



## **Dr. A Aruna Kumari**

B.Tech(Mechanical),M.Tech(Machine Design),Ph.D(Thermal)

### **Professor**

**Life member of Indian society of technical education (I.S.T.E) ,Life member of combustion institute (Indian section)**

Mechanical Engineering

### **Areas of Interest:**

**IC Engines,  
Advanced IC Engines  
Alternative Fuels,  
Bio Diesels,  
Automobile Engineering,  
Energy Conservation And Management,  
Engineering Drawing,  
Machine Drawing,  
Instrumentation And Control Systems  
Power Plant Engineering**

Dr.A. Aruna Kumari was born in Mahabubabad District, Telangana

She completed her B-Tech (Mechanical) from JNTU Ananthapuramu in 2000, M-Tech (Machine Design) from JNTU Kakinada in 2005, and completed Ph.D (Thermal Engg) from JNTU, Hyderabad in 2013.

She has 64 International and National Journals to her credit. She has 15 National papers Published in various National and International conferences. Approximately she participated in 35 workshops throughout the country.

Presently she is guiding 10 Ph.D scholars at various universities, 2 are already awarded their degrees, since 20 years guiding M.Tech, B.Tech students in their research.

She worked on research project title "Solar Desalination for Nano and Micro Hierarchical Structure" Funded by TEQIP -III.

She is Life member of Indian society of technical education (ISTE), Life member of combustion of institute.

She is Appointed as pollution control board (TSPCB) member in 2018 to 2023

She worked as confidential team member for various competitive exams conducted by Telangana state government.

She Worked as coordinator for TSLPRB (Telangana state level police recruitment board) in 2022-23.

Appointed Twice as a convener for TGPGET for the years 2024, 2025

### **- Educational & Professional**

#### **- Academic Qualifications**

- Ph.D in Thermal Engineering, JNTU college of Engineering, Hyderabad (2008-2013)

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M.Tech in Machine Design, JNTU college of Engineering, Kakinada with First class with distinction (2002-2005)

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B.Tech in Mechanical Engineering, JNTU college of Engineering, Anantapuramu with first class (1996-2000)

#### **Professional Experience**

#### **- At JNTUH**

- Professor, JNTUH (2014 - Till Date)

- Associate Professor, JNTUH (2006 - 2014)

- Assistant professor, JNTUH (2000 - 2006)

#### **- Research**

#### **- Research Projects**

- *Solar desalination for nano and micro hierarchical structures*, funded by TEQIP III, JNTUH - 2,85,000 (sanctioned in 2019 duration of 1 years)

#### **- Patents**

- Dr.A.Aruna Kumari, *ML Powered Device for Breast Mammogram Detection*, Controller general of patents, designs and trademarks, department of industrial policy and promotion, Govt OF india, 2025

- Dr.A.Aruna Kumari, *Development of Atmospheric Water collector*, Office of the control general of patents designs and trade mark, Department of industry policy and promotion, Ministry of commerce and industry, Government of india, 2023

- Dr.A.Aruna Kumari, *Devolopement of Plastic Rope by using Plastic waste bottles*, Office of the control general of patents designs and trade mark, Department of industry policy and promotion, Ministry of commerce and industry, Government of india, 2023

- Dr.A.Aruna Kumari, *Fabrication of 360 Degrees Wheel rotation vehicle*, Office of the control general of patents designs and trade mark, Department of industry policy and promotion, Ministry of commerce and industry, Government of india, 2023

- Dr.A.Aruna Kumari, *Devolopement of Avanced Hydroponic system by solar energy*, Office of the control general of patents designs and trade mark, Department of industry policy and promotion, Ministry of commerce and industry, Government of india, 2023

- Dr.A.Aruna Kumari, *Devolopement of Economical 3D Printer*, Office of the control general of patents designs and trade mark, Department of industry policy and promotion, Ministry of commerce and industry, Government of india, 2023



