



(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)

S.P.G.Chidambara Nadar - C.Nagammal Campus

S.P.G.C. Nagar, K. Vellakulam - 625 701 (Near VIRUDHUNAGAR).

# DEPARTMENT OF MECHANICAL ENGINEERING (Accredited by NBA, New Delhi)

# HIGH LIGHTS OF THE DEPARTMENT

## **Department Profile**

Program of Study	Description
	Started with Approved intake of 30 seats in 2005 FILE NO.: 730-52-311(E)/ET/98 dated 09.06.2005
	Intake increased to 60 seats in 2009 FILE NO.: 730-52-311(E)/ET/98 dated 11.07.2009
Under Graduate B.E Mechanical Engineering	Intake increased to 120 seats in 2013 FILE NO.: Southern/1-1402872972/2013/EOA dated 19.03.2013
	Intake reduced to 60 seats in 16.06.2021 FILE NO : Southern/1-9321338833/2021/EOA dated 10.07.2021
	Intake reduced to 30 seats in 02.01.2023 _FILE NO : Southern/1-36452806855/2023/EOA dated 02.01.2023.
Post Graduate M.E Manufacturing Engineering	Started with Approved intake of 18 seats in 2012 FILE NO.: Southern/1-712736295/2012/EOA dated 10.05.2012 Intake reduced to 9 seats in 2020
	FILE NO : Southern/1-7003917858/2020/EOA dated 15.06.2020
Research Programmes	Research center Approval extended upto 14.10.2023

#### **HoD Message**

**Department** of Mechanical The Engineering started the UG programme in 2005. Mechanical Engineering is witnessing remarkable growth and opportunities especially recent advancements in materials, automation, and Al integration. From 3D printing and smart materials to renewable energy systems, these trends are shaping the future of Mechanical Engineering and opening doors to innovative solutions across various industries. The Department has highly qualified and experienced faculty members in different fields of specialization. The Department is accredited by the NBA, New Delhi. We are dedicated in preparing students to harness the potential of Mechanical Engineering, vast contributing to a sustainable and technologydriven world. Together, we aspire to shape a brighter future with our collective expertise and passion.



Dr.S.Thanga Kasi Rajan
Associate Professor and HOD

# Department of Mechanical Engineering

## **Achievements**

## **MoUs Signed by Department of Mechanical Engineering**







MoU signed with SIEMENS
Centre of excellence in Manufacturing
at NIT Trichy

MoU signed with Alfa TKG
Integrated
Solutions India Pvt. Ltd., Chennai

MoU Signed with Sri Hari Tex Industries. Madurai

#### **Patent Granted**



A Design patent titled "SPACER WITH STRIP SLOT FOR TUBELESS TIRE" was granted to Dr.M.Prithiviraj AP/ Mechanical Engineering





#### ORIGINAL

मुस/No : 131400



#### भारत सरकार GOVERNMENT OF INDIA पेटेंट कार्यालय THE PATENT OFFICE

डिजाइन के पंजीकरण का प्रमाणपत्र CERTIFICATE OF REGISTRATION OF DESIGN

डिजाइन सं. / Design No. : 375461-001 तारीख / Date : 12/12/2022

पारस्परिकता तारीख / Reciprocity Date\*

देश / Country

.

प्रमाणित किया जाता है कि संतरन प्रति में वर्णित डिजाइन जो SPACER WITH STRIP SLOT FOR TUBELESS TIRE से संबंधित है, का पंजीकरण, थेणी 12-16 में 1.Dr K Kannan 2. Dr M Prithiviraj 3.Mr R Rajprabu 4.Mr S David Blessley 5.Dr S Jeya Devi के नाम में उपर्युक्त संख्या और तारीख में कर लिया गया है।

Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 12-16 in respect of the application of such design to SPACER WITH STRIP SLOT FOR TUBELESS TIRE in the name of 1.Dr K Kannan 2. Dr M Prithiviraj 3.Mr R Rajprabu 4.Mr S David Blessley 5.Dr S Jeya Devi.

डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अध्यक्षीन प्रावधानों के अनुसरण में। In pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.

# INTELLECTUAL PROPERTY INDIA PATENTS I DESIGNS I TRADE MARKS GEOGRAPHICAL INDICATIONS

निर्मान औ लागिकाDate of house : 20/03/2023

unferties 42c Temps are unot the Controller General of Patents, Designs and Trade Marks

पानपरिकार तारीक (परि कोई से) निकारी अनुपति देस के नाम पर को पई के किनाइन का सन्वयंक्षण पंतीकरण को नारीक से सा करूँ के लिए सेपा निकार जिसार, अधिनिका एवं निवार के निकार में के अधीर, पीन कर्यों की अधिरित्त अर्थिय के लिए किया वा सदेगा हुए प्रधान पर का उपयोग निवार कार्यवाली अपना निर्देश से पंतीकर अपन करने के लिए पाति से सकता है।

"The reciprosity date (if any) which has been allowed and the name of the country/Copyright in the design will subset for lan years from the date of Regulatation, and may under the terms of the Act and Rules, be extended for a further period of the years. The Certificate is not for use in legal proceedings or for obtaining registration abroad.

## **Funded Faculty Development Programmes**

STTP- AICTE Sponsored STTP on "MAKE IN INDIA THROUGH 3D PRINTING AND INDUSTRY 4.0 FOR INDIAN INDUSTRIES" Fund sanctioned – Rs.3.93 Lakhs on 10.8.2020

Phase	Coordinator	Duration	No of Participants
Phase - I	Mr.R.Sakthivel Murugan AP/Mech	01.02.2021 - 06.02.2021	65
Phase - II	Mr.N.R.Madhan AP/Mech	12.04.2021 – 17.04.2021	120
Phase -	Mr.S.Muthunatarajan AP/Mech & Mr.A.Sanakaranarayana murthy AP/Mech	03.05.2021 – 08.05.2021	60
Phase - IV Mr.D.Palanikumar AP/Mech & Mr.S.Devaraj AP/Mech		04.06.2021 - 19.06.2021	83

ATAL Online FDTP 2021 -22
(Organ printing using 3D printing Technologies) –
Rs.93,000 Fund sanctioned
'Organ Printing using 3D Printing Technologies'
FDP conducted on 7.12.2021 – 11.12.2021

Anna university has sanctioned Rs. 35000/- for conducting Six Days Faculty Development Programme on "Additive

Manufacturing".

