



Details of Student Utilizations @ NMDC for the last Five Years

S.NO	Category	Academic Year	Quantity
1.	Main Projects Carried out (25)	2017-18	05
		2016-17	09
		2015-16	04
		2014-15	06
		2013-14	01

S.NO	Category	Academic Year	Quantity
1.	Mini Projects Carried out (38)	2017-18	09
		2016-17	11
		2013-14	18

S.NO	Category	Academic Year	Quantity
1.	Term Paper Carried out(17)	2016-17	14
		2015-16	03

S.NO	Category	Academic Year	Quantity
1.	Paper Publications (09)	2017-18	01
		2016-17	01
		2015-16	01
		2014-15	02
		2013-14	04

S.NO	Category	Academic Year	Quantity
1.	Papers Presented in Conferences/ seminars/Symposiums	2013-14	08



PROJECTS @ NMDC (25)

A.Y:2017-18			
S. No	Title of the Project	Regd. No	Name of the Guide
1.	Ion funnel for Mass Spectrometer	14756A1021 14761A1036 14761A1037	Dr.T.Satyanarayana
2.	Quadrupole Mass Spectrometer	14761A1039 14761A1032 14761A1052	Dr.B.Rambabu
3.	Design and analysis of lock in amplifier in bio sensor applications	15765A1013 15765A1007 14761A1024	Mr.M.Vasu Babu
4.	Modeling and analysis of superconducting wire for MRI	14761A1010 15765A1015 14761A1050	Dr.T.Satyanarayana
5.	Design and analysis of capacitive sensor for oil degradation	14761A1035 14761A1053	Mr.M.Vasu Babu
A.Y:2016-17			
1.	Paper based piezoresistive sensor using MEMS	13761A1015 13761A1011 13761A1035 13761A1019	Mr.R.Anjaneyulu Naik
2.	Design and simulation of piezoelectric cantilever	13761A1013 13761A1032 13761A1023	Dr.T.Satyanarayana
3.	Separation of platelets from RBC in blood using MEMS	14765A1003 14765A1011 13761A1016	Mr.R.Sarveswara Prasad
4.	Simulation of heat generating in a vibrating structure	13761A1020 13761A1006 13761A1017	Mr.Sk.Mastan sharif
5.	Design and analysis of stress induced delamination of 3D structure	13761A1038 13761A1025 14765A1015	Mr.M.Vasu Babu
6.	Accelerometer based gesture controlled robot	13761A1021 13761A1014 13761A1009	Mr.G.Md.Rafi
7.	Capacitive pressure sensor using MEMS	13761A1036	Mr.B.Sandeep

		14765A1016 13761A1039	
8.	Design and simulation of electric sensor	13761A1037 13761A1004 13761A1003	Mrs.V.Vineela
9.	Design and simulation of pacemaker electrode using COMSOL Multiphysics	13761A1034 13761A1030 13761A1024	Ms.D.Venkata Lakshmi
A.Y:2015-16			
1.	Automated Control System for Air Pollution Detection in Vehicles	12761A1014 12761A1051 12761A1019	Dr.T.Satyanarayana
2.	Wearable Sensor for Monitoring of Human Movements & Positions	12761A1025 12761A1044 12761A1030	Smt.G.Anusha
3.	Role Of FTIR And UV-Visible Spectrometers For In-vitro Investigation Using SBF	12761A1007 12761A1024 13765A1007	Mr.M.Vasu Babu
4.	Synthesis, Characterization & Spectral Analysis of Phosphate Composite using Spectrophotometers	12761A1040 13765A1004 13765A1008	Mr.M.Vasu Babu
A.Y:2014-15			
1.	Modelling & Simulation of RF MEMS Switch	11761A1035 12765A1012 12765A1007	Dr.K.SrinivasaRao
2.	Design, Simulation and Analysis of MEMS cantilever beams for Bio-sensing Applications	11761A1028 11761A1007 11761A1045	Mr.G.MallikarjunaRa o
3.	Design and Magnetic Force Analysis of Axial Magnetic Bearings	11761A1029 12765A1001 11761A1046	Mrs.V.Vineela
4.	Modelling, Simulation & Analysis of Pressure Sensor	11761A1013 12765A1011 12765A1002	Ms.P.Bhavya
5.	Influence of crystallization on dielectric properties of Phosphate based Glasses	11761A1039 11761A1036 10761A1020	Dr.T.Satyanarayana
6.	MEMS based capacitive sensor for detection of ethylene gas	11761A1016 11761A1020 10761A1032	Mr. M. VasuBabu
A.Y:2013-14			
1.	Design and Deformation Analysis of MEMS Based Piezoresistive Pressure Sensor	10761A1022 10761A1047 10761A1004 10761A1023	Dr.T.Satyanarayana



