

# **S.A. ENGINEERING COLLEGE**

**(An Autonomous Institution , Affiliated to Anna University , Chennai)**

**Accredited by NAAC with 'A' Grade & ISO 9001:2015 Certified Institution**

**Approved by AICTE and Affiliated to Anna University, Chennai**



## **DYNAMIX'21**

## **EVEN SEMESTER**

*Newsletter 2020 - 2021*

## **DEPARTMENT OF**

## **MECHANICAL ENGINEERING**

## ABOUT THE DEPARTMENT



The department of Mechanical Engineering was established in the year 1998 in our college; it was affiliated to Anna University in 2001 and got permanent affiliation in 2013. It has been accredited by the National Board of Accreditation (NBA) from the year 2009. The post graduate programme, M.E. CAD/CAM was established in the year 2014 with an intake of 18 students. The department has been recognized as a research center by Anna University in the year 2012. The students are given hands on training about the theoretical concepts they are learning through various labs such as Manufacturing Technology Lab, Fluid Mechanics Lab, I C Engines lab, Heat Transfer Lab, CAD CAM LAB, Dynamics Lab, Mechatronics Lab.

The department has eminent faculties to guide the students in learning the various concepts of mechanical engineering. The faculty are well versed in research and publish papers periodically in reputed journals like WOS, SCI, SCOPUS. The faculty of mechanical engineering also have patent grants for their research and innovation projects in emerging fields of mechanical engineering. In addition to this, various funded projects are also being carried out with the grants received from AICTE, DST, TNSCST etc. The students are also encouraged to participate in various events such as design and fabrication of parallel hybrid electric race car, Solar vehicle championship conduct by ISIE every year.



# Vision

- **Academic Excellence:** To strive and attain a premier position in providing Quality Higher Education integrated with Research and Scholarly activities in the emerging areas and diversify in the emerging fields of Mechanical Engineering, thus serving to the needs of the society.
- 
- **Inventory of Skill Development:** To make our graduates to be adept in handling real life complex problems through Modern Tools and Techniques and while doing so making them to imbibe ethical practices and confident enough to assume leadership position.

# Mission

- **Conducive Environment:** To provide conducive atmosphere for effective teaching-learning by disseminating the knowledge in breadth and depth.
- **Centre of Excellence:** To practice modern tools and techniques so as to make our department a Centre of Excellence and sustainable in their growth.
- **Critical and Clinical Thinking:** To transform our students to be open minded with critical thinking in their approach to real-life problem-solving situations keeping in mind the Professional, Ethical, Environmental and Societal aspects
- **Active Involvement in R&D:** To provide a perfect platform for our faculty and students to undertake research activities.
- **Collaboration and Integration:** To collaborate with the industries, premier Institutions in taking up consultancy projects, internship so that our students will acquire experience hands-on in current industrial practices and ethical standards.
- **Implementation of Students Quality Circle:** To make our students imbibe leadership qualities by fostering in them a good amount of soft skills, personality traits and by way of active participation in extra-curricular and co-curricular activities.



## PROGRAMME EDUCATIONAL OBJECTIVES

- 1. **Technical and Professional Excellence:** Graduates will demonstrate technical competence in solving real life Mechanical Engineering problems using Engineering principles and modern tools while engaging in continuous professional development to stay updated of the industry trends.
- 2. **Leadership and Communication:** Graduates will exhibit strong leadership qualities enabling them to manage projects, work in inter disciplinary teams and communicate complex technical information using contemporary tools in a global environment.
- 3. **Ethical and Social Responsibility:** Graduates will demonstrate a commitment to professional ethics, understand the broader impacts of engineering solutions on society and the environment and apply their engineering skills to address global challenges in sustainability, health, and safety
- 4. **Lifelong Learning:** Graduates will successfully establish themselves in professional engineering roles in various industries by engaging in lifelong learning or by participation in professional organizations to continuously improve their knowledge and skills.




On 06.06.20, The Department of Mechanical Engineering has conducted a Webinar on Post Covid-19: Challenges and job opportunities for Engineering Graduates, Resource Person - Mr.Suresh Raj, GV Project design Engineer Perception Non contact Metrology Solutions. For II,III & IV Year Students



On 20.06.20, The Department of Mechanical Engineering has conducted a Webinar on " Digital Transformation Technologies in Manufacturing"  
 , Resource Person -  
 Dr.G.S.Kumarasamy, Principal, SA Engineering College






**S.A. ENGINEERING COLLEGE**  
(An Autonomous Institution Affiliated to Anna University, Chennai)  
Accredited by NBA, NAAC 'A' Grade & ISO 9001:2015 Certified Institution  
Poonamallee-Avadi Road, Veeraraghavapuram, Thiruverkadu, Chennai – 600 077.