FDP held on 17.07.2023 – 22.07.2023







### **AICTE Modrobs fund**

AICTE
MODROBS
sanctioned
Rs. 8.8 Lakhs
Fund

#### **Utilization of Modrobs Fund**

**Equipments Purchased** 

3D Printer - Rs 2,60,000/-

3D filament Extruder -

Rs 3,00,000/-

3D Scanner – Rs – 1,88,000/-



#### **3D FILAMENT EXTRUDER**

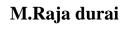




## **Funded and Sanctioned Student Project**

Received Rs.6,000/- from Foundation for Advancement of Education and Research under FAER - McAfee Scholar Program 2022 for the project titled "Design and Fabrication of detachable speed breaker with barricade system".







K.Vishnu priyan



**Arun Karthick** 



Project Guide Dr.Prabhu AP/MECH

 Received Rs.7,500/- from Foundation for Tamilnadu State Council for Science and Technology, Chennai under Students Projects Scheme (2021 - 2022) for the project titled "Design and Fabrication of Solar Operated Litter Raking Machine for Poultry Farm".



J.Bala Vignesh



T.Navaneetha Krishnan



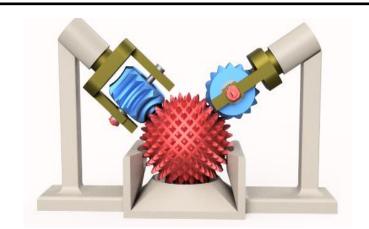
S.Satheesh Kumar



Project Guide T.Suresh/AP/MECH

## **Funded and Sanctioned Student Project**

- Received Rs.7,500/- from Foundation for Tamilnadu State Council for Science and Technology, Chennai under Students Projects Scheme (2022 - 2023) for the project titled "ENERGY CONSERVATION IN INDUSTRIES BY END EFFECTOR ACTIVE BALL JOINT MECHANISM
- Students R. Praveen raj, K. B. Vignesh and C. Aravindan.
- Guide Mr.N.R.Madhan, AP/ Mech. Engg.









Mr.K.B. Vignesh



Mr.C.Aravaindan



Mr.N.R.Madhan AP/Mech

### **COPY RIGHTS GRANTED**

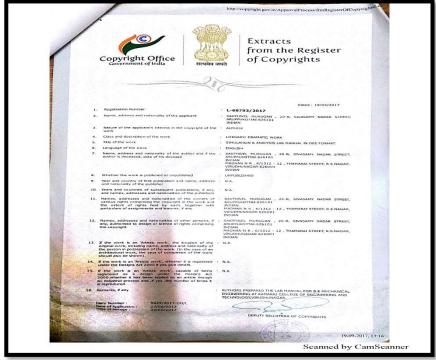
Four copy rights have been Granded for Department of Mechanical Engineering

- Simulation and Analysis Lab manual in OBE Format.
- PO-CO Attainment Calculation Sheet for various assessment using MS Excel (Version 1)
- PO-CO Attainment Sheet for cycle test and various assessments using MS Excel (Version 2)
- Hand book for Design and Fabrication project Manual









# SCHOLARS OF EMINENCE (Faculty Members Completed their Ph.D)



Dr.S.Thanga Kasi Rajan M.E., Ph.D.
Assistant Prof /Mech
Ph.D. Public Viva held on –
28.08.2020



Dr.B.Prabhu, M.E., Ph.D.
Assistant Prof / Mech
Ph.D. Public Viva held on –
15.04.2021



Dr.M.Prithviraj, M.E., Ph.D. Assistant Prof /Mech Ph.D. Public Viva held on – 29.07.2021

# SCHOLARS OF EMINENCE (Completed in KCET – Mech Research center ) Part time Research Scholars



Dr.Rathinavel
Public viva voce held at
08.04.2021
Supervisor
Dr. S.S.Saravanakumar
ASP /Mech – KCET



Ph.D. Public Viva held on 05.05.2023
Supervisor - Dr.S.Senthil
Prof/Mech & Principal - KCET

Dr. K.Murugananthan

**Assistant Prof/Mech** 



Dr. B.Balavairavan
Assistant Prof/Mech
Ph.D. Public Viva held on –
09.03.2022
Supervisor
Dr. S.S.Saravanakumar
ASP /Mech – KCET





Dr.P.Balasundar
Assistant Prof/MTRE
Ph.D. Public Viva held on –
30.06.2023
Supervisor – Dr.S.Senthil
Prof/Mech & Principal – KCET

Dr.P.Senthamarai Kannan
Assistant Prof/Mech
Ph.D. Public Viva held on – 12.07.2023
Supervisor – Dr. S.S.Saravanakumar
ASP /Mech – KCET

# Two of Faculty members received Guide ship from Anna university, Chennai



Dr.S.Thangakasi rajan , M.E., Ph.D.
Assistant Prof /Mech
received Guide ship from Anna
University, Chennai on 22.06.2022.



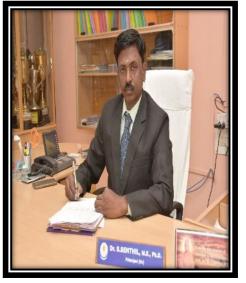
Dr. B.Balavairavan M.E., Ph.D.
Assistant Prof/Mech
received Guide ship from Anna
University, Chennai on 12.04.2023





Dr. S. Senthil
Prof&HOD/Mech
Received Kamarajar award
from rotary club of
Virudhunagar for Research
Excellence

Er.S.Devaraj
Assistant prof/Mech
AICTE -Technical
Book writing in Tamil
Approved





Dr.S.Senthil and Dr.S.Thanga Kasi Rajan received award as Primary Evaluator for exceptional contribution in Toycathon, 2021, AICTE.





Dr.M.Prithiviraj and Mr.D.Palani Kumar has secured Best Research Paper Award for a research paper titled "Energy Absorption Characteristics of Thin Walled Tubes with Rubberized Coir Filler in Axial Loading" presented in the 3rd International Conference on Empirical and Theoretical Research (ICETR-2022) organized online on 28/01/2022 to 29/01/2022.



Er.R.Sakthivel Murugan, AP/ Mechanical Engineering has contributed as Resource Person in AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Organ Printing using 3D Printing Technologies to make Self-Reliant India" from 07/12/2021 to 11/12/2021 at Kamaraj College of Engineering and Technology.

