



# **SV COLLEGE OF ENGINEERING**

**(Autonomous)**



Karakambadi Road, Opposite LIC Training Centre, Tirupati – 517 507.  
Accredited by NBA (B.Tech – CSE, ECE, EEE, IT, ME & Civil) and NAAC with 'A' Grade  
Approved by AICTE-New Delhi, permanently affiliated to JNTUA, Ananthapuram.

*Department of Mechanical Engineering*

# **MECHANIX**

*Newsletter*

**July\_2021-June\_2022**

## VISION OF THE INSTITUTE

- To be a center of excellence focusing on high quality technical education, research and technical services with global leadership competence to succeed in employment and higher education with ethical, social, entrepreneurial aspects updating to the real time requirements.

## MISSION OF THE INSTITUTE

- **M1:** To impart high quality technical education by providing the state-of-the art infrastructure, core instruction.
- **M2:** Advanced research and technical consultancy services with qualified and senior faculty.
- **M3:** To prepare the students professionally deft and intellectually adept possessing excellent skill, knowledge and behavior with global competence.

## 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 Educational Objectives

The program educational objectives of the Mechanical Engineering program describe accomplishments that graduates are expected to attain after 3 to 5 years of graduation.

- ❖ **PEO1:** Graduates can demonstrate technical competence in mechanical engineering domain as they apply problem solving skills to conceive, analyze, design and develop products, processes and systems.
- ❖ **PEO2:** Graduates can actively embrace leadership roles and strive hard to achieve professional and organizational goals with adherence to professional and ethical values, team expectations and sensitivities of cultural diversity.
- ❖ **PEO3:** Graduates are committed to practice engineering strategies in industry and government organizations to meet the growing expectations of the stakeholders and also contribute to the societal development.

## Program Specific Outcomes

- ❖ **PSO1:** Ability to apply the knowledge in Thermal Sciences, Design and Manufacturing processes 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.

## Program Outcomes

- ❖ **PO1:Engineering knowledge:** Apply knowledge of Mathematics, Science, Engineering Fundamentals, and an Engineering Specialization for the solution of complex engineering problems.
- ❖ **PO2:Problem analysis:** Identify, Formulate, Research Literature, and Analyse complex Engineering problems reaching substantiated conclusions using First Principles of Mathematics, Natural Sciences, and Engineering Sciences.
- ❖ **PO3:Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for public health and safety, and cultural, societal, and environmental considerations.
- ❖ **PO 4: Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- ❖ **PO 5: Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- ❖ **PO 6: The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues and the consequent responsibilities relevant to the professional engineering practice.



- ❖ **PO7:Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- ❖ **PO 8: Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- ❖ **PO9:Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- ❖ **PO10:Communication:** Communicate effectively on complex engineering activities with the engineering community and with the society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- ❖ **PO11: Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- ❖ **PO12: Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

# ABOUT PRINCIPAL



## ***Dr .N . Sudhakar Reddy*** ***Principal (SVCE)***

- Dr. N Sudhakar Reddy, completed his B.E from College of Engineering, GITAM, Visakhapatnam, M.Tech (Computer Science) from College of Engineering JNTU, Anantapur and Ph.D from JNTUA Anantapur in Data mining Specialization.
- He has been awarded the CMI Level 5 Certificate in Management and Leadership.
- He has 22 years of Teaching and Research Experience.
- He worked at various engineering colleges in different positions like Professor, Training and Placement Officer, Head of the Department and Principal.
- He has conducted many training programmes for Engineering and MBA students on life skills and campus recruitment. He acted as a coordinator for Infosys Campus Connect and also trained many students on Programming Fundamentals in STP(Special Training Programme), which is conducted by Infosys, IEG, JNTUH & Rajiv Udyogasri.
- He is the life member of ISTE, CSI, IETE and an annual member of IEEE and ACM. Member of JNTUA-PG Board of Studies in faculty of CSE & MCA.
- He has been with SV College of Engineering, Tirupati since 2008. Under his adroit administration, SVCE is glorified with permanent affiliation, 2(f), 12(B) , R&D centers(CSE & ECE), NAAC with “A” grade and NBA for all eligible UG Programmes - EEE, ECE, CSE, IT, MECH, CIV and UGC Autonomous Status.
- He received prestigious ISTE – Best Engineering College Principal award in AP and TS for the year 2017 from the Honorable Vice-Chancellor of JNTUA

