# Department of Mechanical Engineering



# VELAGAPUDI RAMA KRISHNA SIDDHARTHA ENGINEERING COLLEGE

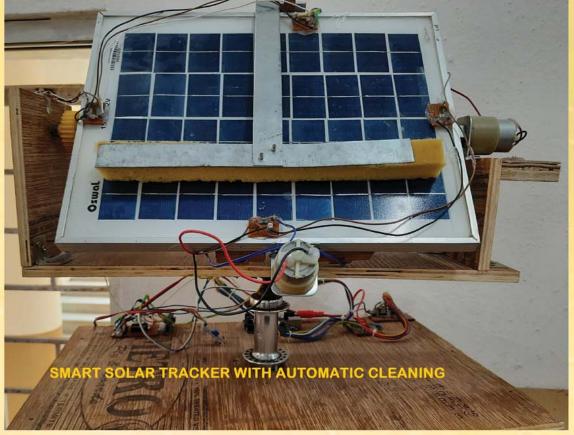


Academic Year 2020-21

Issue - II

# NEWS LETTER RTMENT NEWS LETTER





Chief Editor
Dr. A.V. Ratna Prasad
Principal

Editor

Dr. N. Vijaya Sai

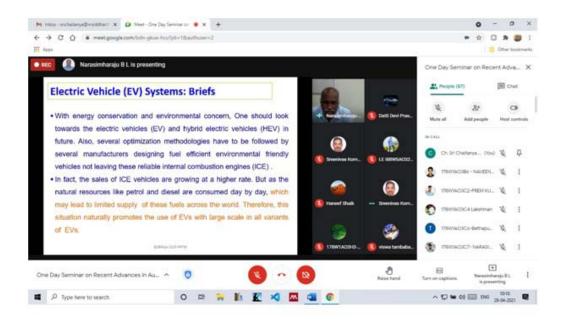
Prof. & Head, ME Dept.

Associate Editors Dr. G. Dillibabu Dr. M. Sumalatha Dr. K. Prakash <u>Babu</u> Student Co-ordinators U. Hemanth Kumar 4 / 4 ME K. Janardha 4 / 4 ME S. Yuvraj Reddy 4/4 ME

#### WORKSHOPS/SEMINARS/FDP/CONFERENCES ORGANISED

#### One-Day Seminar on "Recent Advances in Automobile Engineering"

Department of Mechanical Engineering organized a one-day seminar on "Recent Advances in Automobile Engineering" with resource persons Dr. B. L. Narasimha Raju, Associate Professor, Department of Electrical Engineering, NIT Warangal and Dr. G. Nagasrinivasulu, Associate Professor, Department of Mechanical Engineering, NIT Warangal on 28<sup>th</sup> April 2021. The seminar was organized under AICTE MARGDARSHAN to enlighten the students with the new age technologies in Automobile Engineering. Its main aim was to provide an in-depth review on the existing and upcoming innovations in Automobile Engineering. There were 100 attendees from the department including Associate professors, Assistant Professors and student participants.



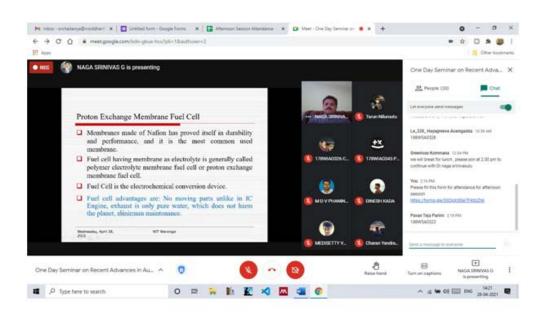
The seminar was organized around the main themes of the advancement in Automobile Engineering and Fuel Cells. The topics covered are as follows,

**Electric Vehicle Systems:** Any vehicle with electric propulsion can be branded as an EV.

**Different types of EV Systems:** BEV - Battery Electric Vehicle, PHEV - Plug-in Hybrid Electric Vehicle, FC-EV – Fuel Cell operated Electric Vehicle, ICE integrated Hybrid Electric Vehicle

**Benefits of Fuel Cell Vehicle:** Low emission of Greenhouse gases, Reduce the consumption of fossil fuels.

**General Issues faced by Fuel Cell Vehicles:** Safety, Hydrogen infrastructure, Fuel cell durability and Reliability.



**Types of Fuel Cells:** Polymer Electrolyte Membrane Fuel Cell, Direct Methanol Fuel Cell, Alkaline Fuel Cell, Phosphoric Acid Fuel Cell

**Fuel Cell Technology:** Thermodynamics and Electrochemical kinetics, Fuel cell components and their impact on performance, Catalysts for the proton exchange membrane FC

A fuel cell vehicle (FCV) or fuel cell electric vehicle (FCEV) is an electric vehicle that uses a fuel cell, sometimes in combination with a small battery or super-capacitor, to power its on-board electric motor. Fuel cells in vehicles generate electricity generally using oxygen from the air and compressed hydrogen. Most fuel cell vehicles are classified as zero-emissions vehicles that emit only water and heat. As compared with internal combustion vehicles, hydrogen vehicles centralize pollutants at the site of the hydrogen production, where hydrogen is typically derived from reformed natural gas. Transporting and storing hydrogen may also create pollutants.

The environmental impact of fuel cell vehicles depends on the primary energy with which the hydrogen was produced. Fuel cell vehicles are only environmentally benign when the hydrogen was produced with renewable energy. If this is the case fuel cell cars are cleaner and more efficient than fossil fuel cars. However, they are not as efficient as battery electric vehicles which consume much less energy. Usually a fuel cell car consumes 2.4 times more energy than a battery electric car, because electrolysis and storage of hydrogen is much less efficient than using electricity to directly load a battery.

The workshop was organized by Dr. K. Srinivas, Sr. Assistant Professor, and Dr. Ch. Sri Chaitanya, Assistant Professor, Department of Mechanical Engineering, V. R. Siddhartha Engineering College, Vijayawada.