## - International Journals

- ▶ Dr.A.Aruna Kumari, *Simulation of Cooling Helmet*, International Journal Of Innovative Research in Technology, ISBN No.2349-6002, Vol No.11, Issue No.9, pp.948-951, Febraury, 2025
- ▶ Dr.A.Aruna Kumari, *EValuation of compression ratio impact on vcr engine using grape seed oil as biodieseLe*, The journal of analytical and Experimental Model analysis, ISBN No.0886-9367, Vol No.XV, Issue No.IV, pp.1802-1814, APRIL 2023, 2023
- ▶ Dr.A.Aruna Kumari, *A Review on bio diesel performance in a single cylinder ic engine*, International journal of innovative reaserch in technology, ISBN No.2349-6002, Vol No.9, Issue No.11, pp.1020-1026, April 2023, 2023
- ▶ Dr.A.Aruna Kumari, *Performance And Emission Analysis of CI Engine with Different Piston Geometries using Bio Diesel A s Fuel*, The International Journal of Analytical and Experimental Modal Analysis, ISBN No.0886-9367, Vol No.XIII, Issue No.VII, pp.3540-3549, The International Journal of Analytical and Experimental Modal Analysis, JULY, 2021
- ▶ Dr.A.Aruna Kumari, *An overview on hydrogel matierials for solar desalination*, www.elsevier.com, matierials today proceedings, 14 december, 2020
- ▶ Dr.A.Aruna Kumari, *Influence of aluminium parabolic fins as energy absorption material in the solar distillation system*, www.elsevier.com, matierials today proceedings, 14 december, 2020
- ▶ Dr.A.Aruan Kumari, *Effect of Coconut Shell Nanoparticles In Diesel Engine Fueled with Pine Oil Biodiesel*, The International Journal of Analytical and Experimental Modal Analysis, ISBN No.0886-9367, Vol No.XIII, Issue No.XI, pp.1890-1898, The International Journal of Analytical and Experimental Modal Analysis, November, 2020
- ▶ Dr.A.Aruna Kumari, *Experimental assessment of performance, combustion and emission characteristics of diesel engine fuelled with lemon peel oil*, International Journal of Ambient Energy, ISBN No.ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/taen20>, 21 Dec 2020., 21 Dec, 2020
- ▶ Dr.A.Aruna Kumari, *Effect of split fuel injection strategies on the diverse characteristics of CRDI diesel engine operated with tamarind biodiesel*, ENERGY SOURCES, PART A: RECOVERY, UTILIZATION, AND ENVIRONMENTAL EFFECTS, ISBN No.ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/ueso20>, ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/ueso20>, 23 DEC, 2020
- ▶ A.Aruna Kumari, *Experimental Investigations on CI engine with different Combustion Chamber Designs*, international journal of recent technology and engineering(IJRTE), ISBN No.2277-3878, Vol No.7, Issue No.6, pp.188-192, Blue eyes intelligent engineering and science publicatio, march , 2019
- ▶ Dr.A.Aruna kumari, *Experimental Investigations on Ci Engine Using Biodiesel With Fuel Additives*, International Journal for Research in Engineering Application & Management (IJREAM), ISBN No.2454-9150, Vol No.04, Issue No.10, pp.96-101, jan, 2019
- ▶ Dr.A.Aruna Kumari, *Investigation into Emission Characteristics of a Diesel Engine Using Biodiesel with Nanoadditives*, The International journal of analytical and experimental modal analysis Volume XI, Issue X, October/2019 ISSN NO: 0886-9367, ISBN No.ISSN NO: 0886-9367, Vol No.XI, Issue No.X, pp.3303-3309, The International journal of analytical and experimental modal analysis, October, 2019
- ▶ Dr.A.Aruna Kumari, *DEVELOPMENT OF AN EMPIRICAL EQUATION FOR COMPRESSIVE STRENGTH OF UNSTIFFENED DENTED THIN SQUARE PLATES WITH INITIAL IMPERFECTIONS*, ARPN Journal of Engineering and Applied Sciences, ISBN No. 1819-6608, Vol No.14, Issue No.6, pp.1178-1188, Asian Research Publishing Network (ARPN), march , 2019