# ABOUT HOD



*Dr . M . Chandra Sekhara Reddy*

*Head of the Department Mechanical Engineering*

#### **EDUCATIONAL QUALIFICATIONS:**

- ❖ Ph.D. from J N T University, Hyderabad under the guidance of Prof. V. Vasudava Rao, Department of Mechanical and industrial Engineering in College of Science, Engineering and Technology, UNISA July 2015.
- ❖ M.Tech (Energy Systems) from JNTU College of Engineering, Anantapur in 2003.
- ❖ B.E. (Mechanical Engg.) from Bangalore University in March 1999.

#### **PROFESSIONAL EXPERIENCE:**

- Achieved for NAAC, National Board of Accreditation (NBA) and Autonomous in Sri Venkateswara Engineering College, Tirupati under my leadership.
- Established all Mechanical Engineering Labs in Sri Venkateswara Engineering College, Tirupati.
- Established "Dassault 3-D Environment Center" in association with APSSDC and Dassault Systems in Sri Venkateswara Engineering College, Tirupati.
- Instrumental for getting "**Hyundai Crete Left Hand drive Car for free of cost from Hyundai Motors**" in Sri Venkateswara Engineering College, Tirupati.
- Instrumental for getting BMW Engine with transmission system from BMW under BMW Skill Next.
- Instrumental for getting Prathibha Awards from State Govt. of Andhra Pradesh for the students UG & PG 2016, 2017 & 2018 in Sri Venkateswara Engineering College, Tirupati.
- Instrumental for getting Permanent Affiliation for Mechanical Engineering for 5 Years by JNTUA, Anantapur.

#### **ACHIEVEMENTS:**

- Completed a **AICTE Sponsored Short Term Training Program on "Nanotechnology and Functional Materials"** worth of **Rs.3.73 Lakh**.
- **21 years** of teaching experience in various academic institutions extensively in professional institutions.
- Completed a **DST SERB Sponsored National Seminar on "Advances in Nanotechnology in the Field of Mechanical Engineering"** worth of **Rs.1 Lakh**.
- Completed Four IEDC Projects Sponsored by DST.
- Ratified as Associate Professor by J.N.T.U.A, Anantapur in 13-10-2015.
- Ratified as Assistant Professor by J.N.T.U.H, Hyderabad in 26-03-2009.
- Received "**Best Mechanical Engineering Teacher 2019**" from State Award by ISTE – AP Section, Sponsored by Madanapalle Institute of Technology and Science, Madanapalle.
- Received "**Adarsh Vidya Saraswati Rashtriya Puraskar**" from Glacier Journal Research Foundation, Global Management Council, Ahmedabad.
- Editorial Board Member of Glacier Journal of Scientific Research, Ahmedabad.
- Achieved NBA, NAAC and Autonomous status under my leadership to department and college.
- BOS Chairman of Mechanical Engineering

## DEPARTMENT LABORATORIES

- Material Science & Engineering
- Mechanics of Solids
- Thermal Engineering
- Manufacturing Technology
- Heat Transfer
- Engineering Workshop
- Fluid Mechanics & Hydraulic Machinery
- Computer Aided Drafting
- Machine Tools
- Metrology & Measurements
- Computer Aided Engineering & Manufacturing



