S.V.ENGINEERING COLLEGE OF ENGINEERING

Volume: 12

Issue: 02

Mechanical Engineering

MECHANIX

2023-24 ODD Semester News Letter

SV COLLEGES since 1981

"Science can amuse and fascinate us all, but it is engineering that changes the world." — ISSAC ASSMOV

July-December 2023



Mechanical Engineering

Vision of the Department

To impart knowledge with global perspectives in pursuit of excellence in Mechanical Engineering Education, Entrepreneurship and Innovation.

Mission of the Department

M1: To inculcate students with leadership skills with high level of integrity & ethical values for team building and team Work.

M2: To mold the young dynamic potential minds into full-fledged future professionals through effective teaching-learning Techniques & industry – institute collaboration.

M3: To serve the society through innovation and excellence in teaching and research.

Program Specific Outcomes

PSO1: Ability to apply the knowledge in Thermal Sciences, Design and Manufacturing proc esses towards the improvement of engineering systems considering productivity, quality and cost.

PSO2: Ability to analyze and apply the acquired Mechanical Engineering Knowledge for the sustainable growth of society and self.

About the Department

Mechanical Engineering, one of the oldest branches of Engineering, is a professional discipline that applies engineering, physics, mathematics, and materials science principles to design, analyze, manufacture, and maintain mechanical systems. As one of the oldest branches of engineering, Mechanical Engineering as a field of study is broad and diverse. With the need for skilled Mechanical graduates intensifying with every passing year, The Department has highly qualified and rich experienced faculty with an aim of providing quality educational service. The Department has good infrastructural facilities and is equipped with full-fledged laboratories and audio-visual systems. The department focuses research on Heat Transfer Enhancement, Alternative Fuels, Composite Materials and Advanced Machining Process etc..

- The Department of Mechanical Engineering has formulated the following objectives:
- To facilitate students with real-time scenarios and hands-on training sessions through field trips.
- To equip students with practical knowledge to formulate and solve challenging problems.
- To enhance critical thinking and analytical skills of the students.
- To provide equal opportunities to all the students to learn and grow as well-rounded individuals.
- To facilitate the betterment of the students through state-of-the-art laboratories and qualified

Principal's Message



I have great pleasure in conveying my best wishes to the Department of Mechanical Engineering for releasing the technical magazine "Mechanix" which brings the students and teachers of various disciplines on a common platform to share and display their ideas and creative talents. I wish all the students who have involved in bringing out the magazine for their greater success and career ahead.

Dr. N.SUDHAKAR REDDY, ME, Ph.D, FIE, MISTE. **PRINCIPAL**

HOD's Message



Mechanical Engineering is a versatile and evergreen branch of engineering. Mechanical engineer can work in various fields like automotive system, aerospace engineering, design engineering, control, dynamic system and power plant engineering, etc. and most importantly in software field also. Department has well qualified and dedicated faculty with well-developed laboratories. We impart quality engineering education through sound theoretical knowledge, hands on laboratory

as well as computational skill and exposure to recent technologies by visiting industries & expert talk. We provide opportunities for students to participate in various technical and sports events /competitions. This newsletter is an attempt to highlight the achievements of the department, in spite of the space constrain we have showcased the best and look forward to have more in the future on a quarterly editions. I wish good luck to the entire team of editors and look forward for your kind patronage to our newsletter.

Dr. M.CHANDRA SEKHARA REDDY, M.Tech, Ph.D, FIE, MISTE.

Head of the Department M.E,S.V.C.E, Tirupati

Faculty Corner



Patents Published:

- Jaya kishore S, P Charan Theja and Dr E Venkata Kondaiah has published a patent on "Design and Fabrication of CNCGraphic Tablet using Arduino Board", Application No.202341052878, Publication date 6 oct 2023.
- Dr. Rajesh N, a design patent grant is accepted "Smart door system", application number: 395177-001, Nov 2023.
- Gopala Krishna M, K Harshavardhan Reddy, Eswaraiah Billu, Balaji Ganesh N, Karunya Moorthy, Renugadevi Kumar, M.Peeraiah, Sruthi Mannuru, Jaya Kishore S,Mr A Krishna Mohan published a patent titled "REAL TIME QUALITY ASSURANCE FRAMEWORK FOR POWDER BED FUSION ADDI-TIVE MANUFACTURING" vide application no .202341078146 published on 15/12/2023. The date of filing application is 17/11/2023. Indian patent office.
- M. Chandra Sekhara Reddy, Vamsi Krishna Mamidi, Jagath Narayana Kamineni, Gadhamsetty Guru Mahesh, Aluri Venu Gopal, D Anjan Kumar Reddy, E Venkata Kondaiah, Donnapugari Raju, ADDI-TIVE MANUFACTURING OF ACTIVE DEVICES USING DIELECTRIC, CONDUCTIVE AND MAGNET-IC MATERIALS Application No.202341077316 A, Date of filing of Application: 14/11/2023, Publication Date: 22/12/2023. Indian patent office.