### **FACULTY PUBLICATIONS**

#### **INTERNATIONAL JOURNALS:**

- G. V. N. B. Prabhakar, L Dumpala, N. Ravi Kumar, "Mechanical, machining and corrosion properties of Al5083-carbon nanotubes composite produced by friction stir processing", Material Science & Engineering technology, vol 52, issue 7, pp 520-528, ISSN 1521-4052 , May 2021, Impact Factor 0.854, SCIE.
- Akash Vyas, Jyoti Menghani, Pringal Patel, Satish More, C. P. Paul, Amar Patnaik, S.P.Ingole, "Characterization and Optimization of Slurry Erosion Behavior of SS 316 at Room Temperature", Transactions of the Indian Institute of Metals (IIM Metallurgy Materials Engineering), vol 74, pages839–849 Feb 2021, ISSN 0975-1645, SCIE.
- V.V. Venu Madhav, A.V.S.S.K. Gupta, S. R. More, "Study of the Fracture Behavior under the Effect of Cross-ply and Angle -ply arrangement of FRP Composite Laminate Subjected to Central Circular Cut-out with Mechanical and Thermal Loading Conditions", International Journal of Engineering Transactions C: Aspects Vol.34, No.6, (June 2021) PP 1526-1532 SCOPUS
- S. Ravi Theja Reddy, A.V. Ratna Prasad, K. Ramanaiah, "Tensile and flexural properties of biodegradable jute fiber reinforced poly lactic acid composites" Materials Today: Proceedings. ISSN: 2214-7853 PP 917-921, January 2021. https://doi.org/10.1016/ j.matpr.2020.10.806. SCOPUS.
- 5. **G. Jamuna Rani**, G Sai Rani, Anchupogu Praveen, "Nano fluids effect on crossflow heat exchanger characteristics Review ", Materials Today: Proceedings. ISSN: 2214-7853, January 2021. **SCOPUS**
- K. Ramanaiah, A.V. Ratna Prasad, K. HemaChandara Reddy "Experimental study on thermo physical properties of biodegradable borassus fruit fiber-reinforced polyester composite". Materials Today Proceedings, ISSN: 2214-7853. January 2021, PP 1857-1859, SCOPUS
- 7. **K. Siva Prasad**, G. Chaitanya "Optimization of process parameters on surface roughness during drilling of GFRP composite using taguchi technique". Materials Today Proceedings. ISSN: 2214-7853, Vol 39, part 4, 2021, pg 1553-1558. **SCOPUS**
- 8. Ratna Kumari, **K. Ramanaiah**, **A.V. Ratna Prasad**, K. Hemachandra Reddy, Srinivas Prasad Sanaka, A. Kalyan Prudhvi,, "Experimental investigation of water absorption behaviour of sisal fiber reinforced polyester and sisal fiber reinforced poly lactic acid composites" Materials Today: Proceedings. ISSN: 2214-7853, PP 935-940, January 2021. **SCOPUS**

- S.R. More, D.V. Bhatt, J.V. Menghani, C.P.Paul, G.R.Desale "Laser Cladding of PAC 718, Tribaloy T-700 and METCO 41 C Hard Facing Powders on AISI SS 304L Substrate". International Journal of Engineering Transactions B: Applications, vol 34, no.2, PP 478-484, February 2021.ISSN:1735-9244, SCOPUS.
- G DilliBabu, Garikapati Bhavan and K. SivajiBabu "Mechanical and machining characterization of Agave Americana, pineapple and its hybrid fiber composites" AIP Proceedings, Feb 2021, vol 2317, Issue- 1 https://doi.org/10.1063/5.0036545. SCOPUS.
- 11. **M. Bala Chennaiah**, **K. Ravi Kumar**, **V. Sridhar**, "Influence of tool profiles on similar Al 5083 alloys using friction stir welding", Materials Today: proceedings, 23 March 2021, 2214-7853, https://doi.org/10.1016/j.matpr.2021.02.787. **SCOPUS**
- 12. Kanchibhotla Hima Teja, **G. Srivalli** and **V. Balakrishna Murthy**, "A Numerical Model to Study the Fluid-Structure Interaction at a Bridge Pier", Theoretical, computational and experimental solutions to thermo-fluid systems, Lecture Notes in Mechanical Engineering pp 379-390, March 2021, https://doi.org/10.1007/978-981-33-4165-4\_35. ISBN NO 978-981-33-4165-4. **SCOPUS.**
- M. Sumalatha, J. N,Malleswara Rao, B.Supraja Reddy, "Optimization Of Process Parameters In 3d Printing-Fused Deposition Modeling Using Taguchi Method", IOP Conference series: Materials science and Engineering, Vol 112, 2021, https://doi.org/ 10.1088/1757-899X/1112/1/012009.
- 14. **K. Siva Prasad**, G. Chaitanya "Experimental investigation on dimensional accuracy in drilling of GFRP composite". Solid State Technology. Volume: 64, Issue: 2. 2021.
- 15. Adusumilli Adilakshmi, Rithvik Alapati, **Alapati Venkateswarlu**, Raghu Veera Gudapati, "The Internet Of Things And Agriculture: An Enriching And Empowering Combination", International Journal of Advanced Research in Engineering and Technology, Volume 12, Issue 3, March 2021, pp.86-96, ISSN Online: 0976-6499, DOI:10.34218/IJARET.12.3.2021.010.

#### **INTERNATIONAL CONFERENCES:**

 Ch. Prabhu Kumar, K. Ramanaiah, A. V. Ratna Prasad, K. Hema Chandra Reddy, "Development of Sustainable Jute/ Polylactic acid Composite Material for Thermal Insulation Applications", International Conference on recent technologies and advanced Materials for green energy and sustainable environment (RTAMGESE) organized by Department of Chemical Engineering, NIT Tiruchunapalli, 12-13th March, 2021

- 2. **P. Sateesh Kumar Reddy**, **Ch. Nagaraju**, "Size Optimization of Heavy Duty Truck Chassis Frame for Maximum Stiffness to Weight Ratio", International Conference on Recent Advances in Mechanical Engineering (ICRAME-2021), Organized by Dept of Mechanical Engineering, Prasad V. Potluri Siddhartha Institute of Technology, Vijayawada. PP 17- 14, 26<sup>th</sup> & 27<sup>th</sup> March 2021.
- Mallapuram Bala Chennaiah, Srivalli Gollamudi, Sai Teja Kola, "Experimental Analysis on Friction stir processing of Al-2014 with SiO<sub>2</sub> Reinforcement", International Conference on Recent Advances in Mechanical Engineering (ICRAME-2021), Organized by Dept of Mechanical Engineering, Prasad V. Potluri Siddhartha Institute of Technology, Vijayawada. PP 15-21, 26<sup>th</sup> 27<sup>th</sup> March 2021.
- 4. K. Ramanaiah, A.V. Ratna Prasad, K. HemaChandara Reddy "Eco friendly sisal fiber / poly lactic acid composite material for thermal insulation applications". Indo-Korean work on Multifunctional Materials for Extreme Loading (MFMEL2021). The virtual workshop was jointly organized by IIT-Madras and Hanyang University, South Korea during 22<sup>nd</sup> to 24<sup>th</sup> of February 2021.
- 5. **V. Sudheer Kumar**, **Ch. Nagaraju**," Optimization of input parameters in rotor bearing system: using Taguchi method and ANOVA" international conference on Engineering research and Teechnology transfer (ICERTT-2K21) organized by BULE HORA University college of engineering and technology, 14<sup>th</sup> 15<sup>th</sup> May 2021.
- 6. Ch.Venkata Prasad, G. Sulochana, "Modelling and analysis of a car rear spoiler", international conference on technological advancements in Mechanical Engineering (ICTAME 2021) organized by Department of Mechanical Engineering, Academy of Maritime Education and Training (AMET), Deemed to be university, Chennai, held on 15<sup>th</sup> & 16<sup>th</sup> June 2021.