# DEPARTMENT LABORATORIES



Engineering Workshop



Material Science & Engineering Lab



Mechanics of Solids Lab



Thermal Engineering Lab



Manufacturing Technology Lab



Heat Transfer Lab



Fluid Mechanics & Hydraulic Machinery Lab



CAD/CAM Lab



Machine Tools Lab



Metrology & Measurements Lab



CAE Lab



# ASSOCIATION MEMBERS

## FACULTY CO-ORDINATORS



*Mr. G. Guru Mahesh*  
*Assistant Professor*

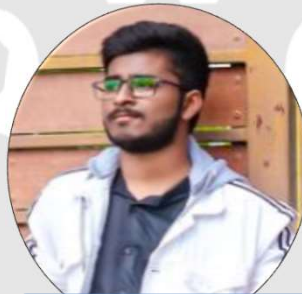


*Mrs. K. Renugadevi*  
*Associate Professor*

## STUDENT CO-ORINATORS



**PRESIDENT**  
**K.RAMPRASAD**



**Vice President**  
**N. HEMANTH**



**Tressurer**  
**A.SHALEM ABHISHEK**



**Joint Secretary**  
**VC.KESAVARDHAN**



**Joint Secretary**  
**MSD.NAWAZ**

# INAUGURATION EVENT



**PLEASE JOIN US FOR  
THE  
INAUGURAL  
OF**



# MEA

## MECHANICAL ENGINEERING ASSOCIATION

**Chief Guest** : **Dr.V. DIWAKAR REDDY**  
Ph.D.  
Professor  
svu university

**President of MEA** : **K. RAMPRASAD**

**Vice President of MEA** : **N. HEMANTH**

**Tressurer of MEA** : **A. SHALEM ABHISHEK**

**Joint Secretary of MEA** : **VC. KESAVARDHAN**  
**MSD. NAWAZ**

### DEPT. OF ME, SVCE

**JANUARY 8th , 2022**

**Time: 11.00 AM**  
**Venue: AUDITORIUM,**  
**III Block, SV Colleges**



## LAMP LIGHTING BY THE CHIEF GUESTS

Darkness can only be wiped out by the Bright light and Beginning the event auspiciously with lighting the Lamp by the Chief Guests