Research Projects:

 Dr. Jagath Narayana Kamineni, and Dr. Vamsi Krishna Mamidi applied a research project proposal for SERB-SURE program, on Development and fabrication of Type-IV COPV for fuel cell technology based vehicles.

Publications:

- Dr. Vamsi Krishna Mamidi, Professor, published a scopus research article titled "Parameter Optimization for Electrical DischargeMachining of Stir Casted AA6063/Nano-SiC with GraphiteHybrid Composite Materials by Using Response SurfaceMethodology", Nov 2023.
- Dr. Rajesh, Associate Professor, published a scopus research article titled "Optimization of machining parameters & studies on characteristics of Monel k400 alloy using abrasive water jet Machining using ANFIS", Nov 2023.
- Vamsi Krishna Mamidi published an article with a title of "Experimental Analysis of the Mechanical and Machining Properties of an Aluminum Hybrid Metal Matrix Composite", in Key Engineering Materials, ISSN: 1662-9795, Vol. 971, pp 3-12, Trans Tech Publications Ltd, Switzerland, doi:10.4028/p-c3VwHP

Conference:

- Mr Guru mahesh given a conference presentation on "Mechanical Characterization of Hybrid Composites", AMPT July 2023.
- Dr. Vamsi Krishna Mamidi and Dr. Jagath Kamineni has participated and presented a paper on "Numerical Simulation for Effect of Varying Materials on Performance Enhancement of Earth Tube Heat Exchanger" in ICIoTCT2023, held on 13th and 14th Oct 2023.

Faculty Corner



Organized/Attended Seminars:

- Department of Mechanical Engineering, Sri Venkateswara College of Engineering, Tirupati, organized a Science & Engineering Research Board (SERB) sponsored national seminar on "Recent Advances in Additive Manufacturing for Mechanical and Aerospace Engineering", on 16-Aug-2023 to 17-Aug-2023.
- Department of Mechanical Engineering, SVCE Tirupati, has organized a Seminar talk delivered by G P Raja Sekhar, Department of Maths, IIT Kharagpur, on "PDE Application to lubrication inside a human knee joint", to inculcate the practical knowledge to students on applications of applied mathematics, held on Oct 11 2023.

FDP'S:

- Dr. Rajesh has attended online FDP on "Data analysis using advanced computational techniques" organized by Department of statistics and mathematics, AMITY University, Kolkata, 24 to 28 July 2023.
- Dr. Rajesh has attended online FDP on "Future Scopes for Additive Manufacturing in industrial and biomedical applications, organized by Aditya Engineering College, 17 to 21 July 2023.
- Dr. Jagath Narayan Kamineni completed a NPTEL-FDP course on "Cloud Computing", 12-week course organized by IIT Kharagpur, During Jul-Oct 2023.
- Dr. Vamsi Krishna Mamidi completed a NPTEL-FDP course on "Social Innovation In Industry 4.0", 12-week course organized by IIT Kanpur, During Jul-Oct 2023.
- Dr. Rajesh N, attended online STTP on "Recent Advancements in Fuel Cell and Hydrogen Storage", Anurag University, Hyderabad, 9 to 13 oct 2023
- Dr. N Rajesh, attended online FDP, "Recent advances in materials, manufacturing and technology", 30 Oc to 04 Nov 2023.

NPTEL CERTIFICATION:

- Raju D, received a certificate from NPTEL on "National Education policy-2020 Professional Development Program, May 16 to 15 June 2023.
- Anjan KumarReddy D completed a NPTEL-FDP course on "Power Plant Engineering", 8-week course organized by IIT Roorkee, During Jul-Sep 2023.



Student Corner

Results and Toppers

I B. Tech II Semester

Total students registered	: 46
Total students passed	: 32
Pass Percentage	: 69.56%

List of Toppers

	S.No.	Roll Number	Name of the Student	CGPA
1	1	22BFA03044	T.Anil Kumar	9.30
	2	22BFA03021	K.Soma Sekhar	8.37
	3	22BFA03020	K.Subramanyam	8.23
	4	22BFA03015	G.Venkata Kedhar Nadh	8.14
	5	22BFA03011	C.Naveen	8.09

II B. Tech IISemester

Total students registered	: 117
Total students passed	: 79
Pass Percentage	: 67.52%

List of Toppers

S.No.	Roll Number	Name of the Student	%
1	22BF5A0354	V.Akash	94.71
2	22BF5A0301	P.Vinay Kumar	89.71
3	22BF5A0304	A.Harshavardhan Reddy	89.41
4	22BF5A0356	V.Dileep	88.92
5	22BF5A0329	N.Guru Govinda Kumar	88.82

III B. Tech II Semester

Total students registered	: 138
Total students passed	: 97
Pass Percentage	: 70.28

List of Toppers

S.No.	Roll Number	Name of the Student	%
1	20BF1A0368	B.Pujitha	95.85
2	21BF1A0302	M.Mihana Bhanu	92.76
3	20BF1A0319	C.Sai	92.02
4	20BF1A0344	K.Likhit Sai Aditya Vardhan	91.49
5	20BF1A03C2	V.Giri Babu	91.38