#### **NATIONAL CONFERENCES:**

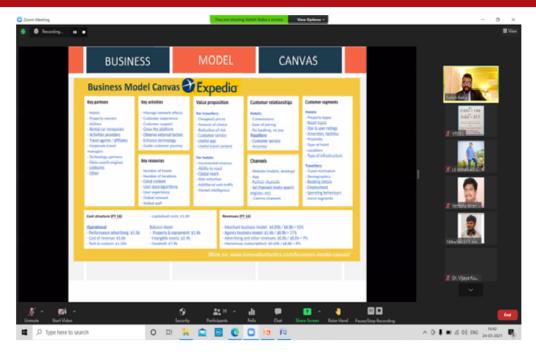
1. K. Ramanaiah, A. V. Ratna prasad, Shaik Galshid Vali, "Experimental investigation of tensile properties of wood- Poly lactic acid biocomposites developed via 3D prnting", in National conference on Biological, Biochemical, Biomedical, Bioenergy, and Environmental Biotechnology (NCB<sup>4</sup>EBT – 2021), conducted by the department of Biotechnology from 29<sup>th</sup> to 30<sup>th</sup> January 2021.

#### WORKSHOPS /SEMINARS/FDP ATTENDED BY FACULTY

- 1) Sri P.Gopinadh Chowdary had attended one week short term training program (STTP) on "Basics of Tribology and its Industrial Engineering Applications (BTIEA-2021)" at NIT, Surat during 4<sup>th</sup> to 8<sup>th</sup> January 2021.
- 2) Dr M.Jogendra Prasad attended one week short term training program (STTP) on "Design of Experiments in Engineering" at B.V.Raju Institute of Technology, Medak District during 4<sup>th</sup> to 9<sup>th</sup> January 2021.
- 3) Sri V.Vasu attended a National workshop on "Fuel cell Technology and its Research Opportunities" at NIT, Warangal on 8th January 2021.
- 4) Sri V.V.Venu Madhav attended Faculty Development Program(FDP) on "The Scope of Additive Manufacturing in Digital Manufacturing" at IILM College of Engineering & Technology, Greater Noida during 18<sup>th</sup> to 22<sup>nd</sup> January 2021.
- **5) Mrs G.Jamuna Rani** attended Faculty Development Program(FDP) on "Thermodynamics & its Applications" at JNTUA College of Engineering, Ananthapuram during 20<sup>th</sup> to 25<sup>th</sup> January 2021.
- 6) Sri V.V.Venu Madhav attended a Webinar on "Mobile Smart Factory" at IILM College of Engineering & Technology Greater Noida on 1<sup>st</sup> February 2021.
- 7) Sri K.Ramanaiah attended a Webinar on "Managing Research Overload" at John Wiley
   & Sons research on 2<sup>nd</sup> February 2021.
- 8) Sri V.V.Venu Madhav, Sri V.Bapi Raju attended Faculty Development Program(FDP) on "Inculcating Universal Human Values in Technical Education (AICTE)" at AICTE, New Delhi during 1st to 5th February 2021.
- 9) Sri K.Siva Prasad attended Faculty Development Program(FDP) on "Frontier of 3D Print Technology and its Industrial Applications (Phase-II)" at Lakireddy Bali Reddy College of Engineering, Mylavaram during 25<sup>th</sup> January to 6<sup>th</sup> February 2021.
- **10) Dr G.Dilli Babu** attended Faculty Development Program(FDP) on "Recent Advancements in Green and Sustainable Manufacturing" at Siddhartha Institute of Engineering & Technology, Puttur(A.P.) during 8<sup>th</sup> to 12<sup>th</sup> March 2021.
- 11) Sri G.Jamuna Rani, Mrs G.Srivalli, Dr M.Sumalatha, B.Supraja Reddy attended Faculty Development Program(FDP) on "Advances in Mechanical Engineering with an Emphasis on AI(AMEAI-2021)" at Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad during 15<sup>th</sup> to 20<sup>th</sup> March 2021.
- **12) Dr N.Vijaya Kumar** attended a Webinar on "Industry 4.0: Digital Manufacturing" at Vignan Institute of Technology & Science (Telangana State) at 26<sup>th</sup> March 2021.

