

Jan' 19 – Jun' 19



Autonomous | Affiliated to Anna University, Chennai  
Accredited by NAAC with 'A' Grade





Jan' 19 – Jun' 19

**Chief Editor:** Dr. C. Krishnaraj      **Editor:** Mr. V. V. Arun Sankar      **Co – Editor:** Mr. R. Krishnan

**Student Editorial Board:** Sathish.E (16M145), Vivekanandar.M (16M256), Dinesh Banu M (16M307)

#### **WARM WELCOME TO**

- Dr. K. Ananthakumar joined as Associate Professor on 24th June 2019.

#### **DEPARTMENT ACTIVITIES**

##### **Guest Lectures**

- Mr.V.Suresh, Director, S&S Technologies, delivered a guest lecture for a total of 70 participants on 03rd January 2019.

##### **Professional Societies / Chapter Events**

- Organized a Workshop as a part of Society of Automotive Engineers (SAE) Chapter Event titled "Skill development workshop on "Dismantling and assembling of Mahindra XUV 300 Petrol and Diesel Engine" from 11th to 12th January 2019.
- Organized a Workshop as a part of Society of Automotive Engineers (SAE) Chapter Event titled "Skill development workshop on Dismantling and Diagnosing Maruti Suzuki Petrol and Diesel Engine" on 02nd February 2019.
- Organized a Workshop as a part of Society of Automotive Engineers (SAE) Chapter Event titled "Hands on training on Automobiles by Ambal Auto" on 02nd February 2019.
- Organized a Workshop as a part of Society of Automotive Engineers (SAE) Chapter Event titled "Process Map for Design and development of Latest Products through value stream Mapping" on 04th February 2019.
- Organized a Workshop as a part of Society of Automotive Engineers (SAE) Chapter Event titled "One Week Short Term Training Program on Biofuels and its Application in IC Engines" from 10th to 14th June 2019.
- Organized a Guest Lecture as a part of Indian Society of Technical Education (ISTE) Chapter Event on "One days Hands on Training program on Scientific writing" on 21st June 2019.



##### **Miscellaneous Events**

- Organized a Guest Lecture on "Importance of Design in Engineering Field" on 25th January 2019.
- Organized a Guest Lecture on "Roles and Responsibilities of Industrial Engineers in Manufacturing Sector" on 25th January 2019.
- Organized a Guest Lecture on "Learning and Development - An Industry perspective" on 28th January 2019.
- Organized a Guest Lecture on "MATLAB for Mechanical Engineers" on 09th February 2019.
- Organized a Guest Lecture on "Electric Vehicles: Technologies and Challenges" on 15th February 2019.
- Organized a Workshop on "Recent trends in Pump Design" as a part of Dhruva 2K19 on 14th March 2019.

##### **NATIONAL / INTERNATIONAL LEVEL PROGRAMMES (Conducted)**

- Organized an Expo titled TNSCST Sponsored National Level Project Model Display - MEXHIBIT'19 on 15th March 2019.

##### **FACULTY ACHIEVEMENTS**

###### **Journal Publications**

###### **Dr. M. Mubarak, Assistant Professor**

- Published a paper titled "Bubble column photobioreactor for Chlorella pyrenoidosa cultivation and validating gas hold up and volumetric mass transfer coefficient", Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, Vol.10, No. 1080, 2019, International (WoS).

- Published a paper titled "Characterization of *Salvinia molesta* and *Chlorella pyrenoidosa* for biofuel applications using FTIR and TGA", Pakistan Journal of Biotechnology, Vol.12, No. 2, pp. 139 - 143, 2019, International (Referred).
- Published a paper titled "Performance, emission and combustion characteristics of low heat rejection diesel engine using waste cooking oil as fuel", International Journal of Ambient Energy, Vol.10, No. 1080, 2019, International (Scopus).
- Published a paper titled "Flocculation: An effective way to harvest microalgae for biodiesel production", Journal of Environmental Chemical Engineering, Vol.103221, No. 7, 2019, International (WoS).

**Mr. S. Sathish Kumar, Assistant Professor**

- Published a paper titled "Mechanical and Material properties of Areca/ Epoxy composite", International Journal of Innovative Technology and Exploring Engineering, Vol.9, No. 2, 2019, International (Scopus).

**Mr. R. Haridass, Assistant Professor**

- Published a paper titled "Analysing the Mechanical Behaviour of Natural Waste Fiber Reinforced Composite by Using Degradable Resin", International Journal of Engineering and Advanced Technology, Vol.8, No. 3S, pp. 788 - 791, 2019, International (Scopus).

**Paper Presentation - National / International Conferences**

**Dr. C. B. Srinivasan, Professor**

- Presented a paper titled "Comprehensive Study of Implementing Lean and Six Sigma Concepts in Textile Product Manufacturing Facility to Enhance Productivity", International Conference on Intelligent System and Control (ISCO) 2019 at Karpagam College of Engineering from 10th to 11th January 2019.