3 of our faculty members are listed in world scientist list released by AD scientific Index 2022

2 of our faculty members are recognized as top 2% scientists world wide by Elsevier BV 2022











Dr.S.Senthil Prof/Mech

Dr. S.S.Saravanakumar Associate Professor /Mech

Dr.P.Senthamarai kannan Assistant Professor / Mech

Dr. S.S.Saravanakumar Associate Professor /Mech

Mr.P.Senthamarai kannan Assistant Professor / Mech



Dr.P.Senthamaraikannan
AP/Mech
Recognized as Editorial board
member in Journal of Natural
Fibers
Publisher - Taylor and Francis,
Philadelphia, USA,PA



Journal of Natural Fibers Taylor & Francis



Dr.B.Balavairavan
Assistant Prof/Mech
was recognized by Anna
University, Chennai for
publishing his PhD article in
Q1 Journal

## 5 of our faculty members are listed in world scientist list released by AD scientific Index 2023



Dr.S.Senthil Prof/Mech



Dr.S.Thanga Kasi Rajan Associate Professor and HOD



Dr.P.Senthamarai kannan Assistant Professor / Mech



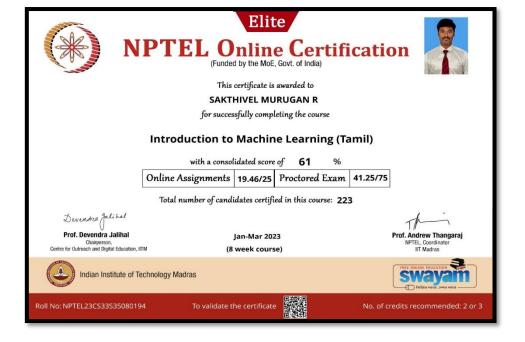
Dr.M.Prithiviraj
Assistant Professor / Mech



Dr.K.Muruganandam Assistant Professor / Mech



Er.R.Sakthivel Murugan,
AP/ Mechanical Engineering
has successfully completed the NPTEL
course "Introduction to Machine
Learning" in Elite category (Jan – April
2023)





Mr.D.Palani Kumar

AP/ Mechanical Engineering

awarded as Top Performing Mentor

for Computer Integration

Manufacturing course by NPTEL (Jan

– April 2023)



## Awards given to our faculty - Researchers day

The following Mechanical Engineering faculty members who have received the awards on the Researchers day held on 06.03.2023 for their various Research achievements during 2021-22

Faculty Name	Award Received
	<b>Top Researcher Award</b>
Dr.S.S. SARAVANA KUMAR,	<b>Star Researcher Award</b>
M.E.,Ph.D.,	<b>Best Research Supervisor</b>
	Award
Dr C SENTHII M E Dh D	<b>Top Researcher Award</b>
DI.S. SENTHIE, WI.E., PII.D.,	<b>Star Researcher Award</b>
Mr.P.SENTHAMARAIKANNAN	<b>Top Researcher Award</b>
,M.E.,(Ph.D.),	<b>Star Researcher Award</b>
Dr.P.NARAYANASAMY,	Top Researcher Award
M.E.,Ph.D.,	Top Researcher Award
Dr.S.THANGAKASI RAJAN,	Active Researcher Award
M.E.,Ph.D.,	Active Researcher Award
Dr.M. PRITHIVIRAJ M.E.,Ph.D.,	<b>Active Researcher Award</b>
Mr.A. SANKARA NARAYANA	Active Researcher Award
MURTHY M.E.,(Ph.D.,)	Active Researcher Award
Mr.K. MURUGANANTHAN,	Active Researcher Award
(M.E.,Ph.D.,)	Active Researcher Award
Mr.S. MUTHU NATARAJAN	Active Researcher Award
(M.E.,Ph.D.,)	Active Researcher Award
	Dr.S.S. SARAVANA KUMAR, M.E.,Ph.D.,  Dr.S. SENTHIL, M.E.,Ph.D.,  Mr.P.SENTHAMARAIKANNAN ,M.E.,(Ph.D.),  Dr.P.NARAYANASAMY, M.E.,Ph.D.,  Dr.S.THANGAKASI RAJAN, M.E.,Ph.D.,  Dr.M. PRITHIVIRAJ M.E.,Ph.D.,  Mr.A. SANKARA NARAYANA MURTHY M.E.,(Ph.D.,)  Mr.K. MURUGANANTHAN, (M.E.,Ph.D.,)  Mr.S. MUTHU NATARAJAN









## Awards given to faculty by KCET

KCET Managing board members appreciated for the dedicated service of following faculty members of Mechanical Engineering Department and honour them during KCET Silver Jubilee Function held on 15.07.2023

SI.NO	Name of the Faculty	Category (Year of Service in KCET )	
1	Dr.S.Senthil Prof/Mech	20 Years and above	
2	Dr.S.Thangakasirajan ASP&HOD/Mech	10 Years and above	
3	Mr.D.Palanikumar AP/Mech	10 Years and above	
4	Mr.R.Sakthivel Murugan AP/Mech	10 Years and above	
5	Mr.B.K.Parrthipan AP/Mech	10 Years and above	
6	Mr.N.R.Madhan AP/Mech	10 Years and above	

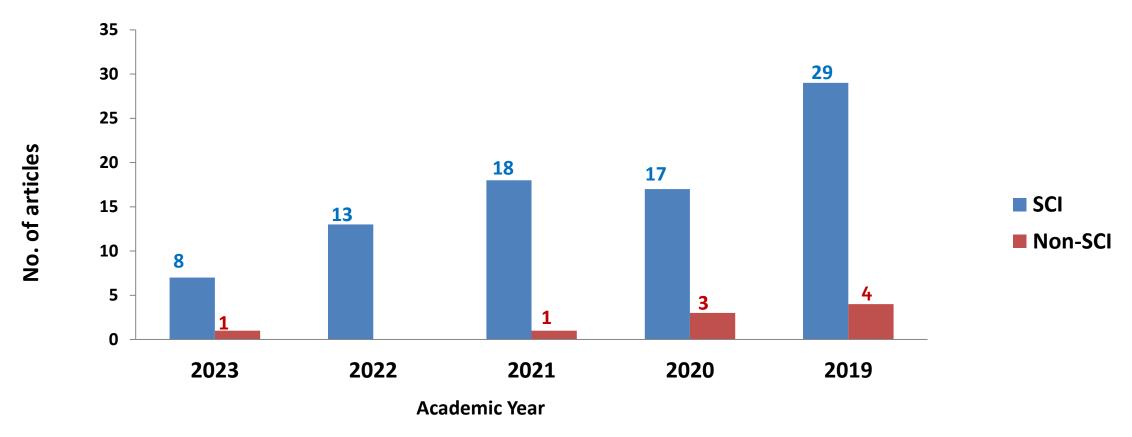








## **Faculty Research Publications**















## **Department Citation**

#### Faculty Citation as per Scopus\*

S.NO	Name of the faculty	Total Citations	H Index
1	Dr.S.Thangakasirajan	75	5
2	Dr.S.Senthil	1512	11
3	Dr.P.Narayanasamy	1365	19
4	Dr.M.Prithiviraj	243	7
5	Dr.B.Balavairavan	32	3
6	Dr.K.Murugananthan	157	3
7	Dr.P.Senthamaraikannan	4090	30
8	Mr.B.K.Parrthipan	4	2
	Total	7478	80