- **13) Sri V.V.VenuMadhav** attended Faculty Development Program(FDP) on "Entrepreneurship" at APSSDC during 15<sup>th</sup> to 27<sup>th</sup> March 2021.
- **14) Sri V.V.VenuMadhav** attended Faculty Development Program(FDP) on "How Teachers can make a difference" at IIT Madras during 15<sup>th</sup> to 17<sup>th</sup> April 2021.
- **15) Dr M.Sumalatha**, **Sri B.Supraja Reddy** attended a Webinar on "Advancements in Friction Stir Spot Welding on Dissimilar Materials" at Arasu Engineering College, Kumbakonam(Tamilanadu State) on 11<sup>th</sup> May 2021.
- **16) Dr M.Sumalatha** attended a Webinar on "Additive Manufacturing Experimental and Numerical Approach" at Arasu Engineering College, Kumbakonam(Tamilanadu State) on 15<sup>th</sup> May 2021.
- **17) Dr N.Vijaya Kumar** attended a Webinar on "Additive Manufacturing: Application, Challenges and Future Scope" at Vignan Institute of Technology & Science (Telangana State) on 22<sup>nd</sup> May 2021.
- **18) Dr N.Vijaya Kumar** attended a Webinar on "Data Science Approach for Mechanical Engineers" at Vignan Institute of Technology & Science (Telangana State) on 4<sup>th</sup> June 2021.
- **19) Dr G.Dillibabu** attended International Faculty Development Program(FDP) on "Applications of Mechanical Engineering" at SVR Engineering College, Nandyal during 9<sup>th</sup> to 14<sup>th</sup> June 2021.
- **20) Dr N.Vijaya Kumar** attended a Webinar on "The Role of Enrepreneurship in post COVID-19 Resurgence" at Vignan Institute of Technology & Science (Telangana State) on 17<sup>th</sup> June 2021.
- **21) Dr V.Balakrishna Murthy** attended a Webinar on "Environmental testing of underwater weapons and equipment" at Tirumala Engineering College, Narasaraopet, Guntur on 19<sup>th</sup> June 2021.
- **22) Dr G.Dillibabu** attended Faculty Development Program(FDP) on "Innovations in Materials and manufacturing Processes (IMMP-2021)" at Vemu Institute of Technology, Tirupati during 21<sup>st</sup> to 25<sup>th</sup> June 2021.
- **23) Sri Ch.Venkata Prasad** attended International Faculty Development Program(FDP) on "Thrust Areas of Research in Mechanical Engineering" at Geethanjali Institute of Technology, Nellore during 22<sup>nd</sup> to 26<sup>th</sup> June 2021.
- **24) Sri K.Siva Prasad** attended National Workshop on "Futuristic Trends in Research for Mechanical Engineering" at Shri Vshnu Engineering college for Women, Bhimavaram during 25<sup>th</sup> June to 4<sup>th</sup> July 2021.

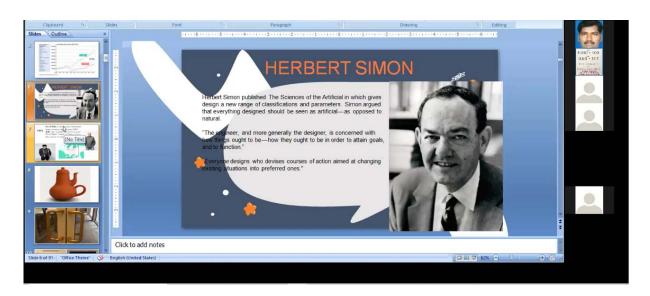
### **GUEST LECTURES ORGANISED**



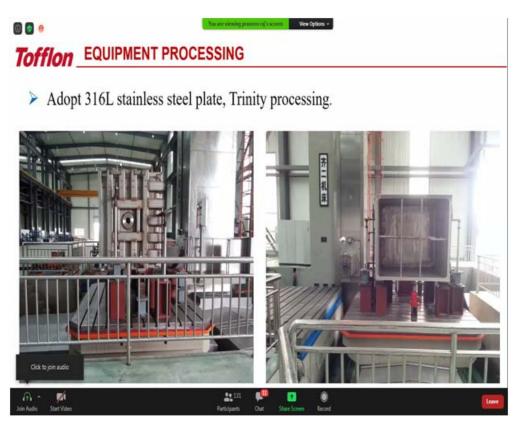
The department together with Institution Innovation Council (IIC) has organized a webinar on "Business Model Canvas" with the guest speaker Sri. M. Satish Babu, Founder and Managing Director, Tech-Mark pvt ltd, Singapore on 24th March 2021.



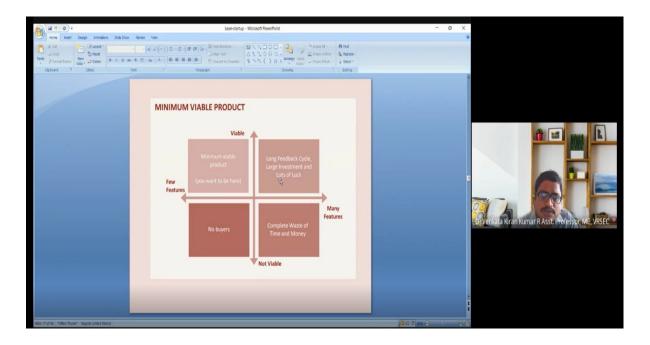
2) Guest lecture on "Non Destructive Testing" organized by the ASME and conducted in the Department of Mechanical Engineering, V R Siddhartha Engineering College, on 24/03/21, Chief Guest & Speaker: Sri G.Vijay Kumar, Prakasa Spectro Cast Pvt Ltd & Synergem. (Webinar).



3) The department together with Institution Innovation Council (IIC) has organized a webinar on "Mentorship Session for Innovators (prototype, Design, Process development for business model" with the guest speaker Sri. M. Janakiram, IIC Innovation Ambassador, PACE Institute of Technology & sciences, Ongole on 31st March 2021.



4) A webinar on "Lean Manufacturing and Industry Automation" organized by the Institution of Engineers India student's chapter, and conducted in Department of Mechanical Engineering, V R Siddhartha Engineering College on 24<sup>th</sup> April 2021, Speaker: Sri Yarlagadda Praveen Raj, Plant Manager, M/s Tofflon India Pvt.Ltd, Hyderabad.



5) The department together with Institution Innovation Council (IIC) has organized a webinar on "Lean startup & Minimum Viable Product/Business" with guest speaker Dr. Venkata kiran kumar Ravi, IIC Innovation Ambassador, VR Siddhartha Engineering College, ME Department, Vijayawada on 30<sup>th</sup> June 2021.

### **DOCTORAL DEGREES AWARDED**

- 1) Dr. G.Jamuna Rani, working as Assistant Professor in the Department of Mechanical Engineering was awarded Ph.D degree for the title "Experimental Investigation on Direct Injection Diesel Engine Using Madhuca Longifolia Biodiesel" in the specialization of Thermal Engineering from JNTUK, Kakinada on 27th May 2021.
- **2) Dr.Ch. Sri Chaitanya**, working as Assistant Professor in the Department of Mechanical Engineering was awarded Ph.D degree for the title "*Mechanical and Tribological Performance of Cenosphere based Syntactic Foams*" in the specialization of Design Engineering from NIT, Warangal on 19<sup>th</sup> March 2021.