**LAMP LIGHTING BY  
Dr .N . Sudhakar Reddy  
Principal of SVCE**



**LAMP LIGHTING BY  
Dr.T.Kalpalatha Reddy  
Principal of SVCE**



**LAMP LIGHTING  
Dr . M . Chandra Sekhara Reddy  
Head of the Department  
Mechanical Engineering**



## SPEECH BY PRINCIPAL



*Dr .N . Sudhakar Reddy Sir*

## SPEECH BY HOD



*Dr . M . Chandra Sekhara Reddy*

## SPEECH BY PRESIDENT

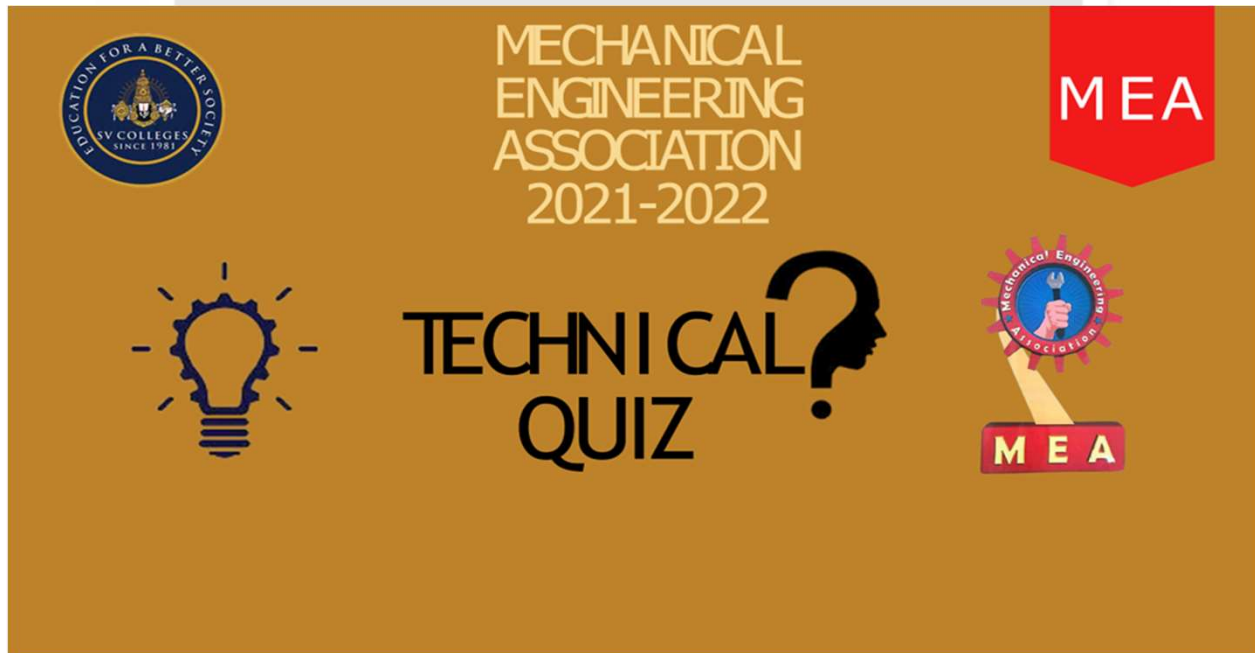


*Mr.K.RAMPRASAD*

# EVENTS CONDUCTED

Below are the Events conducted for the students on behalf of MEA in the year 2022

## Technical Quiz



On the occasion of MEA we conducted Technical Quiz on Mechanical Subjects.





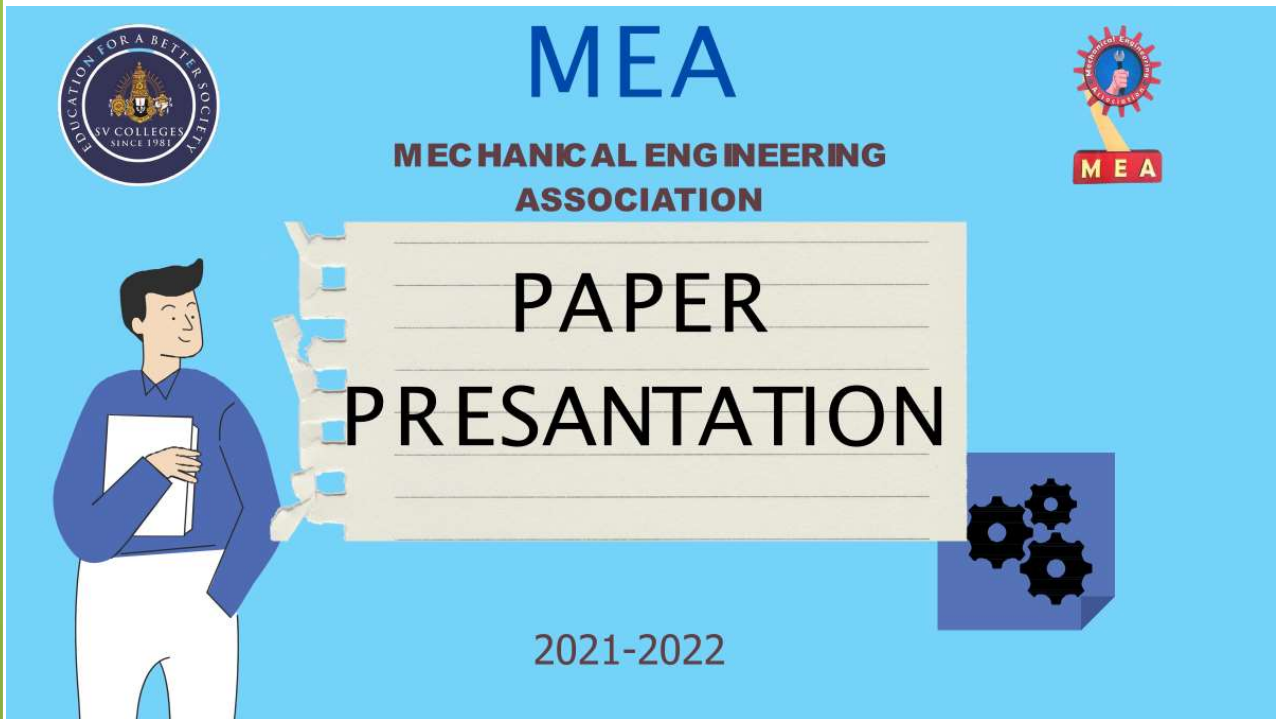
# Poster Presentation



On the occasion of MEA we conducted Poster Presentation. Students made posters regarding the topics that they wished to present .