#### Faculty Citation as per Google scholar\*

S.NO	Name of the faculty	Total	H Index	I 10 index
		Citations		
1	Dr.S.Thangakasirajan	91	6	3
2	Dr.S.Senthil	1857	11	11
3	Dr.P.Narayanasamy	1665	21	29
4	Dr.M.Prithviraj	283	7	6
5	Dr.B.Balavairavan	35	3	2
6	Dr.K.Murugananthan	190	2	2
7	Dr.P.Senthamaraikannan	4844	32	42
8	Mr. D.Palani Kumar	13	1	1
9	Mr.B.K.Parrthipan	4	2	0
10	Mr.R.Sakthivelmurugan	20	1	1
	Total	9002	86	97

<sup>\*</sup> as on 18.07.2023

## **Consultancy work from Industry**

S. No.	Academic Year	Name of the Faculty	Name of the Industry	Details of Consultancy Services	Amount (Rs.)
1.	2021-2022	Dr.P.Narayanasamy AP/Mech	M/s. Paprika Oleo's (India) Ltd., Virudhunagar	Testing of sieve fabrics	Rs. 3894/-
2.	2022-2023	Dr.S.Thangakasirajan AP/Mech & Mr.D.Palanikumar AP/Mech	Alfa Tekg Integrated Solutions India Pvt. LTD., Chennai	CAD Drawing Completion	Rs.14160/-

## **Consultancy work in 3D printing Lab**

Sl.No	Academic Year	Name of the Faculty	Completed Date	Project ID	Nature of work	Amount received
1	2022 2022	Mr.N.R.Madhan AP/Mech	10.03.2023	MECH0007	Filament Making	Rs.2500/-
2	2022-2023	AP/Iviech	20.03.2023	MECH0009	Filament Making	Rs.2650/-

## **Effective Online Teaching during Covid 19 Pandemic Period**

# **Table Top Educational Video Creation Kit (2020-21)**

#### **Application**

Creation of Tutorial Video.

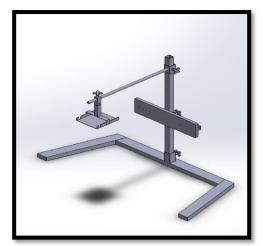
#### **Benefits**

Easy to handle.

Students will love to learn through this method of teaching.

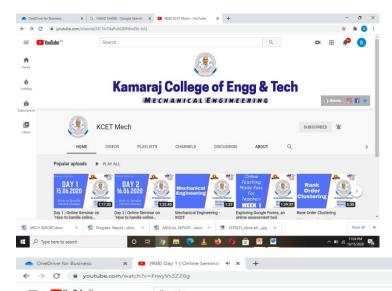
Manufactured in: Prototype Development Center, Kamaraj College of Engineering and Technology, Madurai.

**Designed by**: Er.R.Sakthivel Murugan, AP/Mech

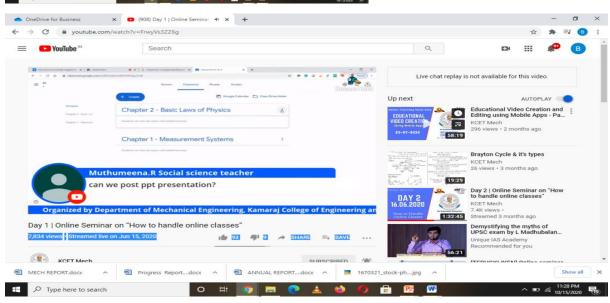




#### **KCET – MECH YouTube channel & Online Events**



Maximum views 7,834



#### **Effective Online Teaching during Covid 19 Pandemic Period**

#### Multi Media Room set up

#### **Purposes**

To conduct Video Conferences, Virtual Official Meetings with Industries, Virtual Inauguration and Valedictory ceremonies, Online classes etc,

#### **Features**

- **Green Screen (12x8 ft ) for better** visual backgrounds
- HD Web Camera (Upto1020 px)
- **Multimedia Speakers**
- **Tablet Pen (For Online Classes)**
- **Uninterrupted Power Supply**
- **Uninterrupted High Speed Internet** (65Mbps)
- **Camstatia Studio Software for video** editing.

#### **Established by:**

Er.R.Sakthivel Murugan, AP/Mech, Er.N.R.Madhan AP/Mech and Non – Teaching staff members





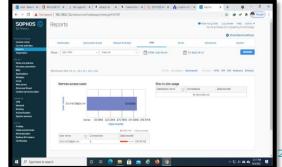
## **SSL VPN Remote Desktop Connection** (to access CAD LAB from home)

- Unique SSL VPN Client Exe file (Sophos) is sent to all the students via official mail with username & password.
- Students can connect from their private network to the KCET Network through Firewall (Sophos) with proper authentication via SSL VPN Client.
- Once they get connected, all students can access provided college system via IP Address and their allocated drive space through remote desktop connection.





SSL VPN Access -Sample Report



# Department of Mechanical Engineering

The following final year students won First prize and cash prize in the "PALS –NexGen3D Hackathon 2021-22" held from September 2<sup>nd</sup> to September 9<sup>th</sup>, 2021".

Pravin kumar.S Bala Vignesh .J Jerry Robinson Ajay Krishnan .S



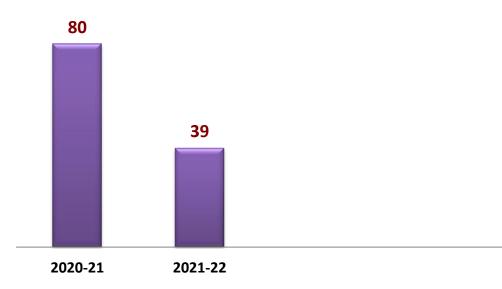
The following students completed Autodesk Design Academy and Udemy certification courses

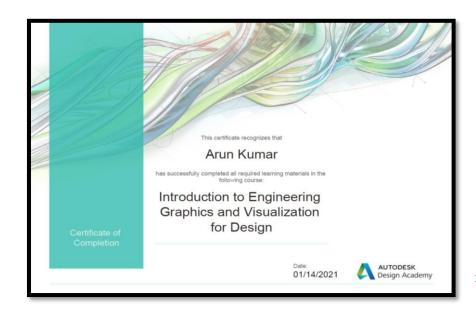
- 1. R.Poul Jacob Introduction to Design for Manufacturing
- 2. S.Pravin Kumar Introduction to Design for Manufacturing
- 3. N.Balasudharson Super learning system for IT Professional

All Third year Mechanical engineering Students (2021-22) got Autodesk Design Academy Certification for Introduction to Engineering Graphics and Visualization for Design (14.01.2021)

## **Students Participation in Online Webinars, E -Quiz and seminars**

■ Students Participation in Online Webinars, E -Quiz and seminars

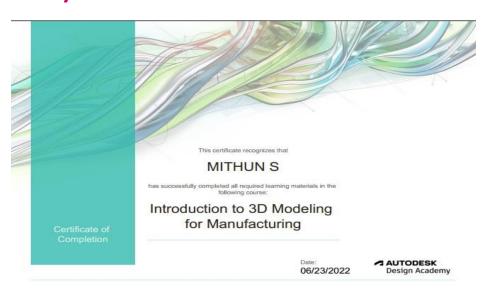




- Final year students (2021-22) participated in INTER ENGG COLLEGE cricket tournament at KLN college of Engineering organized by ISHRAE Madurai chapter on 05/03/2022.
- Mickael Raj. P, Naga Raj. S and Lokesh. S got First Prize in KCET Build-A-Thon 2022 Contest Organized by Kamaraj College of Engineering and Technology (Autonomous) on 27/05/2022.