# **ONGOING RESEARCH (DOING PH.D)**

S. N o	Name	Designation	University	Month & Year of Registration	Specialization
1	P.S.K. Reddy	Sr. Asst. Prof	A N U Guntur	November 2011	Design Engineering
2	K.Ramanaiah	Sr. Asst. Prof	JNTU Anantapur	July 2009	Composites
3	V. Sudheer Kumar	Asst. Prof.	A N U Guntur	November 2011	Machine Dynamics
4	K. Ravi Kumar	Asst. Prof	J N T U Kakinada	September 2013	Heat Transfer
5	B. Srinivasa Rao	Asst. Prof	J N T U,Hyderabad	November 2012	Design Engineering
6	V. Sridhar	Asst. Prof	A U Vizag	April 2014	Production Engineering
7	M. Ashok Chakravarthy	Asst. Prof	J N T U Kakinada	December 2012	C F D Simulation
8	K. Siva Prasad	Asst. Prof	A N U Guntur	March 2014	Advanced Manufacturing
9	B. Supraja Reddy	Asst. Prof	A N U Guntur	March 2014	Manufacturing
10	G. Srivalli	Asst. Prof	A N U Guntur	July 2016	Thermal Engg
11	Ch. Venkata Prasad	Asst. Prof	J N T U Kakinada	August 2012	Design Engineering
12	A.N. Phani Deepthi	Asst. Prof	Annanmalai University, Chennai	October 2019	Thermal Engg.
13	G. Sreedhar Babu	Asst. Prof	A U,Vishakhapatnam	April 2018	Design &Mfg.
14	M. Rajesh	Asst. Prof	K L E F, Guntur	January 2017	Thermal Engg
15	V. Vasu	Asst. Prof	N I T Warangal	December 2019	Thermal Engg
16	P.Gopinath	Asst. Prof	N I T Warangal	August 2020	Machine Design
17	G.S.Pavan Kumar	Asst. Prof	Annanmalai University, Chennai	December 2018	Composites

# **GUIDING Ph.D**

SI. No	Name	Designation	Name of the scholar	University & Date of Registration
1.	Dr. A.V.Ratna Prasad	Professor & Principal	K. Ramanaiah	J N T U Anantapur, 30-07-2009
			P.Srinivasa Rao	K L E F, Guntur, 18-09-2013
			G.S. Pavan Kumar	Annamalai University,
			Transaction and the second	Chennai
				04 -12-2018
2.	Dr. N. Vijayasai	Professor & H.O.D.	A.Satyanarayana	J N T U,Hyderabad, 17-07-2009
			U. HariBabu	A N U, Guntur, 16-11-2011
			P.Nanda Kishore	JNTU, Kakinada,
				15-12-2012
3.	Dr. V. Bala	Professor	N. Vijeta	JNTU, Kakinada,
	Krishna Murthy			15-12-2012
	5		S Rambabau	J NTU, Anantapur,
				14-08-2010
			Y. SaiBabu	JNTU, Ananatapur,
			3 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 1	14-8-2010
			V. Mohan Manoj	JNTU, Kakinada,
			Gupta	18-05-2016
4.	Dr. N. Ravi Kumar	Professor	Ch. Ranga Rao	JNTU, Kakinada, 25-07-2015
			G.V. N.B.	JNTU, Kakinada, 21-01-2016
			Prabhakar	Terminations 4.0 seeds 1.25 objects so shall be facilities and the editional parties of other terminations of the control of t
5.	Dr. C. Naga Raju	Professor	U. Koteswara Rao	NIT, Warangal, 20-12-2010
	5557 S748		P.Sateesh Kumar	A N U, Guntur, 16-11-2011
			Reddy	
			V. Sudheer Kumar	A N U Guntur, 16-11-2011
			K.Ravi Kumar	JNTU, Kakinada, 17-07-2013
			Ch. Rama Krishna	JNTU, Kakinada, 28-04-2016
			A.Syam Prasad	JNTU, Kakinada, 21-01-2016
6.	Dr. S.S. Prasad	Professor	Smt. A. N.	Annamalai
			PhaniDeepthi	University, Chennai
				10-10-2019
7.	Dr. K.N.	Associate	M. Peraiah	JNTU Kakinada 20-1-2016
	Malleswara Rao	Professor	V. Vasu	NIT Warangal 08-12-2019
8.	Dr. G. DilliBabu	Associate	Obulesu Taperla	JN TU Kakinada 5-3-2017
		Professor	M. Sarath Babu	JPJ Rajasthan 28-12-2015
			B. Yedukondalu	Annamalai
				University, Chennai
			1925 (1925 B) P2	07-04-2019
			C.Ramanjaneyulu	Annamalai
				University, Chennai
POR C				06-02-2020
9.	Dr. V.L.Krishnan	Associate	Nilesh R. Kolhalkar	K L E F, Guntur, 01-02-2016
		Professor	K. Raja Satyanarayana	K L E F, Guntur, 06-01-2014

## **CONSULTANCY DETAILS**

Revenue earned through Consultancy: Rs.49,708/-

S.No	Nature of the work	Agency to which consultancy is offered	Revenue earned	Date
1.	Tensile, Flexural & Impact Testing	K.D.S Prakash, SASI Institute of Technology & Engineering, Tadepalligudem	6,372	23-06-2021
2.	Tensile Test	S.Rohit, SASI Institute of Technology & Engineering, Tadepalligudem	2,655	24-06-2021
3.	Wear Test	A.Subramanyam, Centurion University, Parlakhemundi, Odhisha	4,425	23-04-2021
4.	Wear Test	A.Subramanyam, Centurion University, Parlakhemundi, Odhisha	7,375	18-04-2021
5.	Impact Test	D.Tarun, Gudlavalleru Engineering College,Gudlavalleru	2,950	08-04-2021
6.	Thermal Conductivity Flexural and Hardness Test	V.LakshmiNarayana St. Anns College of Engineering and Technology, Chirala	2,715	31-03-2021
7.	Thermal Conductivity Flexural and Hardness Test	V.LakshmiNarayana St. Anns College of Engineering and Technology, Chirala	10,000	30-03-2021
8.	Tensile, Flexural Impact & Hardness Testing of composites	P.Venkatesh,NOVA'S Institute of Technology,Eluru	3,186	09-03-2021
9.	Thermal Conductivity	Dr.Satyabrata Sahoo Indian Institute of Technology(ISM), Dhanbad	9,440	12-02-2021
10.	3D Printing	P V P Siddhartha Institute of Technology, Vijayawada	590	29-01-2021