MINI PROJECTS @ NMDC (38)

S.No	Title of the Project	Roll No
A.Y:2017-18		
1.	Capacitive pressure sensor	15761A1012
2.	2-D Lithium- ion battery	15761A1015
3.	Deferential Pipes	15761A1050
4.	Piezo resistive pressure sensor Shell	15761A1018
5.	Fuel cell cathode	15761A1032
6.	Piezo resistive gyroscope	15761A1023
7.	Liquid cooled lithium – ion battery pack	15761A1035
8.	Micro pump mechanism	15761A1054
9.	Modelling of cross flow heat exchanger for industrial applications	15761A1020
A.Y:2016-17		
1.	Superconducting Wire	14761A1006
2.	Simulation Of MEMS Based Piezo Resistive Accelerometers	14761A1012
3.	Nanorods	14761A1021
4.	Micromixer - Cluster	14761A1028
5.	Piezo-Ceramic Tube	14761A1041
6.	Quadrupole lens	14761A1055
7.	Electro – Osmotic Micro Mixer	15765A1001
8.	Design Of Tuning Fork By Using COMSOL Multiphysics	15765A1008
9.	Design Of Mems Inkjet Nozzle – Level Set	15765A1011
10.	Beam Splitter	15765A1004
11.	Solute Band Dispersion In A Curved Microchannel	15765A1010
A.Y:2013-14		
1.	Design and simulation of MEMS based accelerometers	12761A1026
2.	Design and simulation of Cantilever Beam	12761A1009
3.	Design and analysis of micro direct methanol fuels	12761A1017
4.	Design of Electro statically Actuated Cantilever	12761A1027
5.	Analysis of Thermal Stress Distribution in a Layered Plate	12761A1015
6.	Design and Simulation of Electric Sensor	12761A1025
7.	MEMS capacitive pressure sensor	12761A1035
8.	Thermo elastic damping in a MEMS Resonator	12761A1041
9.	Design and induced potential analysis of piezo ceramic tube	12761A1040
10.	Design piezo electric shear actuated beam	12761A1033
11.	Baised resonator 3-D Basic	13765A1008
12.	Controlled diffusion micro mixer	12761A1046
13.	SAW gas sensor	13765A1009
14.	Spilt recombine micro mixer	12761A1032
15.	Pace maker electrode	13765A1001
16.	Tapered cantilever	13765A1003
17.	Thin film BAW resonator	12761A1039
18.	Designing modelling of composite transducer	13765A1004



TERM PAPER @ NMDC (17)

S. No	Title of the Paper	Roll No
A.Y: 2016-17		
1.	Design And Optimisation Of Pacemaker Electrode Using Finite Element Method	13761A1002
2.	Flexible Graphite-On-Paper Piezoresistive Sensors	13761A1004
3.	Design And Simulation Of 3d Capacitive Accelerometer For Automotive Applications	13761A1013
4.	MEMS Based Integrated Gas Sensor For No2 &Nh3	13761A1021
5.	Glucometer Biosensor Based On MEMS Ultrasonic Transceivers	13761A1023
6.	Design And Simulation Of Cantilever Array For Fluid Flow Sensing Applications	13761A1024
7.	Simulation And Analysis Of Thermal Bimorph Using COMSOL	13761A1025
8.	Simulation Of Heart Disorders Using COMSOL Multiphysics	13761A1027
9.	Piezoresistive MEMS Cantilever Based Co2 Gas Sensor	13761A1030
10.	Design And Simulation Of Piezoelectric MEMS Cantilever Using COMSOL	13761A1032
11.	Design And Simulation Of MEMS Silicon Piezoresistive Pressure Sensor For Barometric Applications	13761A1034
12.	Modelling Of Capacitance And Sensitivity Of A MEMS Pressure Sensor With Clamped Square Diaphragm	13761A1036
13.	Design And Analysis Of Micro Cantilever Based Biosensor For Swine Flu Detection	13761A1038
14.	Pull In Of RF MEMS Switch	14765A1016
A.Y: 2015-16		
15.	Micro Sensors in Dynamic Backgrounds: Towards Real-Time Breath Monitoring	12761A1016
16.	PID Control system Analysis, Design, and technology	12761A1017
17.	Micro pumps	12761A1045