- R.Praveen Raj, K.B.Vignesh and C.Aravindhan got Second Prize in KCET Build-A-Thon 2022 Contest Organized by Kamaraj College of Engineering and Technology (Autonomous) on 27/05/2022.
- D.Sathish Kumar II year Mechanical got Third Prize in CAD 'O' Mania event Organized by Thiagarajar College of Engineering, Madurai on 28/05/2022.
- ALL Second year students got certification in Introduction to 3D Modelling for Manufacturing – Auto DESK Design Academy 23.6.2022



## **Achievements - patent filed by students**

Mr.V.Santhosh, Mr.M.Bharath and Mr.K.Rahul of III year Mechanical Engineering students filed their project work for Design Patent.

Title of Project: Two fold solar panel external attachment for e-Vehicle.

**Guided by: Dr.S.Thangakasirajan ASP&HOD/Mech** 

Patent Application number no: 383166-001

Date: 06/04/2023

Mr.M.Manoj kumar, Mr.K.Arul Murugan and Mr.P.Aklian karupaiya of III year Mechanical Engineering students filed their project work for Design Patent.

Title of Project: Ceiling fan Cleaning setup.

Guided by: Dr.P.Narayansamy ASP&HOD/Mech & Mr.B.K.Parrthipan

AP/Mech

Patent Application reference number no: 389444,

New No: 389444-001,

Date: 27/6/2023

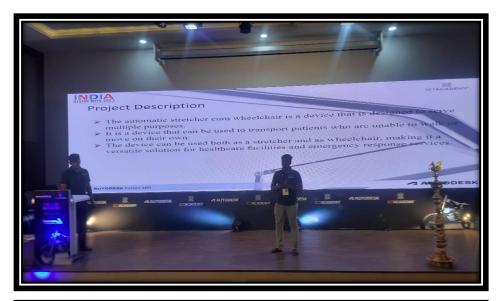
 Mr. G. Rathina siva malayappan of IV Year Mechanical Engineering received Rs.1,49,000/- as Merit Scholarship from Dinamalar & Kingmakers IAS Academy on 23.01.2023.



Mr. M.Jegatheesh, Mr. K.Gokul Raj, Mr. V.Karan, Mr. A.Kaliraj, Mr. S.Kishore and Mr. K.Sivabalan of II Year Mechanical Engineering won Best Team Award in the event National level mini bike racing challenge organized by Sri Ramakrishna Engineering College, Coimbatore on 22.10.2022.



- Our III Mech Students, Thangaraj & Praveen participated in the Finals of India Design Week Challenge 2023- National Level Design Challenge held at Shri Sairam Institutions, Chennai on 25&26 April 2023.
- Out of 90 teams in the finals from various state, our students team bagged one among top 15 teams and gave Presentation for the final round.





- Mr. A.Akash, Mr. M.DA.Shyam and Mr. H.G.Sabaris of III Year Mechanical Engineering won second prize in "Level – I Autodesk Fusion 360 Mega Challenge (Madurai Division)" organized by AU-TNSDC on 24.03.2023 & 25.03.2023.
- Mr. A.Akash, Mr. M.DA.Shyam and Mr. H.G.Sabaris of III Year Mechanical Engineering won second prize in "Level – II Autodesk Fusion 360 Mega Challenge (Madurai Division)" organized by AU-TNSDC.
- Mr. A.Akash, Mr. M.DA.Shyam and Mr. H.G.Sabaris of III Year Mechanical Engineering won second prize in "Level – III Autodesk Fusion 360 Mega Challenge (Madurai Division)" organized by AU-TNSDC.
- Mr. T.Thangaraj, Mr. C.Praveen and Mr. P.Silamparasan of III Year Mechanical Engineering won second prize in "Level – III Autodesk Fusion 360 Mega Challenge (Chennai Division)" organized by AU-TNSDC on 24.03.2023 & 25.03.2023.





- Mr. S.Kiran of II Year Mechanical Engineering won First prize in Paper presentation Contest organized by PSR Engineering College, Sivakasi on 27.01.23. (Title - Design thinking specialised in prototyping)
- Mr. A.Akash and Mr. M.DA.Shyam of III Year Mechanical Engineering won second prize in the event Quality Quiz'23 organized by Anna University, Chennai on 05.02.2023.





- Mr. H.G.Sabarish, Mr. Thangaraj, Mr. Mareeswaran and Mr. Manoj Kumar of III Year Mechanical Engineering Participated in MECH TECH Talk, Cad Modelling, Machinist events in state level Symposium (GenNext2022) organized by Velammal Engineering College, Madurai on October 14, 2022.
- Mr.E.GokulaKrishnan of III year Mechanical Engineering secured Third place in AU Zonal Match Tennis organized by M.Kumarasamy College of Engineering on 27.10.22.







- Mr. S.Kirubakaran of II Year Mechanical Engineering won First prize in Photography event organized by National Engineering College (Autonomous), Kovilpatti on 14.10.22.
- Mr. M.Jegatheesh, Mr. K.Gokul Raj, Mr. V.Karan, Mr. S.Ramachandran and Mr. V.Chandru of II Year Mechanical Engineering organized by Sri Ramakrishna engineering college, Coimbatore won Best Team Award in the event Dirt Rash Engineering College, Coimbatore on 19.10.22.
- Mr. J.Jeeva of III Year Mechanical Engineering won second prize in the event Combinatorial Organized by NIT,
   Trichy on 27.01.23.
- Mr. H.G.Sabaris of III Year Mechanical Engineering won third prize in the event Combinatorial Organized by NIT, Trichy on 27.01.23.
- Mr. J. Madhav Venkatesh of II Year Mechanical Engineering won Second prize in the event WHAT IF Organized by NIT, Trichy.