Department of Mechanical Engineering  
Organizes

**WEBINAR ON  
APPLICATIONS OF  
MECHANISMS IN ROBOTICS**



**01<sup>st</sup> Aug 2020**  
03.00 to 04.00 PM

**Mr. Rajashekhar V S**  
Project Assistant,  
Indian Institute of Science – Bangalore

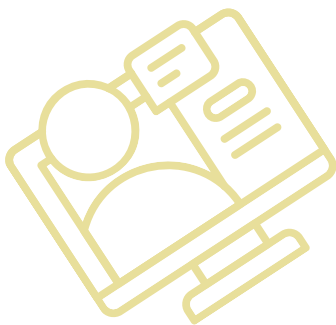


Organized by:  
**Dr. N. Pragadish** HoD Mech, Convener  
**Mr. C. Dhanesh** Assoc. Professor, Coordinator

For Registration, Visit: [bit.ly/mechrobo](https://bit.ly/mechrobo)



On 01.07.20, The Department of Mechanical Engineering has conducted a Webinar on "Applications of Mechanisms in Robotics" Resource Person - Mr.RajasekharV S, Project Assistant Indian institute of Science Bangalore



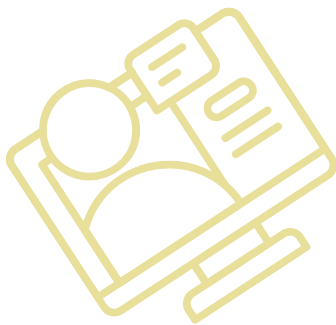
On 03.07.20, The Department of Mechanical Engineering has conducted a Webinar on "Enriched Engineer" Resource Person - Mr.G.Manikandan Chief Officer RighBrain India



Estd : 1998-1999  
 22 YEARS OF EXCELLENCE  
**S.A. ENGINEERING COLLEGE**  
 Accredited by NBA & NAAC with A Grade ISO 9001:2015 Certified Institution  
 Poonamallee - Avadi Main Road, Thiruvorikudi, Chennai - 600 077  
 (AN AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY)  
 18 July, 2020  
 From 12 PM to 1 PM  
 Who Can Participate?  
 Final Year Students  
 Google Meet  
[meet.google.com/szm-abye-tyx](https://meet.google.com/szm-abye-tyx)  
 DEPARTMENT OF IT, EEE, CIVIL, MECH AND MCA organizes  
 WEBINAR TOPIC:  
**"OOPS CONCEPT"**  
 Expert talk  
**Ms.M.J.Aasha**  
 Cloud Engineer  
 Avasoft

**TNEA**  
 Counselling Code : 1114  
 Phone : 044-2680 1999 / 2680 1499  
 Fax : 044-2680 1899  
 Website : www.saec.ac.in  
 E-Mail : saec@saec.ac.in

On 18.07.20, The Department of Mechanical Engineering has conducted a Webinar on "Oops Concept" Resource Person - Ms.M.J.Asha Cloud Engineer Avasoft



Estd : 1998-1999  
 22 YEARS OF EXCELLENCE  
**S.A. ENGINEERING COLLEGE**  
 Accredited by NBA & NAAC with A Grade ISO 9001:2015 Certified Institution  
 Poonamallee - Avadi Main Road, Thiruvorikudi, Chennai - 600 077  
 (AN AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY)  
 25 July, 2020  
 From 10.00 am to 11.00 am  
 YouTube Live  
 Registration Link:  
[rb.gy/bzgz8l](https://rb.gy/bzgz8l)  
 DEPARTMENT OF MECHANICAL ENGINEERING organizes  
 WEBINAR ON CAE ADVANCEMENT IN PRODUCT DESIGN  
**Mr.E.Kalamegam**  
 OSS-Sr.M&S Engineer  
 Cameron, A Schlumberger company  
 Coimbatore

**TNEA**  
 Counselling Code : 1114  
 Phone : 044-2680 1999 / 2680 1499  
 Fax : 044-2680 1899  
 Website : www.saec.ac.in  
 E-Mail : saec@saec.ac.in

On 25.07.20, The Department of Mechanical Engineering has conducted a Webinar on "CAE Advancement in Product Design" Resource Person - Mr.E.Kalamegam OSS – Sr.M&S Engineer Cameron A schlumberger Company

# Work Shop



**S.A. ENGINEERING COLLEGE**  
(An Autonomous Institution affiliated to Anna University, Chennai)  
Accredited by NBA, NAAC 'A' Grade & ISO 9001:2015 Certified Institution  
Poonamallee-Avadi Road, Veenaraghavapuram, Thiruverkadu, Chennai - 600 077.

Department of Mechanical Engineering and  
Centre for Smart & Advanced Manufacturing (CSAM)  
organizes

**1 Day Online Workshop on  
Challenges & Opportunities in FSW of Mg Alloys**

13<sup>th</sup> June 2020  
10.00 - 11.00 AM

**RESOURCE PERSON**



**Dr. P. Sevel,**  
Professor,  
Dept. of Mechanical Engineering  
S.A. Engineering College.

**TO REGISTER VISIT:**



[bit.ly/mgalloy](http://bit.ly/mgalloy)

**Free Registration ! Limited Registrations !!  
E-certificates for all Participants !!!**

[For more information](#)

**Dr. N. Pragadish,** HoD/Mech, Workshop Chair  
**Dr. P. Sevel,** Professor/Mech, Convenor  
**Dr. S. Mahadevan,** Professor/Mech, Convenor

Email: [workshopmech@saec.ac.in](mailto:workshopmech@saec.ac.in) | Phone: +91-91762-78763

- On 13.07.20, Workshop on " Challenges & opportunities on FSW of Mg Alloys" Resource Person Dr.P.Sevel, Professor, Mechanical department, SAEC.