PAPERS PUBLISHED BY STUDENTS IN MEMS AREA (09)

S.No	Title of the Paper	Journal, Vol., Year, Page No.	Roll No
A.Y: 2017-18			
1.	Design and modelling of Nanorods for display applications	International innovations in electrical, electronics, power smart grids & advanced computing technologies (IEEPS-2018), 9 th & 10 th March	14761A1021
A.Y: 2016-17			
1.	Automation Of Temperature Variation Setup For Impedance Analyzer Using LABVIEW	International Journal of Engineering Research online (IJOER-2016) ISSN: 2321-7758 Vol.4., Issue.5., 2016	13761A1004 13761A1011
A.Y: 2015-16			
1.	Mobile Irrigation System	International Journal of Advanced Research (IJAR) Int.j.Adv.Res.4(9),476-480	12761A1031
A.Y: 2014-15			
1.	Design, Simulation And Analysis of Highly Sensitive MEMS Cantilever Beams Using COMSOL Multiphysics	International Journal of Informative & Futuristics Research ISSN:2347-1697 Vol.2,Issue 10 june	11761A1028 11761A1007
2.	Generation of Biological energy Using Vegetable Gas	IEEE Sponsored 9th International Conference on Intelligent Systems and Control (ISCO)2015	11761A1039 11761A1040
A.Y: 2013-14			
1.	Design And Analysis Of Mast Diagonal Mounting For Incessant Communication	International Journal of Current Scientific Research, 2014; 5(3): 1185-1190	10761A1041
2.	Design and Deformation Analysis of MEMS Based Piezoresistive Pressure Sensor	International Journal of Advances in Engineering and Technology, Vol. 7, Issue2, May 2014, ISSN: 22311963	10761A1023 10761A1022 10761A1004 10761A1047
3.	Design and Simulation of Magnetism Based Energy Harvesting by Piezoelectric Cantilever using COMSOL Multiphysics	International Journal on Electronics and Communication Engineering Advanced Research (ISSN:2347-9329) vol-2 issue-2	11761A1025 11761A1013 11761A1017
4.	Design and Simulation of MEMS Based Piezoelectric Accelerometer	International Journal of Current Engineering and Technology ISSN 2277 - 4106	11761A1028 11761A1039



List of Faculty Papers Presented in Conferences/seminars/symposiums for Last Five Years (08)

S.No	Title of the paper	Name of the Programme & Duration with Date Host Institution	Roll No of Student	Academic Year
1.	Design and Simulation of MEMS 3D Piezoelectric Accelerometer	International Conference on Recent Trends in Engineering, Technology & Sciences (ICRTETS-2014), 21 st & 22 nd Feb. 2014, JBEIT, Hyderabad	111A40039 111A40028	2013-14
			111A40039 111A40028	2013-14
2.	Design and Simulation of Magnet Based Energy Harvesting	International Symposium on Engineering & Technology (ISET-2014), 9 th & 10 th Jan. 2014, KJIET, Pune	111A40013 111A40047	2013-14
3.	Design and Simulation of MEMS based accelerometers		111A40039 111A40028	2013-14
4.	Design and Simulation of Vibration Based Energy Harvesting Using Piezo Tires		111A40043 111A40039 111A40028	2013-14
5.	Design and Simulation of Nuclear Radiation Based Energy Harvestion using COMSOL Multiphysics 4.3b		111A40013 111A40047	2013-14
6.	Modeling of MEMS Based Bolometer for Measuring Radiations from Nuclear Power Plant		101A40041	2013-14
7.	MEMS Piezoelectric Generator		111A40043 111A40049	2013-14
8.	Design and Simulation of MEMS Based Piezoelectric Accelerometer		111A40039 111A40028	2013-14