# **TECHNOVISION 2K23 – INTRA COLLEGE PROJECT COMPETITION for Final Year Students on 13.03.2023**



First Prize – Cash prize Rs 1200/-

Students Name: N.Dharun, S.Vijayakumar,

R.Balasubramaniyan and R.Aswin Sundar

**Project Title: Numerical and experimental analysis** 

of gas stove and energy storage device

**Project Supervisor : Dr.B.Prabhuhu AP/Mech** 



**Second Prize** 

Students Name: P.Mickael Raj, Vinish Kumar. and A.

Pandi Kamal Krishna. A

**Project Title: Novel packaging solutions for fragile** 

archeological artifacts using 3d printing

lattice structures

**Project Supervisor : Mr.R.Sakthivel Murugan AP/Mech** 

# Mini TECHNOVISION 2K23 – INTRA COLLEGE PROJECT COMPETITION for Third Year Students on 20.04.2023



First Prize – Cash prize Rs 500/-

Students Name: P.Silamparasan, C.Praveen and L.Vignesh

**Project Title: Design and fabrication of footwear garbage** 

reinforcement fly ash bricks/paver block for RJ Garbage

Bank, Virudhunagar . (Idhyam oil Mills)

**Project Supervisor: Mr.K.Murugananthan AP/Mech** 



**Second Prize - Cash prize Rs 300/-**

Students Name: K.Jaideep Kumar, D.Sathish Kumar and J.

Kesavan

**Project Title: Design and Fabrication of coconut harvesting** 

quad copter

**Project Supervisor : N.R. Madhan AP/Mech** 

# Students achievements in NPTEL Exams

Mr.K.Jaideep Kumar and Mr.V.Shyamganesh of III Year **Mechanical** Engineering has successfully completed the "Computer NPTEL course Integration Manufacturing" in " Elite + Silver category "





# III year Student Progress in NPTEL Course

Number of Weeks : 12 Weeks

**Number of Credits: 3** 

SI.No	Course name	Offered Institute	Duration	No of Student registered	No of student Attended	No of student passed	No of students got Elite + silver	No of students got Elite	Pass%
1	Engineering Metrology	IIT Madras	July 2022 - October 2022	32	32	25	1	9	78.12%
2	Fundamentals of AI	IIT Kanpur	July 2022 - October 2022	15	15	5	-	3	33.33%
3	Computer Integrated Manufacturing	IIT Kanpur	Jan 2023 – April 2023	26	25	23	2	15	88.4

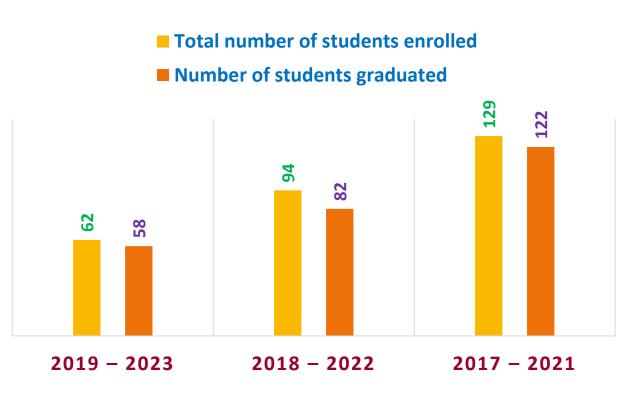
### Value added courses

#### **Details of completed Value added Courses**

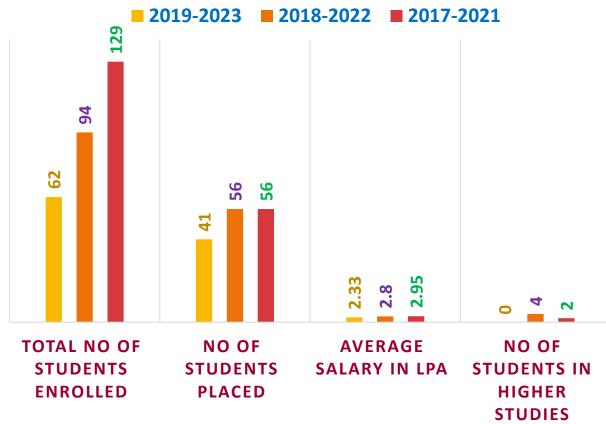
Sl.No.	Name of the Course	Year	Offered by	Date	No of Students
1	NX-CAD for Beginners	III/Mech (2020-24)	CoE-Manufacturing, NITT	23.08.2022 to 28.08.2022	48
2	CNC Coding with live Demo	II/Mech (2021-25)	CIPET, Madurai	04.01.2023 to 07.01.2023	20
3	IoT	II/Mech (2021-25)	Quantanics Techserv (P) Ltd, Madurai	04.01.2023 to 09.01.2023	23

#### STUDENTS GRADUATION & PLACEMENT DETAILS

#### **GRADUATION DETAILS**



#### PLACEMENT DETAILS



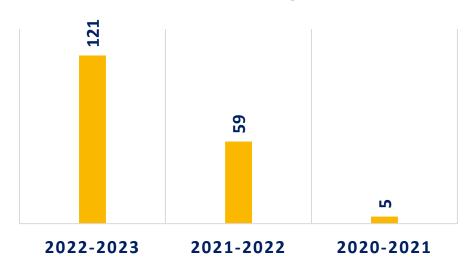
#### **STUDENTS PROJECTS**



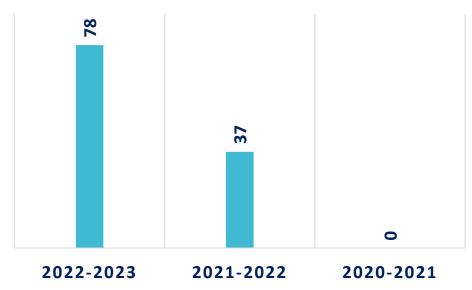
# INTERNATIONAL CONFERENCE



# INDUSTRIAL/INPLANT TRAINING



#### **INTERNSHIP**



# List of Companies Students undergone the Internship

- 1. Tamilnadu State Transport Corporation, Madurai
- 2. Anaamalais Toyoto, Sivakasi
- 3. Anchor poly bags, Kovilpatti
- 4. Majestic die casting, Chennai
- 5. RANE Engine Valves Ltd
- 6. TVS Mobility private limited, Madurai
- 7. R.S.V.industries plastic & rubbers, Chennai
- 8. Puducherry Power Corporation Limited, Puducherry
- 9. Ambal Auto Pvt Ltd, Erode
- 10. Alufit International Pvt Ltd, Hosur
- 11. Goodwins Motors, Chennai
- 12. Schwing Stetter, Chennai
- 13. Unique Measurement Service, Chennai



