- On 18.07.20, Workshop on "Build Your own 3D Printer" Resource Person Dr.P.Sevel, Professor, Mechanical department, SAEC.

Estd : 1998-1999

**22 YEARS OF EXCELLENCE**




**S.A. ENGINEERING COLLEGE**  
Accredited by NBA & NAAC with 'A' Grade ISO 9001:2015 Certified Institution  
Poonamallee - Avadi Main Road, Thiruverkadu, Chennai - 600 077.  
(AN AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY)



**Who Can Participate?  
All Higher Secondary Students**

**FREE ONLINE WORKSHOP  
ON  
"BUILD YOUR OWN  
3D PRINTER"**

Organized by  
**DEPARTMENT OF  
MECHANICAL ENGINEERING**

**Registration Free!**

**18  
JULY  
2020  
10-11 AM**

Registration Link:  
[bit.ly/build3dp](http://bit.ly/build3dp)

**TNEA**  
Counselling Code : 1114

Phone : 044-2680 1999 / 2680 1499  
Fax : 044-2680 1899  
Website : [www.saec.ac.in](http://www.saec.ac.in)  
E-Mail : [saec@saec.ac.in](mailto:saec@saec.ac.in)

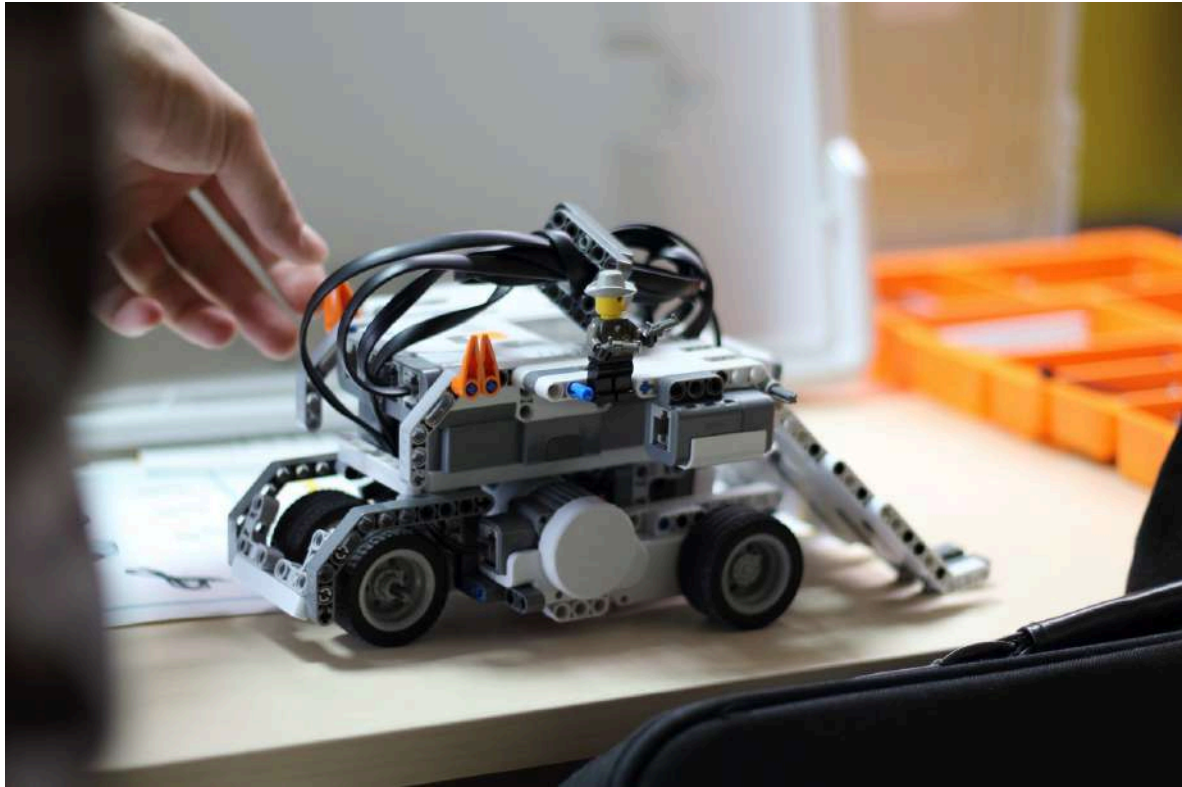


**Resource Person**



**Dr. P. Sevel**  
Professor,  
Dept. of Mech. Engg.,  
SAEC.

# *VALUE ADDED COURSE*



Value Added course has been conducted for 2nd and 3rd year students on the topic **Robotics** on 3 days in September month