**Dr. C. Selvaraj, Professor**

- Presented a paper titled "Analysis on energy and exergy of Vapour Compression Refrigeration System using CNT, GOLD & HAuCl<sub>4</sub> Nano-Fluids", National Conference on Emerging Trends in Electronics, Instrumentation, Automation and Control – ETEIAC 2019 at Karpagam College of Engineering on 22nd March 2019.

**Dr. V. Rajkumar, Professor**

- Presented a paper titled "A Defense in depth strategy to eliminate cyber threats using key management technique in industrial control systems", International Conference on Electrical, Electronics, Instrumentation and computer communication-E2IC2 2019 at Karpagam College of Engineering from 22nd to 25th January 2019.

**Mr. P. Sundaram, Associate Professor**

- Presented a paper titled "Case Study on Lean Manufacturing Implementation system in Small and Medium sized Industries in India", International Conference on Intelligent System and Control (ISCO) 2019 at Karpagam College of Engineering from 10th to 11th January 2019.

**Mr. V. V. Arun Sankar, Assistant Professor**

- Presented a paper titled "An analytic report on design, cross section and material specification of protective structures for earth moving machinery", International Conference on Intelligent System and Control (ISCO) 2019 at Karpagam College of Engineering from 10th to 11th January 2019.

**Mr. D. Manikandan, Assistant Professor**

- Presented a paper titled "Numerical analysis of heat conduction through the Stainless steel clad boiler walls", International Conference on Intelligent System and Control (ISCO) 2019 at Karpagam College of Engineering from 10th to 11th January 2019.

**Mr. E. Vignesh, Assistant Professor**

- Presented a paper titled "A Defense in depth strategy to eliminate cyber threats using key management technique in industrial control systems", International Conference on Electrical, Electronics, Instrumentation and computer communication-E2IC2 2019 at Karpagam College of Engineering from 22nd to 25th January 2019.

**Mr. T. Rajesh Kumar, Assistant Professor**

- Presented a paper titled "Analysis on energy and exergy of Vapour Compression Refrigeration System using CNT, GOLD & HAuCl<sub>4</sub> Nano-Fluids", National Conference on Emerging Trends in Electronics, Instrumentation, Automation and Control – ETEIAC 2019 at Karpagam College of Engineering on 22nd March 2019.

**Mr. T. Akilan, Assistant Professor**

- Presented a paper titled "Case Study on Lean Manufacturing Implementation system in Small and Medium sized Industries in India", International Conference on Intelligent System and Control (ISCO) 2019 at Karpagam College of Engineering from 10th to 11th January 2019.

**Mr. T. Mahdevan, Assistant Professor**

- Presented a paper titled "Design, Analysis and Development of Progressive Die for Seat Rail", International Conference on Intelligent System and Control (ISCO) 2019 at Karpagam College of Engineering from 10th to 11th January 2019.

**Mr. V. Aravinthasamy, Assistant Professor**

- Presented a paper titled "A Comparative Investigation of MIG, TIG and Friction Stir welding: Technical review", National Conference on Emerging Trends in Electronics, Instrumentation, Automation and Control – ETEIAC 2019 at Karpagam College of Engineering on 22nd March 2019.

**Mr. M. Pandi Elavarsan, Assistant Professor**

- Presented a paper titled "Study On Multiple Exhaust Gas Sensor", International Conference on Electrical, Electronics, Instrumentation and computer communication-E2IC2 2019 at Karpagam College of Engineering from 22nd to 25th January 2019.

**Mr. R. Krishnan, Assistant Professor**

- Presented a paper titled "Mechanical characterization of dissimilar alloys joined using electron beam welding: technical note", International Conference on Intelligent System and Control (ISCO) 2019 at Karpagam College of Engineering from 10th to 11th January 2019.

**Mr. P. Karthikeyan, Assistant Professor**

- Presented a paper titled "Design, Analysis and Development of Progressive Die for Seat Rail", International Conference on Intelligent System and Control (ISCO) 2019 at Karpagam College of Engineering from 10th to 11th January 2019.

**Mr. Mohamed Anwar A U, Assistant Professor**

- Presented a paper titled "A Comparative Investigation of MIG, TIG and Friction Stir welding: Technical review", National Conference on Emerging Trends in Electronics, Instrumentation, Automation and Control – ETEIAC 2019 at Karpagam College of Engineering on 22nd March 2019.

**Mr. P. P. Gowtham, Assistant Professor**

- Presented a paper titled "Comprehensive Study of Implementing Lean and Six Sigma Concepts in Textile Product Manufacturing Facility to Enhance Productivity", International Conference on Intelligent System and Control (ISCO) 2019 at Karpagam College of Engineering from 10th to 11th January 2019.