### **Our Top Recruiters**

Sl.no	Our TOP Recruiters
1	M/s. Azelerator
2	Nouveaux Industries
3	RAINI Industries
4	T V Sundaram Fastners
5	JMI FRITECH
6	Gencor Pacific Auto Engineering
7	INDOCOOL
8	TCS
9	Mercury Fittings
10	Young shin Automotive (I) Pvt Ltd.
11	The Sanmar Group
12	SL-LUMAX
13	Dolmatic
14	Minmini pvt. Ltd
15	Aurolab
16	RENAULT NISSAN
17	M/s Idhayam Oil Mills
18	CTS































#### **Development Activities by students**

### **Product Development (2021-22)**



**Semi-Automatic Floor Cleaner** 

Guide: Mr.S.Muthu Natarajan

Name of the Student's : S. Vignesh, T. Gowsic

**K.Balasankar** 



**Detachable Speed breaker with Barricade System** 

Guide: Dr.B.Prabhu AP/Mech

Name of the students : M.Rajadurai, K.Vishnupriyan, M.Arunkarthik



**Solar Operated Litter Raking Machine for Poultry Farm** 

**Guide**: Mr.T.Suresh

Name of the students: J.Bala Vignesh, T.Navaneetha Krishnan, S.Satheesh Kumar

#### **Product Development (2021-22)**



**Fitness Enhancement Machine** 

**Guide: Mr.T.Suresh** 

Name of the Students : G.Santhosh, T.Nalla

Perumal, S.Bala Shivam



IoT QUAD-COPTER

**Guide: Mr.B.K.Parrthipan** 

Name of the students: M.Pavithran, D.Deepak Hariharan, N.Jebarson



Pre signal Analyzer for Indian Railway

Guide: Dr.S.Thanga Kasi Rajan

Name of the students: S.Pravin

kumar, S.Balamurugan, D.J.Robert

Manickam

### **Product Development (2022-23)**







Design and Fabrication of coconut harvesting quad copter

**Guide:** Mr.N.R.Madan AP/Mech

Name of the Student's: Jaideep Kumar. K, Sathish Kumar. D and Kesavan. J

Design and implementation of IoT operated gas stove control system

**Guide:** Mr.T.Suresh AP/Mech

Name of the students: Akash. A, Harisuriya. M and Rajaguru. C

Design and Fabrication of two fold Adjustable
Solar panel External attachment on the top of EVehicle for charging Battery

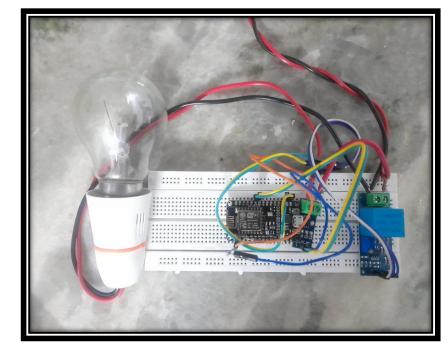
**Guide**: Dr. S. Thanga Kasi Rajan ASP&HOD/Mech

Name of the students: Santhosh.V, Bharath.M and Rahul.K

#### **Product Development (2023)**







**Design and Fabrication Of Ceiling Fan Cleaning Setup** 

**Guide:** Mr.B.K.Parrtipan AP/Mech

Name of the Student's: Manoj Kumar.M, Akilan Karuppaiah.P, and Arul Murugan .K **Design and Fabrication Overhead Water** tank cleaning machine

**Guide**: Dr.P.Narayanasamy ASP/Mech

Name of the students: Navaneetha krishnan.P, Mareeswaran. R and Sree Prabhu. A

Design and Implementation of IoT based Lab Automation for Monitoring and Controlling

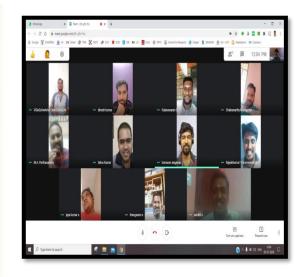
**Guide:** Mr. R. Sakthivel Murugan AP/Mech

Name of the students: Shyam M.DA., Chandra Kumar. G and Subramanian.P

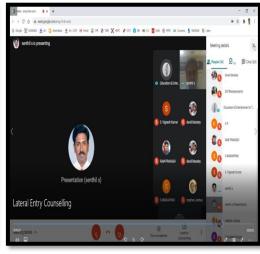
## **Events Organized (2020-21)**

#### Total no events conducted – 21

S. No.	Date of Event	Name of the Event
1	24/11/20	Employability skills and Opportunities in HVAC&R Industry
2	09/02/21	Opportunities in Digital Marketing
3	10/02/21	Online seminar on "Opportunities in HVAC"
4	01/02/21to 06/02/21	Organized AICTE sponsored STTP on Make in India Through 3D Printing and Industry 4.0 for Indian Industries
5	06/03/21	Workshop on Entrepreneurship Opportunities in Solar Technology
6	08/03/21	Guest Lecture on Opportunities in Banking Sector
7	12/04/21to 16/04/21	STTP on Make In India through 3D printing and Industry 4.0 for Indian Industries
8	15/05/21	Webinar on Orientation Programme and Technical talk on Refrigeration Basics, Applications and Opportunities









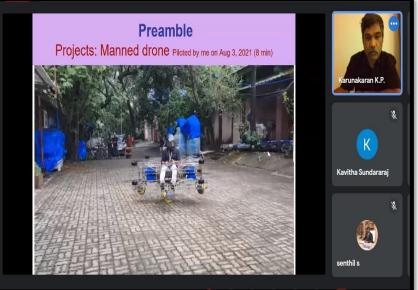




# **Events Organized (2021-22)**

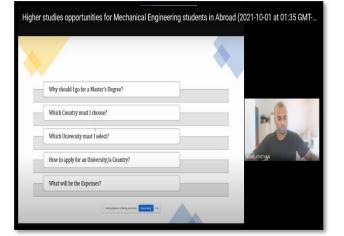
S. No.	Date of Event	Name of the Event
1	28.09.21	Guest Lecture on Mechatronics and its applications
2	29.09.21	Guest Lecture on Non-Destructive testing and its application
3	29.09.21	Basics of CAD and its application in Mechanical Engineering fields"
4	01.10.21	Guest lecture on HVAC Systems, Applications and Opportunities
5	01.10.21	Opportunities of Higher Studies in Abroad for Mechanical Engineering Students
6	28.11.21	<b>Guest Lecture on Entrepreneurship Development</b>
7	07.12.21 -	FDP on 'Organ Printing using 3D Printing
,	11.12.21	Technologies'
8	20.12.21	Seminar on "ICT Design Now Workshop"
9	21.01.22	Guest Lecture on "Advanced Product Quality Planning"
10	24.02.22	Guest Lecture on "Impact of Design in Manufacturing Industry"