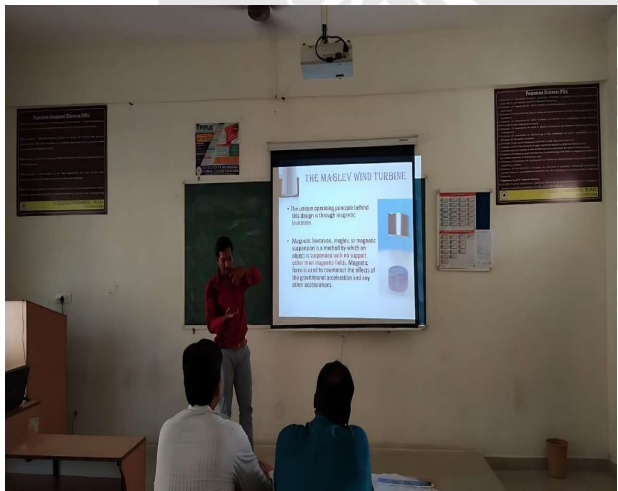


# Paper Presentation



The banner features a light blue background. On the left is a circular logo for SV Colleges with the motto 'EDUCATION FOR A BETTER SOCIETY' and 'SINCE 1981'. In the center, the text 'ME A' is written in large blue letters, followed by 'MECHANICAL ENGINEERING ASSOCIATION' in smaller brown letters. On the right is a red gear logo with a hand holding a pencil and the letters 'ME A' below it. A central white paper graphic with a torn edge contains the words 'PAPER PRESENTATION' in large black letters. Below this, the year '2021-2022' is written. An illustration of a man in a blue shirt holding papers is on the left, and a gear icon is on the right.

On the occasion of MEA we conducted Paper Presentation. Students made papers regarding the topics that they wished to present .



# CAD

**MEA**

MECHANICAL ENGINEERING  
ASSOCIATION  
2021-2022



**CAD**  
**MODELLING**



On the occasion of MEA we conducted CAD. Students actively showed their skill in AutoCAD & Catia Software's.

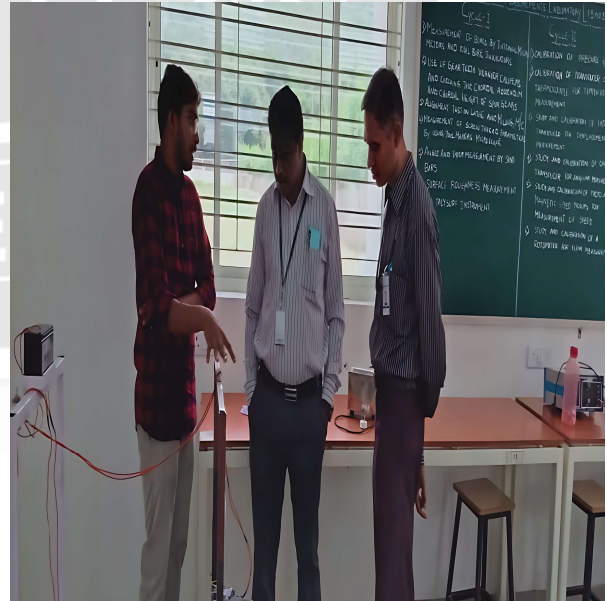




# Project Expo



On the occasion of MEA we conducted Project Expo. Students made Project regarding the topics that they wished to present



## Gully Cricket



## Tug of War





A photograph of an industrial facility, possibly a refinery or chemical plant, situated along a body of water. The facility features several tall smokestacks, distillation columns, and complex piping. The sky is overcast with soft, diffused light. The text is overlaid on this image in a stylized, black, serif font with a white outline.