# **EQUIPMENT AND FURNITURE PURCHASED: Rs. 92,917/-**

S.No	Name of equipment	Nature of equipment	Laboratory in which it is used or if a new lab is set-up details	Amount spent (in Rs.)
1.	ELGI TS03 LB 12 TM 220L, Air Compressor	Metrology	Metrology Lab	82,600
	with 3 HP motor			
2.	Pneumatic regulator with a gauge	Metrology	Metrology Lab	3,717
3.	650 VA UPS	CAD	CAD Lab-I	6,600

# STUDENT ACTIVITIES

S. No	Date	Name of the student	Name of the event	Organizer details	Prize won
1.	07/06/20 21	Shaik afrid 188W1A03G2	Participated in the national level online quiz	Lakireddy Bali Reddy College Of Engineering, Mylavaram	Participation
2.	22/05/20 21	Shaik afrid 188W1A03G2 Gorrela Vital Sai 198W5A0319 Pragadaraju Siva Sai Charan 188W1A03F6 Tirumala Ravi Kumar janjanam 198W5A0305 Mohammad MahaboobBasha 198W5A0325 Abdul Sana Mumthareen 188W1A03B5 Yenubara John babu188W1A03H0 Naga SaiPranayGunda 188W1A03D4	Webinar on "Additive Manufacturing: Application, Challenges and Future Scope"	"VIGNAN Institute of Technology and Science", Hyderabad	Participation
3.	17/06/20 21	Anjana Sai Pullakhandam 188W1A03B8	Essay writing competition on "Yoga – the way of life"	NSS unit of the JNTUK-University College of Engineering Vizianagara m on the eve of 7 <sup>th</sup> International Day of Yoga (IDY – 2021) Celebrations	Participation

# STUDENTS TRAINING PROGRAMS

SL No	Name of the programme	Area	Audience	Schedule	Number of students
1	Infosys Training	Programming	Final year students	16/02/2021 to 19/02/2021	19
2	Infosys Training	Mock Interview and programming guidelines	Final year students	16/04/2021 to 20/04/2021	12

# TRAINING & PLACEMENT (B.Tech)

S.	Name of the	Enrollment	Name of the	Appointment letter reference no.
N o.	student placed	no.	Employer	with date
1	Chaitanya Kumar Ananthaneni	178W1A0301	TCS Ninja	TCSL/DT20206563735/Hyderabad 09/01/2021
2	Hemanth Gopisetti	178W1A0319	TCS Ninja	TCSL/DT2020 6474195/Hyderabad 11/01/2021
3	Karthik Jandhyala	178W1A0321	TCS Digital	TCSL/CT20192634303/Hyderabad 30/10/2020
4	Kottu Sai Manikanta Harshith	178W1A0331	TCS Ninja	TCSL/DT20207086548/Hyderabad 11/01/2021
5	Lam Sampath Kumar	178W1A0334	TCS Ninja	TCSL/CT20192957247/Hyderabad 11/01/2021
6	Durga Venkata Phanindra Kumar Mulamreddy	178W1A0337	TCS Ninja	TCSL/DT20203420537/Hyderabad 11/01/2021
7	Rajulapati Subba Rao	178W1A0346	TCS Ninja	TCSL/DT20203185383/Hyderabad 11/01/2021
8	Sri Pavan Krishna Angadala	178W1A0351	TCS Ninja	TCSL/DT20206633098/Hyderabad 11/01/2021
9	Vudatha Tharun Kumar	178W1A0358	TCS Ninja	TCSL/DT20206646109/Hyderabad 11/01/2021

10	Bondapalli	178W1A0365	TCS Ninja	TCSL/DT20206652586/Hyderabad
	Ramprasad			11/01/2021
11	Chitturi D N	178W1A0373	TCS Ninja	TCSL/CT20203176853/Hyderabad
	Prashanth			11/01/2021
12	Sai Niteesh Reddy	178W1A0377	TCS Ninja	TCSL/ DT20206565101/Hyderabad
	Gadhireddy			11/01/2021
13	Pavan Sylesh	178W1A03D1	TCS Ninja	TCSL/ CT20203473847/Hyderabad
	Chengalva			11/01/2021
14	Gopi	178W1A03D2	TCS Ninja	TCSL/ DT20206804422/Hyderabad
-	Chinthalacheruvu			11/01/2021
15	Manne Ravindra	178W1A03E8	TCS Ninja	TCSL/CT20203177552/Hyderabad
	Babu			11/01/2021
16	Venkata Sai	178W1A03F2	TCS Ninja	TCSL/ CT20203426509/Hyderabad
	Sahishna Mullapudi	.=0	maayu	11/01/2021
17	Saladi Geetanjali	178W1A03G0	TCS Ninja	TCSL/ DT20206790527/Hyderabad
10	77 1 1	1707/110001	TOO N'	11/01/2021
18	Venkatesh	178W1A03G1	TCS Ninja	TCSL/CT20203305733/Hyderabad
10	Sankaramanchi	170331 4 02 42	37.1	11/01/2021
19	P Giridhara Sai	178W1A0342	Medimage	MEP 711/20-21
	Krishna		Technologies Pvt Ltd	1/04/2021
20	Sui Maga Sai	178W1A0311	CTS	Candidate ID – 14976135
20	Sri Naga Sai Bharadwaja Mukesh	1/8W1A0311	CIS	28/04/2021
	Cheruvu			28/04/2021
21	Ganti Veera	178W1A0317	CTS	Candidate ID – 14976138
21	Venkata Kumar	176W1A0317	CIS	27/04/2021
	Srikanth			2770472021
22	Gopisetti Hemanth	178W1A0319	CTS	Candidate ID – 15087784
	Venkat Nagendra	1,01,111001		27/04/2021
	Kumar			
23	Durga Venkata	178W1A0337	CTS	Candidate ID – 14976327
	Phanindra Kumar			23/03/2021
	Mulamreddy			
24	Sri Pavan Krishna	178W1A0351	CTS	Candidate ID – 14976351
	Angadala			23/03/2021
25	Sai Niteesh Reddy	178W1A0377	CTS	Candidate ID – 14976367
	Gadhireddy			23/03/2021
26	Medikonda Mohith	178W1A0385	CTS	Candidate ID – 14976371
				23/03/2021
27	Sai Lakshmi	178W1A0395	CTS	Candidate ID – 14976378
	Manasvi Ilindra			23/03/2021
28	Tavva Gopal Munna	178W1A03B0	CTS	Candidate ID – 14976383
				22/03/2021
29	Pavan Sylesh	178W1A03D1	CTS	Candidate ID – 14976392
	Chengalva			23/03/2021