# **FDP/SEMINAR/WORKSHOP/ SYMPOSIUM ORGANIZED**

Sl. No	Nature of Program (Seminar, workshop, conferences, CEP, FDP, QIP)	Name of the Program	Details of the Guest(s)	Details of the Participants	Date & Duration	Venue
1)	Online Workshop	“Challenges and Opportunities in FSW of Mg Alloys”	Dr.P.Sevvel, Professor, Dept. of Mechanical Engineering, SAEC	1245 (Registered)	13-06-2020	Online
2)	Webinar	Digital Transformation Technologies in Manufacturing	Dr.G.S.Kumarasamy Principal, SAEC	434 (Registered)	20-06-2020	Online
3)	Online Workshop	1 Day Online Workshop on “Build your own 3D - Printer”	Dr.P.Sevvel, Professor, Dept. of Mechanical Engineering, SAEC	25	18-07-2020	Online
4)	Webinar	CAE Advancement in Product Design	Mr.E.Kalamegam OSS-Sr.M&S Engineer, Cameron, A.Schlumberger, Coimbatore.	475	25-07-2020	Online
5)	Webinar	Applications of Mechanisms in Robots	Mr.Rajasekhar VS Project Asst., IISc-Bangalore.	537	1-08-2020	Online

**FACULTY ATTENDED****FDP / SEMINAR / WORKSHOP**

Sl. No	NAME OF THE FACULTY	SEMINAR/WS / CONFERENCE/ CEP/FDP/QIP ATTENDED	NAME OF THE PROGRAMME	VENUE	DATE / DURATION
1)	Mr.D.Prakash	Online FDP	Mechatronics	Chennai Institute of Technology	06.07.2020 to 10.07.2020
2)	Mr.A.Sivarama krishnan	Online webinar	Biomass Gasification facts & Future Research	Francis Xavier Engineering College	09.07.2020
3)	Mr.S.R.Venkataraman	Online workshop	NAAC-Assessment & Accreditation	VB Academy	12.07.2020
4)	Mr.C.Dhanesh	Workshop	Advances in Manufacturing Processes	Bharat Institute of Engineering & Technology	13.07.2020 to 17.07.2020
5)	Dr.Vishvanathperumal	Online STTP	Smart Manufacturing-Opportunities & Challenges	St. Joseph's College of Engineering	13.07.2020 to 18.07.2020
6)	Mr.K.Parthasarathy	Webinar series	Industrial Aspects of Thermal Engineering	Lokmanya Tilak college of engineering	13.07.2020 to 17.07.2020

7)	Mr.D.Prakash	Webinar series	Industrial Aspects of Thermal Engineering	Lokmanya Tilak college of engineering	13.07 .2020 to 17.07 .2020
8)	Mr.C.Dhanesh	Online Webinar	Recent Advances in Nano-Technology	Vidyavardhaka College of Engineering	15.07 .2020
9)	Mr.C.Dhanesh	Online Webinar	Brake Pad Elastic Properties and NVH performance	SRM Institute of Science & Technology	20.07 .2020
10)	Mr.S.R.Venkataraman	FDP	Research opportunities in advanced welding processes	Hindustan College of Engineering & Technology	22.07 .2020 to 26.07 .2020
11)	Mr.C.Dhanesh	Online Webinar	Give Wings to your stress	Balaji Institute of Technology & Science	23.07 .2020
12)	Mr.C.Dhanesh	Online Webinar	Disruptive Technologies for Future Transportation	Sri Venkateswara College of Engineering	25.07 .2020
13)	Mr.K.N.Ramu	Online webinar	CAE advancements in product Design	S.A.Engineering College	25.07 .2020
14)	Mr.A.Sivarama krishnan	Online webinar	CAE advancements in product Design	S.A.Engineering College	25.07 .2020

15)	Mr.V.Sathishkumar	Online webinar	CAE advancements in product Design	S.A.Engineering College	25.07.2020
16)	Mr.K.N.Ramu	Online webinar	Design of Robots	S.A.Engineering College	01.08.2020
17)	Mr.V.Sathishkumar	Online webinar	Design of Robots	S.A.Engineering College	01.08.2020
18)	Mr.D.Prakash	Online webinar	Design of Robots	S.A.Engineering College	01.08.2020
19)	Mr.S.R.Venkataraman	Virtual workshop	Aspects of outcome based education and use of software	Sri Venkateswara College of Engineering	06.08.2020 to 08.08.2020
20)	Mr.L.Anantha Raman	Online workshop	The Art of Technical Writing	Jyothi Engineering College	07.08.2020 to 08.08.2020
21)	Mr.C.Dhanesh	Online International Conference	Smart Materials and Emerging Technologies for Industry 4.0	Sri Venkateswara College of Engineering	16.10.2020 to 17.10.2020
22)	Dr.N.Pragadish	Online FDP	Additive Manufacturing	Noida Institute of Engineering & Technology	09.11.2020 to 13.11.2020

23)	Mr.R.Jeeva	Online FDP	3D printing & Design	B S Abdur Rahman Crescent Institute of Science & Technology	07.12.2020 to 11.12.2020
24)	Dr.S.Baskar	Online STTP	Optimization with MAT lab	NITTTR, Kolkatta	14.12.2020 to 18.12.2020
25)	Dr.P.Sevvel	Online STTP	Manufacturing Applications of Micromachining with Emphasis on make in India	R.M.K College of Engineering & Technology	14.12.2020 to 19.12.2020
26)	Mr.R.Jeeva	Workshop	Robotics in rural & AI in Industry	Chennai Institute of Technology	23.12.2020
27)	Mr.R.Jeeva	Online FDP	FRP composites	L D College of Engineering	18.01.2021 to 22.01.2021