**INDUSTRIAL  
VISITS  
ORGANIZED UNDER  
MEA**

# INDUSTRIAL VISITS

## Industrial Visit to Integral coach factory Perambur, Chennai, Tamil Nadu



- **Integral Coach Factory (ICF)** is a manufacturer of rail coaches located in Perambur, Chennai, Tamil Nadu, India. It was established in 1955 and is owned and operated by the Indian Railways. It is located in Perambur, in the suburbs of Chennai. The ICF is one of the four rake production units of the Indian Railways, the other three being the Modern Coach Factory at Raebareli, Rail Coach Factory at Kapurthala and Marathwada Rail Coach Factory at Latur

## INDUSTRIAL VISIT TO SIBAR



- **SIBAR Auto Parts Limited** was intent to produce “ALUMINIUM GRAVITY DIE CASTINGS” established as Private Limited Company.
- Sibar is Customers Supplying Castings to Greaves, Lombardini , SAME, Hero, Bajaj and etc (OEM Manufacturers) in domestic as well as international market (McCulloch, Italy).
- Sibar had taken technical collaboration with italian firm for Nickel Silicon Carbide plating which is equivalent to Nikasil.

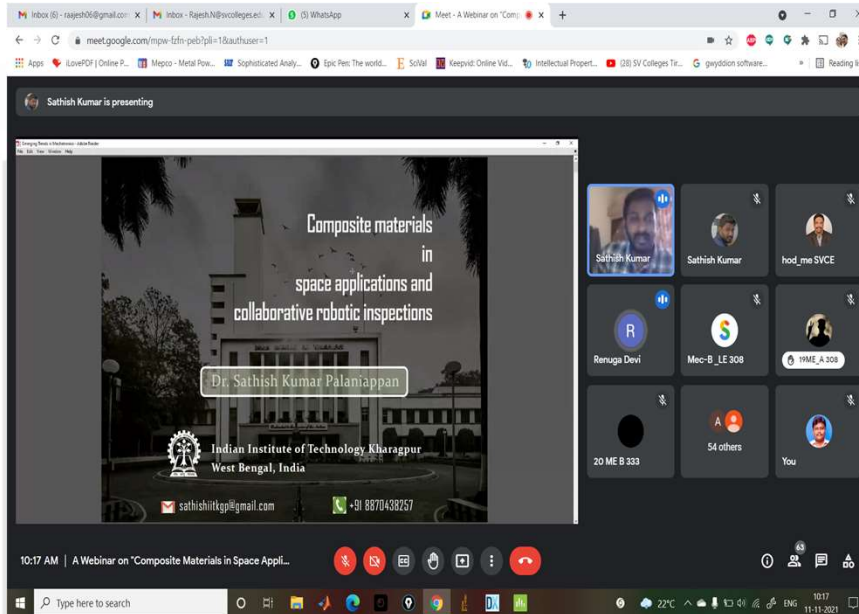
**WORKSHOPS/  
GUEST LECTURES  
ORGANIZED UNDER  
MEA**

## Workshops/Seminars/Guest Lectures by Industry Experts for Students

Name of the Program	Resource Person with Designation	Period	No. of students	Year
<b>2021 - 2022 (I –SEM)</b>				
<b>Composite Materials in Space Applications and Collaborative Robotic Inspections (Webinar)</b>	<b>Dr. P Sathish Kumar</b> Research Associate IIT Kharagpur, India.	11.11.2021 (10.00 am - 12.00 pm)	64	III & IV
<b>Basic Problem Solving Tools and Techniques (Seminar)</b>	<b>Mrs. V. Sulochana,</b> Director, QCFI Chapter, Tirupati	23.11.2021	95	III
<b>Nondestructive Testing for Beginners (Guest Lecture)</b>	<b>Dr. R. Pughazenthi,</b> Professor Department of Mechanical Engineering Vels University, Chennai.	22.12.2021	102	III
<b>Awareness on Technology Innovation Platform (Seminar)</b>	<b>P.V.Sanjeev</b> Associate Professor Department of Mechanical Engineering Annamacharya Institute of Technology Rajampeta	2.07.2022	98	III
<b>UAV- QUADCOPTER Workshop</b>	<b>Venkata Mahesh K</b> Managing director Sri Vignan Technologies Alipiri Road, Tirupati 517501	14 - 16 August 2022	86	II