30	Molleti Bhaskara Sai Santosh Kumar	178W1A03F1	CTS	Candidate ID – 14976035 23/03/2021
31	Saladi Geetanjali	178W1A03G0	CTS	Candidate ID – 14976040 23/03/2021
32	Sankaramanchi L K S S Venkatesh	178W1A03G1	CTS	Candidate ID – 14562106 22/03/2021
33	Chikkavarapu Bhanu Sai Prakash	178W1A0371	Polyhose India Rubber Private Limited	Email dated 07/04/2021
34	Pothureddypremteja	178W1A0393	Polyhose India Rubber Private Limited	Email dated 07/04/2021
35	Lam Praveen	178W1A03E6	Polyhose India Rubber Private Limited	Email dated07/04/202 1
36	Siddineni Lakshmi Sriram	178W1A03G4	Polyhose India Rubber Private Limited	Email dated 07/04/2021
37	Thiriveedhi Varun Teja	178W1A03H0	Polyhose India Rubber Private Limited	Email dated 07/04/2021
38	Datti Devi Prasad	188W5A0315	Polyhose India Rubber Private Limited	Email dated 07/04/2021
39	Krishna Chaitanya Ande	178W1A0306	Infosys	3.8 LPA, 04/06/2021
40	Dinesh Kada	178W1A0322	Infosys	3.8 LPA, 04/06/2021
41	Abhinava Bharat Gavireddi	178W1A03D5	Infosys	3.8 LPA, 04/06/2021
42	Sai Teja Kola	178W1A03E4	Infosys	3.8 LPA, 04/06/2021
43	Jilani Shaik	178W1A03A1	Infosys	3.8 LPA, 04/06/2021
44	Sai Koteswara Rao Nallamothu	188W5A0321	Infosys	3.8 LPA, 04/06/2021
45	Kiran V	178W1A03B5	Infosys	3.8 LPA, 04/06/2021
46	Ujwala Naga Venkata Sri Lekha	178W1A03G2	Infosys	3.8 LPA, 04/06/2021

47	Snehita Kare	178W1A0325	Accenture	4.5 LPA, 04/06/2021
48	Revathi Tanniri	178W1A0354	Accenture	4.5 LPA, 04/06/2021
49	Vineetha Nagidi	178W1A0390	Accenture	4.5 LPA, 04/06/2021
50	Sai Teja Kola	178W1A03E4	Accenture	6.5 LPA ,04/06/2021
51	Chaitanya Kumar Ananthaneni	178W1A0301	Accenture	4.5 LPA, 04/06/2021
52	Krishnachaitanya Ande	178W1A0306	Accenture	4.5 LPA, 04/06/2021
53	Gopisetti Hemanth Venkat Nagendra Kumar	178W1A0319	Accenture	4.5 LPA, 04/06/2021
54	Dinesh Kada	178W1A0322	Accenture	4.5 LPA, 04/06/2021
55	Shanmukha Chandra Sekhar Kasibhotla	178W1A0326	Accenture	4.5 LPA, 04/06/2021
56	Anil Kumar Atta	178W1A0327	Accenture	4.5 LPA, 04/06/2021
57	Gangadhar Nersu	178W1A0339	Accenture	4.5 LPA, 04/06/2021
58	Tarun Niluroutu	178W1A0391	Accenture	4.5 LPA, 04/06/2021
59	Palli Shareef Kumar Palli	178W1A0392	Accenture	4.5 LPA, 04/06/2021
60	Kiran Velamati	178W1A03B5	Accenture	4.5 LPA, 04/06/2021
61	Alluri Sai Nandini Alluri	178W1A03B9	Accenture	4.5 LPA, 04/06/2021
62	Sathish Bommidala	178W1A03C9	Accenture	4.5 LPA, 04/06/2021
63	Abhinava Bharat Gavireddi	178W1A03D5	Accenture	4.5 LPA, 04/06/2021
64	Rehaman Pasha Mohammad	178W1A03F0	Accenture	4.5 LPA, 04/06/2021
65	Natta Dheeraj	178W1A03F4	Accenture	4.5 LPA, 04/06/2021
66	Lakshmi Sriram Siddineni	178W1A03G4	Accenture	4.5 LPA, 04/06/2021

67	Mohan Kumar Surampudi	178W1A03G7	Accenture	4.5 LPA, 04/06/2021
68	Buragadda Saikrishna Srikar	178W1A0309	Qspiders	3 LPA ,10/04/2021
69	Snehita Kare	178W1A0325	Qspiders	3 LPA ,10/04/2021
70	Anil Kumar Katta	178W1A0327	Qspiders	3 LPA ,10/04/2021
71	Gopi Krishna Nadipineni	178W1A0338	Qspiders	3 LPA ,10/04/2021
72	Naga Tejaswi Thotapalli	178W1A0355	Qspiders	3 LPA ,10/04/2021
73	Poojitha Jetti	178W1A03D7	Qspiders	3 LPA ,10/04/2021
74	Sai Teja Kola	178W1A03E4	Qspiders	3 LPA ,10/04/2021
75	Sai Koteswara Rao Nallamothu	188W5A0321	Qspiders	3 LPA ,10/04/2021
76	Yoga Nagachary Katukojwala	188W5A0318	Atul Auto Limited	2.5 LPA 30/06/2021

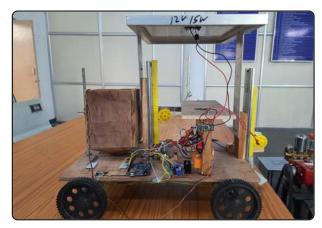
## **INTERNSHIPS**

S.No	Name of The Student	Roll Number	Name of The Industry	Date From	Date To	No of Days
1	Mohammad Mahaboob Bhasha	198W5A0325	Internshala	7/04/2021	7/06/2021	60
2	Gorrela Vital Sai	198W5A0319	Internshala	7/04/2021	7/06/2021	60
3	G.Avinash	188W1A0371	Internshala	7/04/2021	7/06/2021	60
4	V.Manikanta Kumar	188W1A03G8	Internshala	11/03/2021	11/05/2021	60
5	M.Pavan Kumar	188W1A0329	Internshala	27/03/2021	27/05/2021	60
6	N.Veera Sai Kumar	188W1A0395	Internshala	27/03/2021	27/05/2021	60
7	M.Hari Kumar	198W5A0314	Internshala	26/04/2021	26/06/2021	60
8	Arun Teja	188W1A0379	Internshala	15/03/2021	15/05/2021	60
9	M.Raju	188W1A0387	Internshala	03/04/2021	03/06/221	60
10	Kiran Kumar .M	198W5A0312	Internshala	26/04/2021	26/06/2021	60
11	N.Bhanu Teja	188W1A0391	Internshala	24/04/2021	24/06/2021	60
12	B.Rupika	188W1A03C3	Internshala	18/4/2021	18/6/2021	60
13	Sai Krishna	188W1A03B1	Internshala	14/4/2021	14/6/2021	60
14	K.D.S.Venkata Sai Kiran	188W1A0378	Internshala	6/4/2021	6/6/2021	60
15	Naga Bharadwaj. P	188W1A0342	Internshala	1/4/2021	1/6/2021	60
16	P.Gowtham	188W1A0343	Internshala	16/3/2021	16/5/2021	60