IV B. Tech II Semester

Total students registered	: 127
Total students passed	: 123
Pass Percentage	: 96.80



List of Toppers

S.No.	Roll Number	Name of the Student	%
1	20BF5A0301	A.Syam	93.50
2	19BF1A0323	K.M.Pavan Sai	92.75
3	20BF5A0328	T.Hemanth Muni Kumar	92.75
4	20BF5A0306	G.Gagan	92.00
5	20BF5A0302	C.Gireesh	91.75

Placed Students

2020-24 Batch

Accenture

B.Pojitha

Q Spiders

B.Cheshmini

ULEARN

P.V. Anvesh

S.Guru Vishnu

K.Yaswanth Kumar

Shaik Latheef

M.Charanya

D.Pavan Kalyan

Rajsriya Automotive Industries, Hosur

C.Sai

G.Kalyan

K. Likhit Sai Aditya Vardhan

A. Vijay Shankar

B. Guru sai

B. Subba Vamshi Krishna

B.Sunil Reddy

B. Bhargav

J. Sivanjaneya Reddy

K.Sathish

K.Santhosh

P. Vinay Kumar Reddy

D. Tharun Harsha

B. Gopala Krishna

Chegg India

G. Kalyan

K. Santhosh

M. Mihana Bhanu

IMEG

C Sai

Sutherland

C.Sai

C.Deepthi Sree

Integer Telecom Service

B.Chesmini

M. Bhanu Prasad

M.Deepak

S. Raheem

C. Deepthi Sree



Thanks to Placement Team and the Supporting Faculty

Dr. M.Chandra Sekhara Reddy

Mr. T.Pratheep Reddy

Mr. K.Harshavardhan Reddy

Mr. M.Gopala Krishna

Mr. G.Nomu Kumar

Mr. G.GuruSai Prasad

Mr. B.Eswaraiah



STUDENT PARTICIPATIONS

- Department of Mechanical Engineering, Sri Venkateswara College of Engineering, Tirupati, organized a Science & Engineering Research Board (SERB) sponsored national seminar on "Recent Advances in Additive Manufacturing for Mechanical and Aerospace Engineering", on 16-Aug-2023 to 17-Aug-2023.
- Department of Mechanical Engineering, SVCE Tirupati, has organized a Seminar on Systematic Implementation of Analytical Tools in Industry and Institutions, to create an awareness on different advanced tools and practical knowledge to the students, on 16th Sep 2023.
- Mechanical Engineering Department has organized a workshop on CATIA-V5 to improve modeling skills to the students of 2nd and 3rd year students, at SVCE Tirupati, from 25th Aug to 30th Sep 2023.
- Department of Mechanical Engineering, SVCE Tirupati, has organized an orientation program for newly joined mechanical, electrical and civil engineering students, to provide basic idea of engineering culture and how to improve their career through engineering, held from 20th to 23rd Sep, 2023.
- Mechanical Engineering Department has organized an Alumini interaction by Levy Gabriel and Rajesh for the students of 2nd and 3rd year students on how to improve your technical skills, at SVCE Tirupati, from 23th Aug Sep 2023.
- Department of Mechanical Engineering, SVCE Tirupati, has organized a Seminar talk delivered by G P Raja Sekhar, Department of Maths, IIT Kharagpur, on "PDE Application to lubrication inside a human knee joint", to inculcate the practical knowledge to students on applications of applied mathematics, held on Oct 11 2023.
- Mechanical Engineering Department has organized a Workshop on "Entrepreneurship and Innovation as a Career Opportunity" delivered a talk by Dr. P Subramanyachary, held on 14 Oct 2023.
- Mechanical Engineering Department has organized an Industrial Visit to SIBAR, Tirupati, for 2022
 -2026 Batch students to show the fabrication process of automobile parts, they visited on 13 Oct 2023.
- Mechanical Engineering Department has organized an Alumini interaction by V Charan Sreyas Reddy (Batch 2018-2022) for the students of 2nd and 3rd year students to understanding transition from "Campus to Career", at SVCE Tirupati, held on 14th Oct 2023.

STUDENT PARTICIPATIONS

• ME Department has conducted an event on National Entrepreneurship day, motive on case studies and innovative ideas, 9 Nov, 2023.









EVENTS ORGANIZED



Mechanical Engineering Department has organized an Industrial Visit to SIBAR, Tirupati, for 2022-2026 Batch students to show the fabrication process of automobile parts, they visited on 13 Oct 2023



ME Department has conducted an event on National Entrepreneurship day, motive on case studies and innovative ideas, 9 Nov, 2023

Editorial Board

Head of the department : Dr. M.Chandra Sekhara Reddy, Professor & Head/M.E

Staff Advisory Committee : Mr. S.Jaya Kishore, Assistant Professor, Dept. of M.E

Editors : M.Hari Sainadh Reddy, IV M.E

: S.M.Gouse Ali, III M.E

Sri Venkateswara College of Engineering Campus