## PROJECT PROPOSALS

## SUBMITTED

Sl. No	Name of the Co-ordinator	Name of the Proposal	Funding Agency Name	Funding Amount	Date of Proposal Sending
1)	Dr. S.Mahadevan (PI) Dr. P.Sevvel (Co-PI)	2 Days National workshop on "Latest Developments in 3D Printing Technology related to Armor Fighting Vehicle (AFV) components"	Directorate of Extramural Research & Intellectual Property Rights, DRDO, New Delhi	Rs. 95,000	14-08-2020
2)	Dr.P.Sevvel	Smart & cheapest Navigational Aid for blind people for smooth travel to unfamiliar destination	NASSCOM - DST - MSJE	Rs. 5,75,000	16-08-2020
3)	Dr. P.Sevvel (PI) and Mr.D.Srinivasan (Co-PI)	An Innovative IOT based gas pressure measurement using Capsule-Muck Securing Apparatus	DST Mines Metal-IV Section, Room no. 115-A, F wing, Shastri Bhawan, Dr. Rajendra Prasad Road, New Delhi.	Rs. 43,04,447.65	21-09 -2020
4)	Dr.P.Sevvel (PI) Dr.S.Mahadevan (Co-PI)	Development of GIS – WPN based Intelligent Drone for Smart and Precision Farming	DST – Device Development Programme	Rs. 42,27,256	13-11-2020
5)	Dr S Baskar	Digital Tools in Modern Teaching	AICTE-ISTE Orientation/Refresher programs (AQIS 2021-22)	Rs.3,00,000	10-12-2020

S.N O	NAME OF THE RESEARCH SCHOLAR WITH DESIGNATION	RESEARC AREA & TOPIC	RESEARC H GUIDE (Name Design., Address)	NAME OF THE UNIVERSITY IN WHICH Ph.d IS REGISTERED	DATE OF REGISTR ATION.	STATUS OF RESEARCH WORK	DURATI ON(fro m registra tion to till date)
1.	Mr. D. Srinivasan Associate Professor	Friction Stir welding of aluminium alloys	Dr. P. Sevvel Professor, SAEC	AUC – Reg. No 16152997314	AUC 04/07/20 16	Confirmati on Completed	4 years 6 months
2.	Mr. S. Dhanasekar Assistant Professor	Effect of Nano particles on the dynamic characteristics of polymer matrix composites	Dr. S. Baskar Professor, SAEC	AUC-Reg. No 17142991127	AUC 20/12/20 16	Course work completed	4 years
3.	Mr. C. Krishnamurthy Assistant Professor	Dynamic characteristics of polymer matrix composite using Natural fibers	Dr.V.Chan dran, Asso. Professor, VEC	AUC-Reg .No 17142991126	AUC 20/12/20 16	Confirmati on completed	4 years
4.	Mr. Suresh K Assistant Professor	Mechatronics based design and development of magneto rheological abrasive flow machining for Nano surface finishing	Dr. Karuppasa my K Professor, AU- Tirunelveli	AUC-Reg.No 1614289111	AUC 30/12/20 15	Confirmati on completed	5 years
5.	Mr. Dhanesh. C Assistant Professor	Exhaust Heat Recovery in IC Engines	Dr. J. Venkatesa n Professor, SVCE	AUC-Reg. No 1325299830	AUC 18/6/201 3	Confirmati on completed	7 years 6 months

6.	Mr. L. Anantha Raman Assistant Professor	Optimization of swirl ratio on HSDI Diesel Engine for better performance and lower exhaust emissions.	Dr. S. Rajakumar Associate Professor	AUC-Reg.No 1414289124	AUC 03/01/2014	Thesis Submitted	6 years
7.	Mr. S. Praveen Kumar Assistant Professor	Thermal management studies on stacking up of high energy density proton exchange membrane fuel cell	Dr. S. Baskar, Professor, SAEC	AUC :16132697299	July 2016	Confirmation Completed	4 year 6 months
8.	Mr. K. Parthasarathy Assistant professor	Tribological study of nano-biodegradabl grease	Dr. S. Baskar, Professor, SAEC	AUC – Reg.No 20132991165	19-12-2019	Course work started	1 Year

S.NO	NAME OF THE SUPERVISOR WITH DESIGNATION	NAME OF THE RESEARCH SCHOLAR WITH DESIGNATION WITH ADDRESS	RESEARCH AREA & TOPIC	NAME OF THE UNIVERSITY IN WHICH Ph.D. IS REGISTERED	DATE OF REGISTRATION.	STATUS OF RESEARCH WORK	DURATION (from registration to till date)
1.	Dr.P.Sevvel	Mr. Satheesh C Asst.Professor	Analysis of parameters for Deep hole drilling	AUC – Reg. No 1714299 7194	28/06/2017	Synopsis submitted	3 Year 6 months
2.	Dr.P.Sevvel	Dhanesh Babu S.d Asst.Professor	Generation of Mathematical Model for Peak Temperature distribution during FSW process	1612219 103	January 2016	Synopsis submitted	4 years
3.	Dr.P.Sevvel	Giridharan K Asst.Professor	Experimental Study on Mechanical Properties of Friction Stir Welded Dissimilar Joints of Aluminium Alloys AA8011-AA6082	1613299 209	January 2016	Confirmation completed	4 years
4.	Dr.P.Sevvel	Yokesh Kumar B Asst.Professor	Influence of tool rotational speed on microstructural characteristics of dissimilar Mg alloys during friction stir welding	1614299 213	January 2016	Confirmation completed	4 years
5.	Dr.P.Sevvel	Lokesh Kumar P J Asst.Professor	Fabrication of Nano Composites for Automobile Applications	1814299 7208	July 2018	Course work	2 year 6 months