17	Reddy Appala Raju	188W1A0345	Internshala	11/3/2021	11/5/2021	60
18	S.Sri Charan	188W1A0347	Internshala	1/4/2021	1/6/2021	60
19	Altaf Rehman	188W1A0348	Internshala	3/4/2021	3/6/2021	60
20	Syed Nazeer	188W1A0349	Internshala	3/4/2021	3/6/2021	60
21	Y.Saibaburao Patnaik	188W1A0356	Internshala	11/3/2021	11/5/2021	60
22	T.Ravi Kumar Janjanam	198W5A0305	Internshala	7/4/2021	7/6/2021	60
23	A.Sai Teja	188W1A0303	Internshala	19/3/2021	19/5/2021	60
24	A.Sai Krishna	188W1A0304	Internshala	19/3/2021	19/5/2021	60
25	B.V.Naga Sai Charan	188W1A0308	Internshala	26/3/2021	26/5/2021	60
26	Bharat Chowdary Potluri	188W1A0309	Internshala	21/3/2021	21/5/2021	60
27	D.Vinod Kumar	188W1A0314	Internshala	15/3/2021	15/5/2021	60
28	G.Sai Balaji	188W1A0315	Internshala	15/3/2021	15/5/2021	60
29	Gaurav S Kumar	188W1A0316	Internshala	26/3/2021	26/5/2021	60
30	G.Arun Kumar	188W1A0317	Internshala	29/3/2021	29/5/2021	60
31	G.Pujith	188W1A0319	Internshala	20/4/2021	20/6/2021	60
32	Gautam Kodali	188W1A0324	Internshala	22/3/2021	22/5/2021	60
33	K.Sumith Kumar	188W1A0325	Internshala	22/3/2021	22/5/2021	60
34	Mohammad Mustafa	188W1A0332	Internshala	17/3/2021	17/5/2021	60
35	M.Bhargav Krishna	188W1A0333	Internshala	17/3/2021	17/5/2021	60
36	Nithin Morla	188W1A0334	Internshala	15/3/2021	15/6/2021	60
37	Raghava Sai Murthy	188W1A0341	Internshala	25/4/2021	25/6/2021	60
38	Ch.Avinash	188W1A0313	Internshala	27/3/2021	27/5/2021	60
39	Anjaneyulu Baireddy	188W1A0305	Internshala	27/3/2021	27/5/2021	60
40	K.Ajay Sagar Babu	188W1A0377	Internshala	1/4/2021	30/6/2021	60
41	Yogeswara Raj Kumar.M	188W1A0391	Internshala	1/4/2021	30/6/2021	60
42	Yuvaraj Reddy Sanagala	188W1A03A5	Internshala	22/3/2021	3/6/2021	60
43	K.Naga Karthik	188W1A0380	Internshala	1/4/2021	30/6/2021	60
44	N.Lakshmipathi Rao	188W1A0396	Internshala	1/4/2021	30/6/2021	60
45	Naga Sai Pranay .G	188W1A03D4	Sky Rider Institutions	22/12/2020	6/01/2021	15
46	Anjana Sai.P	188W1A03B8	Sky Rider Institutions	22/12/2020	6/01/2021	15
47	Sri Lakshmi Manasvi Ilindra	178W1A0395	Inmovidu	19/7/2020	18/8/2020	30
48	Srijagadde	178W1A0376	Inmovidu	19/7/2020	18/8/2020	30
49	S.Venkatesh (Paid: 15000/-Per Month)	178W1A03G1	Rayontec	29/3/2021	30/6/2021	90

#### **ENGINEERING MODELS DEVELOPED**

IV/IV B.Tech. Mechanical Engineering Students developed engineering models as a part of their Major Project work. Some of the models are presented here.



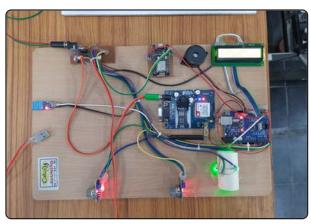
Fabrication of Automated Vehicle for Agricultural Applications



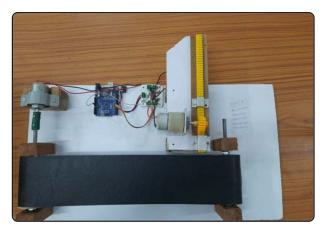
Optimization of Biogas Effecting
Parameters using Taguchi Design of
Experiments



Foot Step Power Generation



Real time Indoor Air Quality Monitoring System Using Arduino UNO



Automated Cast Quality Inspection using Deep Learning



Automatic Cleaning Mechanism for Split Air Conditioner



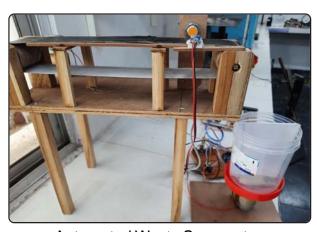
Multi Operational Machine using Toothed Wheel Mechanism



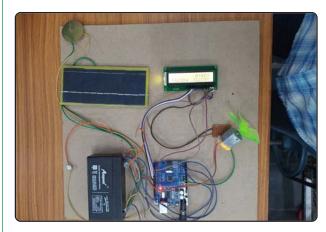
Fabrication of Smart Solar Tracker with Automatic Cleaning



Design and Fabrication of Cycle Operated Agro-Sprayer



Automated Waste Segregator



Hybrid Power Generation using Solar, Wind and Piezo Energy



Design and Fabrication of Solar Fertilizer Spreader



# DEPARTMENT OF MECHANICAL ENGINEERING V.R. SIDDHARTHA ENGINEERING COLLEGE Kanuru, Vijayawada - 520 007.