### **Events Organized (2021-22)**

S. No.	Date of Event	Name of the Event
11	11.04.22	Guest Lecture on "Expectation of Industries"
12	21.04.22	Guest lecture on Role of CAE in Mechanical and Aerospace Sector
13	27.04.22 – 28.04.22	Two days FDP on Future of Making Things with Autodesk Fusion
14	29.04.22	Guest Lecture on Carrier Opportunities for Mechanical Engineers in IT industry
15	05.05.22	Seminar on 3D printing
16	17.05.22	Guest Lecture on Challenges and Opportunities in EV
17	26.05.22	Guest lecture on Design of Pneumatic Circuits



Opportunities of Higher Studies in Abroad for Mechanical Engineering Students



Autodesk Sponsored Two days FDP on Future of Making Things with Autodesk Fusion





Guest Lecture on 
"Impact of Design in Manufacturing Industry"



Challenges & Opportunities in Electrical Vehicles by CAD center

# **Events Organized by Department (2022-2023)**

	<u> </u>		
S. No.	Date of Event	vent Name of the Event	
1	02.07.22	Awareness about importance of Engineering Education	
2	16.07.22	Scope of Coding in Mechanical Engineering	
3	16.07.22	Industry Expectations	
4	19.07.22	Wire Arc Additive Manufacturing	
5	20.07.22	Angel Investment/VC Fudging Opportunity For	
3		Early-Stage Entrepreneurs	
6	26.07.22	How to face the interview for Core/IT jobs	
7	27.07.22	How to prepare for Tier 1 Core companies	
8	03.08.22	<b>Business Model Canvas</b>	
9	12.08.22	<b>Applications of Computer Vision in Mechanical</b>	
		Engineering	
10	16.08.22 to	Advancements in Alternate Filament Fabrication	
	17.08.22	for 3D Printing	











## **Events Organized by Department (2022-2023)**

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# **Events Organized by Department**

S. No.	Date of Event	Name of the Event
21	08.02.23	Career opportunity for student in SAE India
22	10.02.23	<b>Advances in Heat and Mass Transfer Operations</b>
23	15.02.23 to 16.02.23	<b>Challenges and Opportunities in Electric Vehicles</b>
24	27.02.23	ENXENERIO'23
25	14.03.23	Quality Standards
26	11.07.23 & 12.07.23	Hands on Workshop on Cycle Design Challenge
27	11.07.23, 13.07.23 & 14.07.23	Internet of Things
28	07.07.23 to 22.07.23	Additive Manufacturing











#### **Students Industrial Visit (2021-22)**



IV Year Mech students visited CIPET, Madurai on 12/10/2021





III Year Mech students visited Hydax Hydraulics Private Limited, Bangalore on 08/04/2022

II Year Mech students visited HMT Machine Tools Ltd, Bangalore on 09/04/2022.

#### **Students Industrial Visit (2022-2023)**

- IV Year mechanical Engineering students have visited the Sea Blue Shipyard , Cochin , Kerala on 30.09.2022. Dr. B.Balavairavan and Dr.M.Prithiviraj accompanied with the students.
- I Year mechanical Engineering students have visited the Ramco cements. Virudhunagar on 23.06.2023. Dr.M.Murugananthan and Mr.S.Muthunatarajan accompanied with the students.
- Student members of SAE have visited the Ramco cements, Virudhunagar on 12.05.2023 Mr.N.R.Madhan AP/Mech SAE in charge accompanied with the students.
- The Professional Elective Jigs and Fixtures chosen IV year students have visited the Sun pressing Private Ltd., Madurai on 01.04.2023. Mr.N.R.Madhan and Dr.S.Thangakasirajan accompanied with the students.











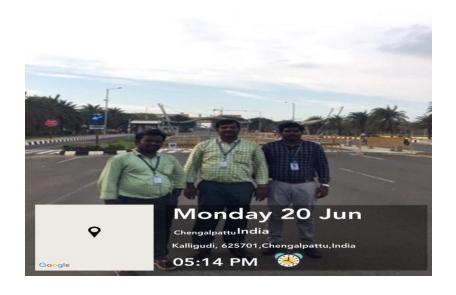




#### **Faculty Industrial Visit (2021-22)**

- Dr.S.S.Saravankumar and Dr.S.Thanga Kasi Rajan visited alfa TKG Integrated Solutions India Private Limited, Chennai to sign MoU for placement, internship and industrial visit.
- Mr.N.R.Madhan visited Brakes India Private Limited,
   Polambakkam Plant to study the Implementation of TPM and Measure of Lean Manufacturing on 15.02.2022.
- Dr.S.Thanaga Kasi Rajan and Dr. B.Balavairavan visited Indira Gandhi Centre for Atomic Research (IGCAR) on 20.06.2022
- Dr.M.Prithiviraj visited Tvs Srichakra, Madurai for Industry Institute Collaboration.
- Mr.A.Sankara Narayana Murthy visited CODISSIA Trade Frair on 03.06.2022 to 04.06.2022 to identify Internship and Placement Opportunities.
- Dr.B.Prabhu visited Sri Hari Tex Industries, Madurai on 16.07.2022 to seek MoU Opportunities.





### **Faculty Industrial Visit (2022-23)**

Dr.M.Prithiviraj , Dr.K.Kannan, Mr.R.Raj Prabhu, visited TCS Srichakra limited on 20.10.2022 to study about the design of spacers in tubeless Tyres.

#### **Outcomes:**

They have got a patent in the spacer design of tubeless tires.

R&D BLOCK Chadurmadangan, Tamil Nadu, India (6XW+8HG, Chadurmadangan, Tamil Nadu 625122, India Long 78.246267° 20/10/22 02:56 PM GMT +05:30

Dr.B.Prabhu , Mr.S. Devaraj, Mr.B.K.Parrthipan, Mr.S.Muthunatarajan have visited Amway manufacturing

#### **Outcomes:**

plant on 07.11.1022.

Inplant training , MoU and placement opportunities to our students



Dr.B.Balavairavan,

Mr. P.Senthamaraikannan have visited Elcon Unit 3, Nilakottai on 27.06.2023.

#### **Outcomes:**

Internship, Inplant training, MoU and placement opportunities to our students. Identified projects in tool design, process planning, material flow control etc.



### **Faculty Industrial Visit (2022-2023)**

Dr.P.Narayanasamy, Mr.A.Sankara Narayana Murthy, Mr. D. Palanikumar have visited AE Industries Madurai , RR industries, Madurai and Vairavan enterprises, Madurai on 06.06.2023

#### **Outcomes**

internship, Inplant training, MoU and placement opportunities to our students. They have identified projects in tool design, process planning, material flow control etc.