- ▶ Dr.A.Aruna Kumari, *ORDER OF INFLUENCE OF DENT GEOMETRY PARAMETERS ON ULTIMATE STRENGTH OF DENTED THIN SQUARE*, GLOBAL JOURNAL OF ENGINEERING SCIENCE AND RESEARCHES, ISBN No.2348-8034, Vol No.5, Issue No.11, pp.328-347, GLOBAL JOURNAL OF ENGINEERING SCIENCE AND RESEARCHES, november, 2018
- ▶ A.Aruna Kumari, *PV Compensation in improving the voltage quality in LV electrical networks*, international journal of technical innovation in Modren engineering &science(IJTIMES), ISBN No.2455-2585, Vol No.3, Issue No.12, December , 2017
- ▶ A.Aruna Kumari, *Fabrication Of Android Based Moving Robot For Pick And Place Aplications*, Journal of emerging technologies and innovative reaserch(JETIR), ISBN No.2349-5162, Vol No.4, Issue No.12, December , 2017
- ▶ A.Aruna Kumari, *the effect of turbocharging on performance and emission charistics for LHR engine using alchoholic blends of biodiesel.review*, international journal of reaserch in engineering and technology, ISBN No.2319-1163, Vol No.05, Issue No.07, pp.362-369, IJRET, JULY, 2016
- ▶ A.Aruna Kumari, *Evaluation of emission characteristics on CI diesel engine using pal stern methyl ester*, International journal of energizing tech&science, ISBN No.0974-3588, Vol No.Vol.6, Issue No.Issue.1-161, Jan13 to June 13, 2013
- ▶ A.Aruna Kumari, *Effect of precipitation hardening on mechanical and micro structural charecteristics of welded incoel-718*, International journal of emerging technologies &applications in engineering and technology and science, Vol No.vol-6, , Issue No.issue-2, july-dec 13., 2013
- ▶ A.Aruna Kumari, *Evaluation of emission charecteristics on CI diesel engine using mutton tallow methyl ester*, international journal of advanced engineering sciences and technologies,, Vol No.Vol no.12, , Issue No.issue no 1, pp.80-82, 2013
- ▶ A.Aruna Kumari, *Heuristic approach based similarity coefficient for cell formation in a flexible cellular manufacturing system*, Journal of information, knowledge, and research in mechanical Engg, ISBN No.0975-668X., Vol No.Vol 2, Issue No.Issue.1, Nov11 to Oct 12, 2012
- ▶ A.Aruna Kumari, *Application of taguchi & response surface methodology for biodiesel production from alkali catalyzed transesterification of waste cooking oil*, International Journal of Applied Engg Research , Vol No.Vol.4, Issue No.0973-4572, pp.1169-1184, 2009
- ▶ A.Aruna Kumari, *Experimental investigations to specify the effect of fuel additives on performance of vegetable oil engine*, International Journal of Mechanical Engg, , Vol No.Vol.-3, Issue No.Issue-1, Jan-Jun 2010,
- ▶ A.Aruna Kumari, *ZTA Based ceramic cutting tools performance on hardware steels*, INTERNATIONAL Journal of Energizing Technology& applications (IJETAETS), , ISBN No.0974-3588, Vol No.Vol-5, Issue No.Issue-2,, July-2012
- ▶ A.Aruna Kumari, *Analysis of performance & emission characteristics of thermal barrier coated DI diesel engine fuelled with animal tallow methyl ester*, International journal of innovative research in science, Engg&Tech, , ISBN No.2319-8753., Vol No.Vol.2, Issue No.Issue.12, Dec 2013
- ▶ A.Aruna Kumari, *Evaluation of emission charecteristics on CI diesel engine using palm stearn methyl ester*, international journal of emerging technologies and applications in engineering, technology and sciences(IJ-ETA-ETS),, ISBN No.ISSN:0974-3588, Vol No.volume 6, Issue No.issue no 1, JANâ€™13-JUNEâ€™13
- ▶ A.Aruna Kumari, *Experimental analysis of swirling flow in cylinder of CI engine by measuring air motion into cylinder using both fossil & renewable fuels*, International journal of innovative research in science, Engg &Tech, , ISBN No.7501-7508, Vol No.Vol.2, Issue No.Issue.12
- ▶ A.Aruna Kumari, *Advanced break alert system*, International journal of innovative research in science, Engg&Tech,, Vol No.Vol.2, Issue No.Issue.12, , pp.7844-7847