# Composite Materials in Space Applications and Collaborative Robotic Inspections

(Webinar)



2-Hours Webinar On Composite Materials in Space Applications and Collaborative Robotic Inspections By **DR. P. SATHISH KUMAR**, Research Associate, IIT Kharagpur, India.

## Basic Problem Solving Tools and Techniques

(Seminar)




One day Seminar On Basic Problem Solving Tools and Techniques By **MRS.V.SULOCHANA**, Director, QCFI Chapter, Tirupati.




# Nondestructive Testing for Beginners

(Guest Lecture)



**SVCE TIRUPATI**  
EDUCATION FOR A BETTER SOCIETY

Department of Mechanical Engineering  
Presents a **Online Guest lecture** on  
**"NON-DESTRUCTIVE TESTING FOR BEGGINERS"**  
By



**Dr. R. Pugazhenth** *B.E., M. Tech, Ph.D*  
Professor, Department of Mechanical Engineering  
Vels University, Chennai

**Date: 22.12.2021 & Time: 02:00PM to 3:00PM**

**Who Can Attend: III Year Students**

**Google Link:**  
<https://meet.google.com/hju-oatr-hvv>

One hour Webinar On Nondestructive Testing for Beginners By **Dr. R. Pughazenth**, Professor Department of Mechanical Engineering, Vels University, Chennai.

## Awareness on Technology Innovation Platform

(Seminar)



One day event on Awareness on Technology Innovation Platform By **P.V.Sanjeev**, Associate Professor, Department of Mechanical Engineering, Annamacharya Institute of Technology, Rajampeta.

# UAV-QUADCOPTER Workshop



Three Days event On UAV-QUADCOPTER Workshop By **K. Venkata Mahesh** , Managing director, Sri Vignan Technologies, Alipiri Road, Tirupati.

## SKILL EMPOWERMENT PROGRAM



### **Under SEP(SKILL EMPOWERMENT PROGRAM)**

1. Hyundai Motors India Pvt.Ltd Sponsored **HYUNDAI CRETA** for demonstration to students
2. BMW India sponsored BMW Engine for demonstration to students

# **Students Achievements**

# DESIGN AND SIMULATION OF MULTITASKING SEED SOWING MACHINE



Bagged **8 prizes** among **26 winners** from all countries across the globe



## We Congratulate!

**M. Sunil, M. Naveen Kumar, P. Hemanth and N. Nagalakshmi** for their exemplary participation and performance in the competition under the mentorship of **D. Rajesh, APSSDC- Dassault Systemes trainer**

## DESIGN AND SIMULATION OF MULTITASKING SEED SOWING MACHINE

We are **proud** of our students for being a part of professional training and development program in one of the **world's biggest innovative engine.**



APSSDC  
Dassault Systemes  
3-D Experience Lab



Sri Venkateswara  
College of Engineering,  
Tirupati

[www.svcolleges.edu.in](http://www.svcolleges.edu.in)

[www.svcolleges.edu.in](http://www.svcolleges.edu.in)

On the occasion of MEA we conducted Dassault systems programme. Our students got 8 prizes among 26 winners from all countries across the globe.

## Project of the Year

**SVCE TIRUPATI**  
EDUCATION FOR A BETTER SOCIETY

Dream **BIG**

*Congratulations!*

**IG prize Winner**  
3DEXPERIENCE Edu, Dassault Systèmes

**2021 PROJECT OF THE YEAR**

A Big Thank You, **SVCians** for your Vote & Support.

**BHEEMA JYOTHI KRISHNA PRAKASH**  
18BF1A0309, Mechanical Engineering, 3rd Year, 2018-22

[www.svce.edu.in](http://www.svce.edu.in)

On the occasion of MEA we conducted 3DExperience Edu, Dassault systems programme. Our student got Project Of the Year.





