyrimidone-salicylideneamines, New ESIPT based AIEgens with applications in latent fingerprinting, Journal of Material Chemistry C, 4, 11180.
30. Prabhpreet Singh, Harminder Singh, Rashmi Sharma, Vanita Vanita, Gaurav Bhargava and Subodh Kumar (2016), Nanomolar Cu2+ detection in water based on disassembly of AIEgen: Applications in Blood Serum, Cell Imaging and Complex Logic Circuits, Chemistry-Select,1(21), ISSN: 6880-6887.

PAPERS PUBLISHED IN NON PEER REVIEWED JOURNALS

1. Rajandeep Singh, Maninder Lal Singh (2016), Optimization of TDFA length, pump power, pump wavelength in hybrid TDFA-RAMAN wideband amplifier yielding flat gain in S-band, International Journal of Engineering Sciences, Vol. 17, ISSN: 2229-6913 (Print), ISSN: 2320-0332 (Online).

PAPERS PUBLISHED IN CONFERENCE PROCEEDINGS

1. Kuldeep Singh, Arshdeep Singh Sandhu & Rupesh Malhotra. (2016), Modified Fuzzy Decision Support System for Implementation of Hand Over in Cellular Networks, International Conference on Communication Systems and Network Technologies, Chandigarh, India.
2. Jaspreet Kaur, & Amarpal Singh. (2016), Different Color Detection in an RGB Image, National Conference on Advances in Engineering & Technology, Management and Sciences held at ASRA College of Engineering and Technology: 56-58, ISBN: 978-93-82376-90-3.
3. Rajandeep Singh & Maninder Lal Singh. (2016), Optimized hybrid Silica TDFA-RAMAN wideband amplifier yielding flat gain in S-Band, International Conference on Computational Techniques in Information and Communication Technologies, New Delhi: 164-167, 11-13rd March, 2016.

4. Rajandeep Singh & Maninder Lal Singh. (2016), Evaluating the Effect of Doping Concentration and Doping Radius on the Gain of Silica Based Thulium Doped Fiber Amplifier, IEEE International Conference on Recent Advances and Innovations in Engineering, Jaipur, India.

INTERNATIONAL CONFERENCES ATTENDED

1. Amandeep Singh attended International Conference on Innovative Trends in Electronics Engineering, Punjabi University, Patiala, Punjab, January, 2016.

PAPERS PRESENTED IN INTERNATIONAL CONFERENCES

1. Rajandeep Singh, Paper entitled 'Optimized hybrid Silica TDFA-RAMAN wideband amplifier yielding flat gain in S-Band' presented in 2016 International Conference on Computational Techniques in Information and Communication Technologies, held at Guru Gobind Singh Indraprastha University, New Delhi, 11-13rd March, 2016.
2. Rajandeep Singh, Paper entitled 'Evaluating the Effect of Doping Concentration and Doping Radius on the Gain of Silica Based Thulium Doped Fiber Amplifier' presented in IEEE International Conference on Recent Advances and Innovations in Engineering held at Poornima University, Jaipur India, 23-25th December, 2016.

PAPERS PRESENTED IN NATIONAL CONFERENCES

1. Jaspreet Kaur, Paper entitled 'Different Color Detection in an RGB Image' presented in National Conference on Advances in Engineering & Technology, Management and Sciences held at ASRA College of Engineering and Technology, 23rd April, 2016.

ATTENDED WORKSHOPS/ SEMINARS/ SYMPOSIA/ORIENTATION COURSES/ REFRESHER COURSES

1. Kuldeep Singh, Attended Special Summer School, UGC- Human Resource Development Centre, Guru Nanak Dev University, Amritsar, 2-22nd June, 2016.
2. Rajandeep Singh, Attended Short Term Course on Wireless Communication, Department of ECE Punjabi University, Patiala in collaboration with NITTTR Chandigarh, 2-6th May 2016.
3. Amandeep Kaur, Attended Short Term Course on E-Learning Technologies for Effective Research and Extension organized by UGC- Human Resource Development Centre, Guru Nanak Dev University, Amritsar, 17-23rd August, 2016.
4. Amandeep Kaur, Attended two day Course on Cloud Computing and Big Data at Department of Computer Science, Guru Nanak Dev University, Amritsar, 18-19th October, 2016.

INVITED LECTURES/ EXTENSION LECTURES/TALKS/ CHAIRING A SESSION/ DISCUSSANT

1. Kuldeep Singh, delivered an expert lecture on Carrier Counselling and guidance at Carrier Counselling Cell, Govt. Sr. Sec. School, Kheeranwali, Kapurthala.

DETAILS OF SEMINAR/CONFERENCE/WORKSHOP/INVITED LECTURES/ COURSES/SYMPOSIA ORGANISED BY THE DEPARTMENT

1. Department organised one day workshop on Technology behind E- Commerce: A workshop on E-Commerce web Development with the help of EMBIT Plus, Jalandhar, for the students of B. Tech (CSE) and MCA, 21st September, 2016.
2. Department organised one day workshop on Hands-On Proteus: A Workshop on Controller based simulation using Proteus Software for students of B. Tech (ECE), 21st September, 2016.
3. Department organised Expert Talk by Er. Lalit Arora, (alumnus of RC Fattu Dhinga) Wipro, Banglore, 27th October, 2016.
4. Department organised one day Technical Exhibition on latest trends in Electronics, Computers and Commerce fields for making awareness about technical and professional education among the students of rural areas. Approximately 400 students of GSSS Fattu Dhinga, GSSS Tibba, GSSS Kheeranwali, BST Sr. Sec. School Sujjo Kalia, Prince Model School Fattu Dhinga and Guru Amardas Public School Ucha Bet (Distt. Kapurthala) participated in this exhibition. This exhibition was organized on 03rd November, 2016 on the occasion of annual foundation day of GNDU Regional Campus Fattu Dhinga (Sultanpur Lodhi).