### National Journals

- ▶ Dr.A.Aruna Kumari, Ramesh Namala1, *PERFORMANCE & EMISSIONS CHARACTERISTICS OF CI ENGINE USING TAMARIND BIODIESEL BY KOH, Al<sub>2</sub>O<sub>3</sub> AS ADDITIVES*, journal of critical reviews, ISBN No.2134-5125, Vol No.10, Issue No.03, pp.308-322, journal of critical reviews, june, 2023
- ▶ Dr.A.Aruna Kumari, *EXPERIMENTAL AND NUMERICAL DETERMINATION OF ULTIMATE STRENGTH OF THE DENTED PLATE UNDER AXIAL COMPRESSION THROUGH 3D INTERPOLATABLE IMPERFECTION SURFACE MODEL*, ARPN Journal of Engineering and Applied Sciences, ISBN No.1819-6608, Vol No.15, Issue No.5, pp.634-642, march, 2020
- ▶ A.Aruna Kumari, *Heuristic approach based similarity coefficient for cell formation in a flexible cellular manufacturing system*, Journal of information, knowledge, and research in mechanical Engg., ISBN No.0975-668X., Vol No.Vol 2, Issue No.Issue.1, Nov11 to Oct 12, 2012
- ▶ A.Aruna Kumari, *Nano composites of Alumina in pure Aluminum-Stir casting route*, Journal of information, knowledge, and research in mechanical Engg, ISBN No.0975-668X., Vol No.Vol.2., Issue No.issue, 2, Nov.12-Oct.13, , 2012
- ▶ Dr.A.Aruna Kumari, *Experimental Investigation on Diesel Engine Performance Using Biodiesel with Nanoparticles*, Journal of Interdisciplinary Cycle Research , ISBN No.0022-1945, Vol No.11, Issue No.3, pp.75-80, MARCH, -2019

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### International Conference

- ▶ A.Aruna Kumari, *Performance evaluation of a low heat injection CI engine using vegetable oils*, ASME international conference on mechanical Engg congress, Oct31-Nov.6, 2008, Oct31-Nov.6, 2008, Boston, Massachusetts., IMECE2008-68206, 2008
- ▶ A.Aruna kumari, *Review on biodiesel exhaust emissions; basics, standards, and control measures*, ICONICE-2007, pp.197-204, 2007
- ▶ A.Aruna kumari, *Experimental investigations on a 4-s*, ICONICE-2007, pp.640-644, 2007
- ▶ A.Aruna Kumari, *Alternative fuels for a single cylinder direct injection diesel engine*, First international conference on emerging trends in Engg & Tech., ICETET-2008
- ▶ A.Aruna Kumari, *Effect of Operating parameters on the performance and emission characteristics of an ethanol fuelled engine*, International Conference on Chemical Environmental & energy Engg, , Issue No.Manu No-ENM-104, Bangkok, Thailand, March 3-4, 2009,
- ▶ A.Aruna Kumari, *Crops used for biodiesel production in Brazil: a review*, International conference on advancements in Engineering & Technology, , RITS ICAEM-2012, , 28th & 29th Feb 2012
- ▶ A.Aruna Kumari, *Review on alternative crops (feed stocks) for biodiesel production*, RITS International conference on advancements in Engineering & Technology, , RITS ICAEM-2012,, 28th & 29th Feb 2012
- ▶ A.Aruna kumari, *Use of diethyl ether as a blend in bio fuels-a review*, RITS International conference on advancements in Engineering & Technology, ICAEM-2012, , 28th & 29th Feb 2012., ICAEM-2012
- ▶ A.Aruna Kumari, *Computer aided design and analysis of swing jaw plate of jaw crusher*, RITS International conference on advancements in Engineering & Technology,, ICAEM-2012
- ▶ A.Aruna Kumari, *Design and analysis of aerospace mounting bracket*, International conference on advancement & manufacturing, , 27th&28th Feb 2013,

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### National Conference

- ▶ A.Aruna Kumari, *investigations into emission characteristics of CI engine using biodiesel with EGR technique*, national conference on recent trends in mechanical engineering, (NCRTME) 2016, April 28-29, 2016
- ▶ A.Aruna Kumari, *Comparison of performance characteristics of direct injection diesel engine using blends of cotton seed oil, palm oil, neem oil with diesel*, 21st National Conference on IC engines & Combustion, pp.368-369, BIET Dawangir, Karnataka, Dec 10-12, 2009
- ▶ A.Aruna Kumari, *Injection timing influence on performance & emission characteristics of DI Diesel Engine using B2O blend of waste cooking oil (WCO) biodiesel with 3.dimethyl carbonate (DMC) as fuel additive*, Two-Day National Conference on Mechanical Engg emerging trends MEET 2010 (6-7) August 2010.
- ▶ A.Aruna Kumari, *experimental studies on performance characteristics of CI engine using biodiesel with EGR technique*, national conference on recent trends in mechanical engineering (NCRTME), April 28-29, 2016