**Mr. B. Sankar, Assistant Professor**

- Presented a paper titled "Study On Multiple Exhaust Gas Sensor", International Conference on Electrical, Electronics, Instrumentation and computer communication-E2IC2 2019 at Karpagam College of Engineering from 22nd to 25th January 2019.

**Mr. K. R. Mathevanan, Assistant Professor**

- Presented a paper titled "Numerical analysis of heat conduction through the Stainless steel clad boiler walls", International Conference on Intelligent System and Control (ISCO) 2019 at Karpagam College of Engineering from 10th to 11th January 2019.

**Mr. V. Balamurali, Assistant Professor**

- Presented a paper titled "Vibration and noise analysis of galvanised steel ducts", International Conference on Intelligent System and Control (ISCO) 2019 at Karpagam College of Engineering from 10th to 11th January 2019.

**Mr. R. Sathish, Assistant Professor**

- Presented a paper titled "Deposition and characterization of Titan/Sic3N4 nano coating on cutting tool", International Conference on Intelligent System and Control (ISCO) 2019 at Karpagam College of Engineering from 10th to 11th January 2019.

**Mr. R. Periysamy, Assistant Professor**

- Presented a paper titled "Comparative analysis of heat transfer enhancement in shell and helical coil heat exchanger", International Conference on Intelligent System and Control (ISCO) 2019 at Karpagam College of Engineering from 10th to 11th January 2019.

**Mr. S. Chitharthan, Assistant Professor**

- Presented a paper titled "Simulation analysis and experimental validation of thermo electric generator by discrete radiation level", International Conference on Intelligent System and Control (ISCO) 2019 at Karpagam College of Engineering from 10th to 11th January 2019.

**Mr. J. Mohanraj, Assistant Professor**

- Presented a paper titled "Study of environment assisted cracking on grade 23 materials", International Conference on Intelligent System and Control (ISCO) 2019 at Karpagam College of Engineering from 10th to 11th January 2019.

**Seminars / Workshops / FDPs / STTPs - Presented / Attended**

- Mr. M. Rajesh, Assistant Professor attended Three Days Entrepreneurship Awareness Camp (EAC) sponsored by EDII (DST - NIMAT) organized by Muthayammal Engineering College, Namakkal from 18th to 22nd February 2019.
- Dr. M. Mubarak, Assistant Professor attended GIAN Course on Advances in Combustion Modelling organized by NIT, Calicut from 04th to 09th March 2019.
- Dr. C. Krishnaraj, Professor and Head attended Six day Faculty Development training program on ME8595 - Thermal Engineering II organized by Sri Krishna College of Technology, Coimbatore from 27th May to 01st June 2019.
- Mr. V. Aravinthasamy, Assistant Professor attended Six day Faculty Development training program on ME8595 - Thermal Engineering II organized by Sri Krishna College of Technology, Coimbatore from 27th May to 01st June 2019.
- Mr. R. Masilamani, Assistant Professor attended Six day Faculty Development training program on ME8595 - Thermal Engineering II organized by Sri Krishna College of Technology, Coimbatore from 27th May to 01st June 2019.
- Mr. S. Sathish Kumar, Assistant Professor attended Six day Faculty Development training program on ME8595 - Thermal Engineering II organized by Sri Krishna College of Technology, Coimbatore from 27th May to 01st June 2019.
- Mr. R. Arul Murugan, Assistant Professor attended Six day Faculty Development training program on ME8501 - Metrology and Measurements organized by Sri Sakthi Institute of Engineering and Technology, Coimbatore from 27th May to 01st June 2019.
- Mr. R. Manimaran, Associate Professor attended One Week Short Term Training Program on Biofuels and its Application in IC Engines from 10th to 14th June 2019.
- Mr. V. Aravinthasamy, Assistant Professor attended One Week Short Term Training Program on Biofuels and its Application in IC Engines from 10th to 14th June 2019.
- Mr. S. Sathish Kumar, Assistant Professor attended One Week Short Term Training Program on Biofuels and its Application in IC Engines from 10th to 14th June 2019.
- Mr. Ilyas Hussain, Assistant Professor attended One Week Short Term Training Program on Biofuels and its Application in IC Engines from 10th to 14th June 2019.
- Mr. S. Chitharthan, Assistant Professor attended One Week Short Term Training Program on Biofuels and its Application in IC Engines from 10th to 14th June 2019.
- Mr. J. Mohanraj, Assistant Professor attended One Week Short Term Training Program on Biofuels and its Application in IC Engines from 10th to 14th June 2019.