6.	Dr.P.Sevvel	John Solomon I Asst.Professor	effect of different layer thickness and pulse frequency on fabrication of thin walled az31 magnesium alloy using wire arc additive manufacturing	1914299 7217	July 2019	Course work	1 year 6 months
7.	Dr.P.Sevvel	Kandukuri Anilbasha Asst.Professor	Joining of magnesium alloy with low carbon steel by cold metal transfer (cmt) arc welding process	1919299 7226	July 2019	Course work	1 year 6 months
8.	Dr.P.Sevvel	Gunasekaran J Assistant Professor	Selective Laser Melting	2015299 1150	January 2020	Course work	1 year
9.	Dr. S. Baskar	Mr.N. Nagabhooshanam Asst.Professor	A microstructure analysis of aluminium alloys using Aluminium gravity die casting process	AUC - Reg.No 1714299 1113	AUC 28/12/2016	Course work Study	4 years

## DETAILS OF PUBLICATIONS (FROM THE MONTH OF JUNE TO NOV)

S. No	Title of the paper	Authors of the Paper	Complete Affiliation of the Authors	Specify Nat.Cof/ Int.Conf./Nat.Jour./Int. Jour.	Name of the Journal/Conference with vol. no., issue no., page no. and impact factor.	DOI & Refereed Indexing of the Conf./Journal with Annexure Details	Date of publication/ presentation
1	Effect of Nanosilica and Crosslinking System on the Mechanical Properties and Swelling Resistance of EPDM/SBR Nanocomposites with and without TESPT	Dr. S. Vishvanathperumal	S.A.Engineering College	International Journal	Silicon (2020)	SCI <a href="https://doi.org/10.1007/s12633-020-00792-9">https://doi.org/10.1007/s12633-020-00792-9</a>	23 Oct 2020
2	Evaluation of Crosslink Density Using Material Constants of Ethylene-Propylene-Diene Rubber/Styrene-Butadiene Rubber with Different Nanoclay Loading: FE-Simulation and Experimental	Dr. S. Vishvanathperumal	S.A. Engineering College	National Journal	Advanced Science, Engineering and Medicine, Vol-12, 1-11	Google scholar doi:10.1166/asem.2020.2567	June 2020
3	Evaluation of tribological characteristics of nano zirconia dispersed biodegradable canola oil methyl ester metalworking fluid	Dr S Baskar	S.A. Engineering College	International Journal	Tribology International Vol 151, Nov 2020	SCI <a href="https://doi.org/10.1016/j.triboint.2020.106510">https://doi.org/10.1016/j.triboint.2020.106510</a>	11 June 2020
4	Fuzzy logic model of journal bearing lubricated with nano lubricant	Dr S Baskar K.Parthasarathy G.Prabakaran	S.A. Engineering College	International Journal	International Journal of Vehicle Structures and Systems	Scopus	29 June 2020

5	Analysis of Bronze Hybrid composite for Spark Ignition Engine Piston	C.Dhanesh	S.A. Engineering College	International Journal	FME Transactions (2020) 48, 962-967	WoS doi:10.5937/fme2004962D	29 Sep 2020
6	Optimization of electroless bath process parameter for improving the tribology behavior of Ni-P/CaBr <sub>2</sub> composite coating against the hardened EN-31 steel	Dr.Jagatheshwaran M S	S.A. Engineering College	International Journal	Surface Topography: Metrology and Properties Vol-8 Issue 2 Pg-	SCI-E <a href="https://doi.org/10.1088/2051-672X/ab9f55">https://doi.org/10.1088/2051-672X/ab9f55</a>	30 June 2020
7	Peak Temperature Correlation and Temperature Distribution during Joining of AZ80A Mg Alloy by FSW – A Numerical and Experimental Investigation	Dr. P. Sevvil	S.A. Engineering College	International Journal	Strojniški vestnik Journal of Mechanical Engineering 66(2020)6, 395-407	SCI DOI:10.5545/sv-jme.2020.6566	16 June 2020
8	Simulation of heat transfer and analysis of impact of tool pin geometry and tool speed during friction stir welding of AZ80A Mg alloy plates	Dr. P. Sevvil	S.A. Engineering College	International Journal	Journal of Mechanical Science and Technology volume 34, pages4239-4250(2020)	SCI <a href="https://doi.org/10.1007/s12206-020-0916-7">https://doi.org/10.1007/s12206-020-0916-7</a>	8 Oct 2020
9	Acoustic Emission Based Deep Learning Technique to Predict Adhesive Bond Strength of Laser Processed CFRP Composites	Dr. P. Sevvil	S.A. Engineering College	International Journal	FME Transactions (2020) 48, 611-619	WoS doi: 10.5937/fme2003611S	5 June 2020