## **-> Events Participated/Organized**

### **- Organized**

- > Organized a Workshop on Workshop on "Results Processing - Affiliated Autonomous Engineering Colleges of JNTU Hyderabad", EXAMINATIONS BRANCH Jawaharlal Nehru Technological University Hyderabad Kukatpally, Hyderabad, 09-02-2023
- > Organized a Training on Hybrid Vehicle Technology, Mechanical Department, JNTUH College of Engineering, Hyderabad, 11-02-2021 to 13-02-2021
- > Organized a Refresher Course on RECENT ADVANCES IN THERMAL ENGINEERING AND THEIR APPLICATIONS, UGC C ACADEMIC STAFF COLLEGE, 04-11-2013 to 25-11-2013
- > Organized a Training on AUTOMOBILE TECHNOLOGY, Mechanical Department, 23-03-2009 to 28-03-2009

### **- Participated**

- > Participated in a FDP on "Fuel powered, Hybrid Electric and Modern Vehicles", VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, 19-07-2021 to 24-07-2021
- > Participated in a FDP on "Advances in Composite Materials and their Applications", CMR Institute Of Technology, 25-01-2021 to 30-01-2021
- > Participated in a Workshop on Research initiatives on startups and entrepreneurship development, LBEC, Mylavaram, 05-12-2020 to
- > Participated in a FDP on "Recent Trends in Advanced Materials and Devices", NIT, Jalandhar, Panjab, India, 21-09-2020 to 25-11-2020
- > Participated in a Workshop on preparing UG programme Accrediation, JNTUCEH, Hyderabad, 12-08-2020 to 14-08-2020
- > Participated in a Training on Modern online tools and software for Remote teaching and E content development, JNTUCEH, Hyderabad, 04-08-2020 to 06-08-2020
- > Participated in a Workshop on TESTING OF INTERNAL COMBUSTION ENGINES, Francis xavier engineering college, Tirunelveli, 23-07-2020
- > Participated in a FDP on ONLINE TOOLS & SOFTWARE FOR REMOTE TEACHING -LEARNING, JNTUH-UGC-HRD, 16-07-2020 to 18-07-2020
- > Participated in a Workshop on Data analytics, Adi shankara institute of technology, 13-07-2020
- > Participated in a Workshop on Mendeley for Researchers: Bibliography and Networking, KPR institute of engineering and technology, 13-07-2020
- > Participated in a Workshop on "Insightful Introduction to MATLAB", Sri Venkateswara College of Engineering Pennalur, Sriperumbudur Tk, 11-07-2020
- > Participated in a Workshop on "COMBUSTION IN S.I. & C.I. ENGINES", Francis xavier engineering college, Tirunelveli, 10-07-2020
- > Participated in a Workshop on "Application of PCM Nanofluids in Thermal Power Plants", Francis xavier engineering college, Tirunelveli, 08-07-2020
- > Participated in a FDP on Recent Developments in Mechanical Engineering (RDME-2020)", KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE WARANGAL -506015, Telangana, 07-07-2020 to 11-07-2020
- > Participated in a FDP on effective design delivery of curriculum in outcome based education, Jhulilal institute of technology, 06-07-2020
- > Participated in a Workshop on Feedback evaluation for Numerical Investigation of flow and heat transfer using nano fluids" 2020 x, Francis xavier engineering college, Tirunelveli, 04-07-2020
- > Participated in a Workshop on "Effective and efficient writing of research papers for web of science, Scopus indexed journal and Conference papers using Typeset Research Studio", AISSMS college of Engg, 01-07-2020
- > Participated in a FDP on Research Trends in Mechanical Engineering organized', GEC, Gudlavalleru, 15-06-2020 to 20-07-2020
- > Participated in a FDP on professional developement training programme for faculty and administrators of project institutes of TEQUIP-III, IIM Vishakhapatnam, 02-03-2020 to 06-07-2020
- > Participated in a Workshop on "Outcome Based Education, NBA Approach, Dr Vithalrao Vikhe Patil College of Engineering Ahmednagar, Maharashtra., 01-01-2020
- > Participated in a Workshop on preparing for NBA Accreditation & SAR filling, JNTUH College of engineering, 18-02-2019 to 19-02-2019
- > Participated in a Workshop on SAR Filling and Preparedness for Assesment, JNTUCEH, Hyderabad, 14-12-2017 to 16-12-2017
- > Participated in a Workshop on workshop on NBA crediation, UGC HRD Auditorium, JNTUH, 14-12-2017 to 16-12-2017
- > Participated in a Workshop on a national workshop on bharata ratna Dr.B.R.Ambedkar, JNTUCEH, Hyderabad, 13-04-2017 to 14-04-2017
- > Participated in a Conference on ICRAMAV 2014, JNTU, Hyderabad, 05-11-2014 to 07-11-2014
- > Participated in a Workshop on introduction to research methodology, UGC-ASC JNTU, Hyderabad, 25-06-2012 to 04-07-2012
- > Participated in a Workshop on Two-week ISTE WORK SHOP on HEAT TRASFER, UGC-ASC JNTU, Hyderabad, 29-11-2011 to 01-01-1970
- > Participated in a Workshop on ETIAE-2008, NIT, WARANGAL, 03-07-2008 to 05-07-2008
- > Participated in a Workshop on RAICE-2008, NIT, WARANGAL, 28-03-2008 to 30-03-2008
- > Participated in a Refresher Course on Computational Methods in Thermal Engineering, UGC-ASC JNTU, Hyderabad,, 28-03-2005 to 16-04-2005
- > Participated in a Refresher Course on Environmental Management, UGC-ASC JNTU, Hyderabad, 17-11-2004 to 01-12-2004
- > Participated in a Training on Advances in Manufacturing, IIT Madras, 01-12-2003 to 07-12-2003
- > Participated in a Workshop on two day national workshop on preparing for NBA Accreditation & SAR filling, JNTUCEH, Hyderabad, 01-01-1970
- > Participated in a Workshop on TRAIN THE TRAINER, JNTU, Hyderabad,
- > Participated in a Workshop on Recent Trends in Technical Education, UGC Academic Staff College,