Bheema Jyothi Krishna got Instagram Project of the Year 2021 under a title of Beam Engine Powered Circular Sawing Machine organized by Dassaults Systems in the year of 2021.



## AWARD WINNER

This award recognizes that  
**BHEEMA JYOTHI KRISHNA PRAKASH**

is one of the winners of the

**Instagram Prize in  
 Project of the Year 2021**

Held in 2021 - Vélizy-Villacoublay, France



Guillaume VENDROUX  
 CHARLES BONNASSIEUX  
 3DEXPERIENCE Edu Marketing Manager  
 CEO DELMIA

# ISTE AP STATE AWARD 2020



**Mr. MALLELA SUNIL**  
16BF1A0361, Mechanical Engineering,  
SVCE Tirupati

Dream **BIG**

## ISTE AP STATE AWARD 2020

Hearty Congratulations  
for receiving the  
**Best Mechanical  
Engineering  
Student Award**



[www.svce.edu.in](http://www.svce.edu.in)

Our student got the Best Mechanical Engineering student Award on the occasion of ISTE AP AWARDS 2020.

## WEAPONOBOT



Mr K Vamsi Krishna and his team got 1st prize in THE DESIGN & INNOVATION CLINIC 2022 organized by CMTI at Bangalore in 8<sup>th</sup> June 2022 under a title of WEAPONOBOT



- **Mr K Vamsi Krishna and his team got Consolation prize in AVISHKAAR-2022**
- **2022 organized by APCOST & AICTE on 4<sup>th</sup> & 5<sup>th</sup> March in Adikavi Nanayya**
- **University, Rajamahendravaram March 2022 under a title of WEAPONOBOT.**



**Mr K Vamsi Krishna and his team got Consolation prize in Ample(2022-2022) organized by SVCE at Tirupathi in 15<sup>th</sup> July 2022 in Project Expo under a title of WEAPONOBOT**





# Final Year Project



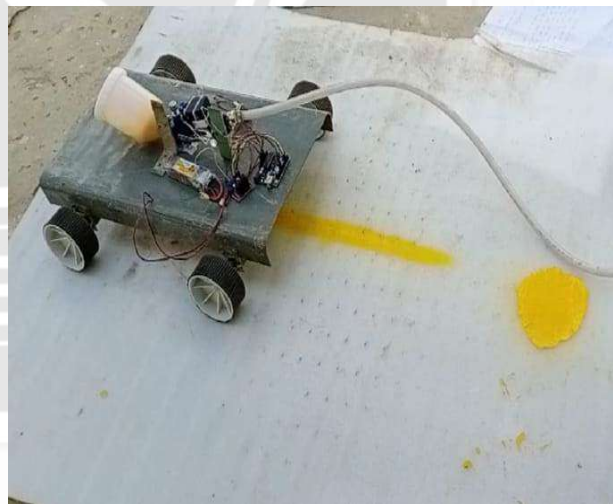
WeaponoBot



Automatic Sanitizer Dispenser



Disinfectant Spraying Robot



Automatic Line Marking Machine



## ~ CONCLUSION ~

- During the year period 2021-2022, Mechanical Engineering Association(MEA), along with the Department and with the co-operation of students has organized many events.
- Students had spent a good time and acquired much knowledge and skills via participating in various events under the guidance of respective faculty coordinators. We are very happy that we successfully organized many events with the help of Department of Mechanical. We contribute for more number of events to be happen in the future . We wish good luck and welcome our juniors to  
**“ MECHANICAL ENGINEERING ASSOCIATION”**

# Thank you



Prepared by :  
P.Devi Prasad  
20BF1A0352  
95057722290



Editing by :  
***Mr. G. Guru Mahesh***  
***Assistant Professor***



Well Established  
Laboratories



Industry Oriented Courses



R&D and Knowledge  
Sharing Centre



Experienced and Qualified  
Faculty



Effective Mentoring System  
For Students



Excellent Success rate in  
Placements