10	Metallic materials fabrication by selective laser melting: A review	Dr. P. Sevvel	S.A. Engineering College	International Journal	Materials Today: Proceedings	Scopus <a href="https://doi.org/10.1016/j.matpr.2020.05.16">https://doi.org/10.1016/j.matpr.2020.05.16</a>	3 June 2020
11	A review on the various processing parameters in FDM	Dr. P. Sevvel	S.A. Engineering College	International Journal	Materials Today Proceedings	Scopus <a href="https://doi.org/10.1016/j.matpr.2020.05.484">https://doi.org/10.1016/j.matpr.2020.05.484</a>	13 June 2020
12	Investigation and evaluation of mechanical Behaviour of Al-TiC alloy	Dr. P. Sevvel	S.A. Engineering College	International Journal	Materials Today Proceedings	Scopus <a href="https://doi.org/10.1016/j.matpr.2020.06.372">https://doi.org/10.1016/j.matpr.2020.06.372</a>	16 July 2020
13	Investigation and optimization of laser welding process parameters for AA7068 aluminium alloy butt joint	Dr. P. Sevvel	S.A. Engineering College	International Journal	Materials Today Proceedings	Scopus <a href="https://doi.org/10.1016/j.matpr.2020.07.196">https://doi.org/10.1016/j.matpr.2020.07.196</a>	11 August 2020
14	Experimental studies on the combustion derived Zinc Oxide nanoparticles as fuel additives to evaluate the emission characteristics of a diesel engine	C.Dhanesh	S.A. Engineering College	International Conference	International Conference on Smart Materials & Emerging Technologies for Industry 4.0		17 Oct 2020

15	Calcium hexaboride reinforced Nickel-Phosphorus composite coating for increasing the wear properties of low carbon steel	Dr.Jagath eeshwaran M S	S.A. Engineering College	International Journal	Materials Today: Proceedings	Scopus <a href="https://doi.org/10.1016/j.matpr.2020.07.034">https://doi.org/10.1016/j.matpr.2020.07.034</a>	7 July 2020
16.	Polyolester Based Lubricant from Waste Feedstock for Sustainable Environment: A Tribological Investigation	Dr. S. Baskar	S.A. Engineering College	International Journal	IOP Conference Series: Materials Science and Engineering 954(1), 2020	Scopus	Oct 2020

## DETAILS OF PATENTS, AWARDS & INVITATION RECEIVED BY FACULTY

S. NO	NAME OF THE FACULTY	AWARDS /INVITATION RECEIVED			DETAILS OF APPLICATION OF PATENTS		
		DATE	NATURE OF AWARD/INVITATION	GRANTING AUTHORITY /JOURNAL/CONFERENCE	DATE	APPLICANT NAME,DEPT	TOPIC WITH IPR APPLICATION NUMBER
1	Dr.P.Sevvel	12-10-2020	BEST RESEARCHER AWARD for distinct contribution in the field of Materials Science	6th Annual Millennium Impact Award 2020 organized by Shri Paramhans Education and Research Foundation Trust, New Delhi	21/08/2020	R.Jeeva S.A . Engg College	Sensor Based Artificial limb for Physically Challenged People Appn. No-202041034045 A Status: Published

## DETAILS OF PATENTS, AWARDS RECEIVED BY STUDENTS

S. No	NAME OF THE STUDENT	AWARDS /INVITATION RECEIVED		
		DATE	NATURE OF AWARD/ INVITATION	GRANTING AUTHORITY /JOURNAL/CONFERENCE
1.	Oruganty nitya Phani santosh	June 23, 2020	Certificate of Completion for online course in “Introduction to Data Science”	cognitiveclass.ai Powered by IBM Developer Skills Network.
2.	Oruganty nitya Phani santosh	June 26, 2020	Certificate of Completion for online course in “Data Science Methodology”	cognitiveclass.ai Powered by IBM Developer Skills Network
3.	Oruganty nitya Phani santosh	June 22, 2020	Certificate of Completion for online course in “What is Data Science?”	an online non-credit course authorized by IBM and offered through Coursera
4.	Oruganty nitya Phani santosh	July 24, 2020	Certificate of Completion for online course in “Python for Data Science and AI”	an online non-credit course authorized by IBM and offered through Coursera
5.	Oruganty nitya Phani santosh	July 31, 2020	Certificate of Completion for online course in “Machine Learning with Python”	an online non-credit course authorized by IBM and offered through Coursera
6.	Mr.P K Goghula Sundhar	Aug 1, 2020	Certificate of Participation for a webinar on “Design of Robots”	SAEC