## **-> Honors & Professional Activities**

### **-> Professional Activities**

- > acted as a coordinator for technical fest CONNAISSANCE 2018 held on march 13&14,2018



**- Teaching**

- Instrumentation and sensor technology in Mechanical M.Tech I semester (I Year)
- Advanced IC Engines in Mechanical B.Tech,IV Year (IV Year)
- Power Plant Engineering in Mechanical B.Tech,IV Year (IV Year)
- Machine Tools LAB in Mechanical B.Tech,IV Year (IV Year)
- Design of Machine Elements-2 in Mechanical B.Tech,IV Year (IV Year)
- Machine Tools in Mechanical B.Tech,IV Year (IV Year)
- Automobile Engineering in Mechanical B.Tech,III year,II Semester (III Year)
- Metrology Lab in Mechanical B.Tech,III year,I Semester (III Year)
- thermal engineering lab in Mechanical B.Tech,III year,I Semester (III Year)
- Metrology in Mechanical B.Tech,III year,I Semester (III Year)
- Design of Machine Elements-1 in Mechanical B.Tech,III year,I Semester (III Year)
- Production Technology lab in Mechanical B.Tech,II Year,II semester (II Year)
- instrumentation and control systems in Mechanical B.Tech,II Year,II semester (II Year)
- Production Technology in Mechanical B.Tech,II Year,II semester (II Year)
- Machine Drawing in Mechanical II year II semester (II Year)
- Engineering Workshop in Mechanical B.Tech,II Semester (I Year)
- Engineering Graphics in Mechanical B.Tech,II Semester (I Year)
- Energy Management in Mechanical(TE) M.Tech,II Semester (I Year)
- Instrumentation And Control System in Mechanical(MD) M.Tech,I semester (I Year)
- Advanced Machine Design in mechanical(MD) M.Tech,II Semester (I Year)
- Advanced IC Engines in mechanical(TE) M.Tech,I semester (I Year)

**- Administrative Positions Held**

- Hostel Warden, JNTUK, 01 Jan 2000 - 30 Nov 2005
- Department Library Incharge, JNTUH university, 31 Jan 2006 - 30 Jun 2009
- Director Of University Examinations, JNTUH University, 09 Feb 2024 - 28 Mar 2025
- Controller of Examinations, JNTUH university, 25 Jan 2023 - 08 Feb 2024
- Member, Telangana State Pollution Control Board, 11 Apr 2018 - 15 Feb 2023
- Additional controller of Examinations, JNTU University, 21 Jun 2021 - 24 Jan 2023