**NPTEL Certifications**

Se. No.	Course Name	Roll Number	Name
1	Principles of Casting Technology	NPTEL19ME18S11181806	C.Krishnaraj
2	Basics of Finite Element Analysis-1	NPTEL19ME02S31242020	Dhandapani. N.V
3	Convective Heat Transfer	NPTEL19ME07S51241335	Mubarak.M
4	Principles of Casting Technology	NPTEL19ME18S11181880	N.Subramani
5	Inspection and Quality Control in Manufacturing	NPTEL19ME25S31242014	Arun Sankar.V.V

6	Inspection and Quality Control in Manufacturing	NPTEL19ME25S31240761	Akilan.T
7	Manufacturing Process Technology	NPTEL19ME20S61240227	Akilan.T
8	Principles of Casting Technology	NPTEL19ME18S11181702	Masilamani.R
9	Principles of Casting Technology	NPTEL19ME18S11181911	Haridass.R
10	Principles of Casting Technology	NPTEL19ME18S11181761	T.Rajeshkumar
11	Principles of Casting Technology	NPTEL19ME18S21181528	K.R.Mathevanan
12	Engineering Mechanics-Statics and Dynamics	NPTEL19ME01S11181812	Arulmurugan.R
13	Conduction and Convection Heat Transfer	NPTEL19ME06S41240963	Sathishkumar.S
14	Conduction and Convection Heat Transfer	NPTEL19ME06S41240862	Aravinthasamy.V
15	Principles of Casting Technology	NPTEL19ME18S11181629	Rajesh.M
16	IC Engines and Gas Turbines	NPTEL19ME10S41240828	Mohamed Anwar.A.U
17	Principles of Casting Technology	NPTEL19ME18S21181528	Mohamed Anwar.A.U
18	Principles of Casting Technology	NPTEL19ME18S11181845	Ilyas Hussain
19	Manufacturing Process Technology	NPTEL19ME20S51241077	Mohanraj.J
20	Manufacturing Process Technology	NPTEL19ME20S51241173	Chitharthan.S
21	Manufacturing Process Technology	NPTEL19ME20S61240740	Muraleedharan.P
22	Manufacturing Process Technology	NPTEL19ME20S61241540	Sivakumar.R
23	Thermodynamics	NPTEL19ME12S41241969	Sivakumar.R
24	Concepts of Thermodynamics	NPTEL19ME13S51241019	Balamurali.V

**Innovations by the Faculty in Teaching and Learning**

Se.No.	Course Name	Mode
1	Kinematics of Machinery	ICT
2	Strength of Materials	ICT + Smart Class
3	Gas Dynamics and Jet Propulsion	ICT
4	Finite Element Method	ICT

**Value Added Courses**

Se.No.	Course Name	No. of times offered during the same year	Duration of the Course	Number of Students Enrolled
1	Auto CAD	2	45 Hrs	60
2	SolidWorks	2	45 Hrs	40
3	ANSYS	2	45 Hrs	40
4	Basics of Finite Element Analysis	1	45 Hrs	30

**Visiting Faculty**

Se.No.	Name of the Visiting or Adjunct Faculty	Designation of the Faculty	Course Handled	Duration (Hours/Semester)
1	M.Dharani Kumar	Proprietor, AV Engineering, Coimbatore	Thermal Engineering	28

## **STUDENT ACHIEVEMENTS**

### **Online Certifications**

- In the academic year 2018-2019
  - Total number of NPTEL Certifications from Students: 43
    - Elite + Gold: 1
      - Kalaiselvan.R (15M317) for the course Manufacturing Process Technology organized by IIT Kanpur.
    - Elite + Silver: 1
      - Vivekanandar.M (16M256) for the course Inspection and Quality Control in Manufacturing organized by IIT Roorkee.
    - Successful Completion: 41
  - Total number of Design Certifications from Students: 5
  - Total number of IT Certifications from Students: 3

### **Placement, Higher Studies and Entrepreneurship**

- In the academic year 2018 - 2019,
  - Out of the 208 final year students, 156 students are placed in companies inclusive of Government Jobs.
  - A total of 19 students from the Department of Mechanical Engineering, have been admitted to higher studies with valid qualifying scores.
  - Two of our students have turned into Entrepreneurs in the field of Engineering/ Technology.

### **On Job Training**

<b>Se.No.</b>	<b>Company Name</b>	<b>Date</b>	<b>Number of Students</b>
1	Unimag Metals and Machinerries	15.05.2019 to 14.06.2019	2
2	United Enterprises	15.05.2019 to 14.06.2019	4
3	SAN Precision Alloys Pvt,Ltd	15.05.2019 to 14.06.2019	7
4	Super Quality Services	15.05.2019 to 14.06.2019	2

### **Co-Curricular Activities**

- Student Participation in inter-institute events for the academic year 2018-2019
  - Within the state
    - A total of 61 students Participated in Symposium
    - A total of 136 students Participated in Workshop
    - A total of 17 students Participated in Design Contest
    - A total of 32 students Participated in Conferences
  - Outside the State
    - A total of 35 students Participated in Miscellaneous events