7.	Kargil Jove Anirudh R R	June 6, 2020	Certificate of Participation for an online lecture on “GATE: The road ahead”	RMKCET
8.	Kargil Jove Anirudh R R	June 3 to 5, 2020	Certificate of Merit for the completion of a technical e-quiz on “Industrial Internet of Things”	Panimalar Institute of Technology
9.	Vishal VD	June 5 2020	Certificate of Participation for a webinar on the topic “BLOCK CHAIN AN OPPORTUNITY FOR ENERGY PROSUMERS”	Easwari Engineering College
10.	Mr.Yashwa nth Kumar S	Aug 1, 2020	Certificate of Participation for a webinar on “Design of Robots”	SAEC
11.	Mr.Yashwa nth Kumar S	June 6, 2020	Certificate of Participation for an online lecture on “GATE: The road ahead”	RMKCET
12.	HariRajan R	July 19, 2020	Certificate of Participation for a webinar on “CAR Air- Conditioning”	Girijabai SAIL Institute Of Technology Karwar, Karnataka

## DETAILS OF SEMINAR, WORKSHOP, CONFERENCES, CEP, FDP, QIP PROGRAMS ORGANIZED

S, NO	NATURE OF PROGRAM (SEMINAR, WORKSHOP, CONFERENCES, CEP, FDP, QIP)	NAME OF THE PROGRAM	DETAILS OF THE GUEST(S)	DETAILS OF THE PARTICIPANTS	DATE & DURATION	VENUE	SPONSORS IF ANY
1	Online Workshop	Challenges and Opportunities in FSW of Mg Alloys”	Dr.P.Sevvel, Professor, Dept. of Mechanical Engineering, SAEC	1245 (Registered)	13-06-2020	Online	
2.	Webinar	Digital Transformation Technologies in Manufacturing	Dr.G.S.Kumarasamy Principal, SAEC	434 (Registered)	20-06-2020	Online	Institutions innovation council (IIC)
3.	Online Workshop	1 Day Online Workshop on “Build your own 3D-Printer”	Dr.P.Sevvel, Professor, Dept. of Mechanical Engineering, SAEC	25	18-07-2020	Online	
4.	Webinar	CAE Advancement in Product Design	Mr.E.Kalamegam OSS-Sr.M&S Engineer,Cameron, A.Schlumberger, Coimbatore.	475	25-07-2020	Online	
5.	Webinar	Applications of Mechanisms in Robots	Mr.Rajasekhar VS Project Asst., IISc-Bangalore.	537	1-08-2020	Online	

**DETAILS OF GRANTS (RECEIVED /APPLIED) FOR THE  
MONTH OF JUNE to DEC 2020**

S.NO	TITLE OF RESEARCH PROPOSAL	PI / RESEARCH COORDINATOR(S)	FUNDING ORGANIZATION	FUND REQUESTED	PROPOSAL SENT ON	STATUS OF PROPOSAL
1.	GSM – GPS based Intelligent Safety & Navigational Aid for Women Security and smooth travel to unfamiliar destination	Dr.P.Sevvel (PI) Dr.S.Mahdevan (CO-PI)	S & T for Women, SEED Division, Department of Science & Technology, Technology Bhavan, New Delhi-110016	Rs.29,89,605	29 – 07 – 2019	Granted
2.	An Innovative IOT based gas pressure measurement using Capsule-Muck Securing Apparatus	Dr. P.Sevvel (PI) and Mr.D.Srinivasan (Co-PI)	DST Mines Metal-IV Section, Room no. 115-A, F wing, Shastri Bhawan, Dr. Rajendra Prasad Road, New Delhi.	Rs.43,04,447.65	21 – 09 – 2020	File No: SNTMOM/155/2020 Under Scrutiny
3.	Development of GIS – WPN based Intelligent Drone for Smart and Precision Farming	Dr.P.Sevvel (PI) Dr.S.Mahdevan (Co-PI)	DST – Device Development Programme	Rs.42,27,256	13-11-2020	File No: TPN / 58807 & Under Processing
4.	Smart & cheapest Navigational Aid for blind people for smooth travel to unfamiliar destination	Dr.P.Sevvel	NASSCOM - DST - MSJE	Rs. 5,75,000	16-08-2020	Under Scrutiny

5.	Digital Tools in Modern Teaching	Dr S Baskar	AICTE-ISTE Orientation/Refresher programs (AQIS 2021-22)	Rs.3,00,000	10-12-2020	Under Scrutiny
6.	2 Days National workshop on “Latest Developments in 3D Printing Technology related to Armor Fighting Vehicle (AFV) components”	Dr. S.Mahadevan (PI) Dr. P.Sevvel (Co-PI)	Directorate of Extramural Research & Intellectual Property Rights, DRDO, New Delhi	Rs.95,000	14/08/2020	Under Scrutiny

### DETAILS OF FACULTY INTERACTION WITH OUTSIDE WORLD

S.NO	NAME OF THE FACULTY	DETAILS OF INTERACTION WITH OUTSIDE WORLD
1	Dr.M.S. Jagadheeshwaran	Session Chair, International Conference on Advanced materials Behaviour & Characterization, ICAMBC_2020



# **EDITORIAL BOARD**

## **EDITOR - IN - CHIEF**

**Dr.N PRAGADHISH**  
**HEAD OF THE DEPARTMENT**  
**MECHNICAL**

## **EDITOR**

**Mr. C. KRISHNAMURTHY**  
**ASSISANT PROFESSOR**  
**MECHANICAL**

## **ASSOCIATE EDITORS**

**Subash S, IV/MECH**  
**Abhilash P, III/MECH**

## **PUBLISHER**

**Mechanical Department,**  
**S.A. Engineering College**