- ► **Project/Research Guidance**

- **Students**

Student Name	Title	Year	Download
P.Nihanth Satya Teja	Design of Material handling system for saving loading time	2021	
K.prasada rao	Optimization of process parameters on die sink EDM by using taguchi methods for aluminum grade 64430(HE-30)	2020	
Deshineni naveen kumar	Design and analysis of CI engine for dual fuel mode-Bioga	2019	
V.Rohith Kumar	Investigation into performance ,combustion and emisson charecteristics of a diesel engine using nano additives for biodiesel	2019	
R.Gopal RAO	Investigation on VCR engine with dual fuel mode	2019	
N.Vamshi	Experimental investigations into performance ,emission and combustion charecteristics of CI engine using biodiesel with catalytic converter	2019	
MOHAMMED AZAM	Investigations on CI Diesel Engine with varied nozzle design using black sesame methyl ester biodiesel	2018	
N.Vamshi	Experimental investigations into performance emission and combustion characteristics of CI engine using Biodiesel with catalytic converter	2017	
I.Ravi kiran	Design and analysis of solar powered window air conditioner	2015	
Nitish Shresta	Performance analysis of a finned pipe earth air heat exchanger	2015	
D.Dinesh yadav	Friction stir welding of dissimilar AA204 and AA6061 Aluminium alloys	2014	
MD.TAJUDDIN	Experimental Investigations and finite element analysis of compression and bending strength of sandwich composite	2013	
S.NagaRani	Machinability investigations of super alloy INCONEL 718 high speed dry machining	2013	
J.S.Priyanka	Effect of water absorption on the impact strength and tensile strength for polyester sisal/glass fiber composites	2013	
K.Prema Kumar	Investigations of composite materials on the effect of drilling operation	2013	
Golla Ashok Kumar	Structural analysis of Multi plate clutch for different friction surface matierial	2013	
Y.Satya Swaroop	Experimental investigation and optimization on EDM for AA-6061 material using Taguchi technique to minimize machining time	2013	
Teetla Raju	Study of two phase flow distribution inside the parallele channels of compact heat exchanger	2013	
Mehdi Kiani	Non cubic singularity surface of stewart gough platform	2013	
P.Vineela	Design evaluation of camshaft used in multi cylinder engine	2013	
A.Suresh	An experimental study of tool overhang on surface roughness during Turning process	2013	
Mary Dellilla.N	Manufacturing of plenum frame using electro discharge machining	2012	
Aa	Design and analysis of aerospace mounting bracket	2012	
G.Bharat	Experimental investigation on process performance of powder mixed electric discharge machining of high carbon high chromium steel and EN-31 STEEL	2012	
Durga Prasad Rapaka	Design and manufacturing of reconfigurable universal vaccum clamoing fixture for machining monolithic thin wall thin floor components	2012	
Cheekatla Vamshikrishna	Optimum design and analysis of composite drive shaft for an automobile	2012	
B.Polaraju Gupta	Experimental study on effect of weld joint gap on mechanical properties by physical and finite element analysis method	2012	
Gugulothu Rambabu	Computer aided design and analysis of swing jaw plate of jaw crusher	2012	
Fharhana baby	Experimental evaluation and optimiasation of surface roughness of EN8,EN 24,&HCHC matierial in CNC Lathe	2012	
Nimmala Mallikarjuna	The machining parameters optimisation of electrical discharge machining of 15.5 stainless steel	2012	
Srikiran maheshwaram	Static and Fatigue analysis of Aluminum alloy wheel	2012	
Masabattula Satyanarayana	Formability of an automotive High strength steel structural part using hot forming	2011	
B.Suresh	Characterization of laser beam &electron beam welding of titanium alloy Ti 6 Al 4V	2010	
Deshini Naveen Kumar	Design and analysis of CI engine dual fuel mode biogas	2010	
Gubbala Srihari	New product development Analog herbal vaporizer	2010	
K.Venugopal	Rape seed oil as an alternate fuel in IC Engines	2010	
Rama Rao Thatigiri	Structural design and optimization of constrained damping layer for reduction of random vibrations in aluminum plate	2010	
K.Ram prasad Reddy	Reducing the evaporation losses in cryogenic fluids by using liquid hydrogen	2007	

- ► **Consultancy**

- ►  
involved in tractor trailer consultancy

Contact :

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**Dr. A Aruna Kumari**  
Mechanical Engineering

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Phone: 8897811899,