

EVENTS ORGANISED

1. "Burning Rubber", a Motor Sport Event was organised in association with Volkswagen India on 19th July 2018.



2. One Day workshop on "Introduction to Yoga and Meditation for professional excellence and stress Management" was conducted on 06-08-2018.



3. "One day Hands-on Training on 3D-Printing" was organized by Centre for Advanced Manufacturing, on 27th August 2018 in association with VIPRA 3D, Students Startup of RIT.



4. Mr.S.Yuvaraj, Asst. Professor delivered a Lecture in a topic "Robotics and its Applications" to the students of Chellammal Vidyalaya, Nungampakkam on 29-09-2018.The second and third year students from VIPRA 3D have contributed in the Robotics Project Demonstration to the students.



5. Engineers Day was celebrated at RIT on 15th September, 2018.. The event was organised by the department of Mechanical Engineering. We were

honoured to have Mr. N. Subramanian, Senior Data Analyst, ANB Systems as the chief guest.



6. Entrepreneurship awareness camp (Sponsored by DST) was conducted from 26-09-2018 to 28-09-2018. Delicates from various institutes and industries delivered lectures in different sessions.



7. The Alumnus talk was given by Mr. Mohnish S. Kumar, Assistant Manager, Research & Development, Testing & Vehicle Development Department, Hyundai Motor India Engineering Pvt Ltd. titled "Roadmap to a Successful Career in Mechanical Engineering" on 29.09.2018. He is our alumnus from the first batch of RIT.



8. Two Days National level workshop on “Intellectual Property Rights and Art of Writing Funding Proposals and Journal Articles” conducted on 05th & 06th October, 2018. Around 60 delegates across the nation participated in the workshop. The workshop was flagged off by the chief guest Mr.Udhayashanker, Assistant Controller of Patents & Designs, Patent Office, Chennai.



9. One Day Workshop on “OVERVIEW OF AIRCRAFT DESIGN” was conducted in association with Centre of Excellence in Aerospace and Defence, VTU, Bangalore on 8th October, 2018. Dr. K. Badari Narayana, Principal consultant, Centre of Excellence in Aerospace and Defence, VTU, Bangalore was invited as Chief Guest.



10. The Alumnus talk was given by Mr. Bharath Kumar, Application Engineer, NETZSCH Pumps and Systems on 06-10-2018. He is an Alumnus of 2012-2016 Batch of Mechanical Engineering, Rajalakshmi Institute of Technology.



11. “One day workshop on 3D printing” was conducted by CAM on 28-02-2019. Around 40 students of our campus have registered and attended the workshop. The program was organised by Mr.C.Murugan, Asst. Professor.



12. “A National Science Day – 2019” was conducted on 28-02-2019. As a part of celebration, various events were conducted for our students. The event was organised by Mr.S.Vivek and Mr.N.Lingaraj.



13. A National level Technical symposium “KOLBEN 2K19” was conducted on 09-03-2019. Students from various institutions participated in the events. The events were organised to give an opportunity for the students for expressing their talent in technical and non-technical domains.



14. Two days National Conference On “Recent Innovations in Advanced Material Science (RIAMS’19)” was conducted on 13th and 14st March 2019. The research scholars and faculty members from various institutes participated in the conference.



15.The Guest Lectures were arranged for the students. The title and schedule were enumerated below.

Date	Year/Sem	Title	Resource Person
19/07/18	IV/VII	Industrial automation and process control.	Mr.Sirish Vissa Head of Volks wagan Motorsports India
15/09/18	II/III	Optimization technique in machine design	Mr.N.Subramanian Senior Data Analyst, ANB systems
27/09/18	III/VI	Nano Technology in Instrumentation	Dr.Tiju Thomas, Professor, Materials & Metallurgical Engineering, IIT Madras
05/10/18	IV/VII	Flow though Channels.	Dr.Pennathur Gautam, Centre for Biotechnology, Anna University, Chennai.
08/10/18	III/V	Overview of Aircraft Design	Dr. K. Badari Narayana, Principal consultant, Centre of Excellence in Aerospace and Defence, VTU, Bangalore
19/01/19.	II / V	Industrial Exposure on Automotive Industries	Mr.G.Rajavel, Assistant Manager, TVS Brakes India Ltd.

PUBLICATIONS

S K Rajesh Kanna, “Reinforcing Distance Education through eLearning and e-Assessment practices Using ICT”, The Online Journal of Distance Education and E- Learning, Vol:06, Issue 2, PP:74-79, April 2018, ISSN 2147-6454.

Yuvaraj, S. Malayalamurthi, R.; Gokulprasath, S.; Venkatesh Raja, K., “Assessment of contact parameters of soft splined hemispherical finger tip pressed against a concave profile”, Material Research Express, Vol:05(6), PP:74-79, Jun 2018, ISSN 2053-1591.

S.Yuvaraj, “Assessment of contact characteristics of soft finger tip in multiprofile grasping”, IOP Conference Series- Material Science and Engineering, Vol:441, PP:01-07, Jun 2018, 1757-899X.

S.Yuvaraj, R. Malayalamurthi, K. Venkatesh Raja, “Assessment of soft materials for anthropomorphic soft robotic finger tips”, Material Testing, Vol:60(9), PP:902-906, Sep 2018.

S.Stephen Bernard, L. S. Jayakumari “Pressure and Temperature Sensitivity Analysis of Palm Fiber as a Biobased Reinforcement Material in Brakepad”, Journal of Brazilian Society of Mechanical Science and Engineering, Vol:40(152), PP:1-12, March 2018. ISSN: 1678-5878.

S.K.Rajesh Kanna, K.C.Udaiyakumar “Ant colony optimization algorithm for the identifying the optimal parameters for worm gear design”, International Journal of Pure and Applied Mathematics, Vol:119(13), PP:231-240, June 2018. ISSN: 1314-3395.

S.Aravinth, V. Sugumaran “Air compressor fault diagnosis through statistical feature extraction and random forest classifier”, Oct 2018, Vol:12, PP:1-2.

S K Rajesh Kanna, K C Udaiyakumar, **S Dinesh Kumar** and **N Lingaraj**, “3D heterogeneous bin packing framework for multiconstrained problems using hybrid genetic approach”, IOP Conference Series- Material Science and Engineering, Vol:12, PP:1-9, June 2018. ISSN: 1757-899X.

P.Naryanasamy, N.Selvakumar, **P.Balasundar**, “Effect of weight percentage of TiC on their tribological properties of magnesium composites”, Materials today Proceedings, Elsevier publications. Vol 5, Page no 6570-6578, 2018, ISSN: 2214-7853.

Ramkumar Thulasiram, Narayanasamy P, M.Selvakumar & **P.Balasundar**, “Effect of nano-reinforced B4C on the dry sliding wear behaviour of Ti-6Al-4V sintered composites using response surface methodology”, Archives of

Metallurgy and Material, DE GRUYTER Publications, Vol:63(3), Page no:1179-1200, 2018. ISSN: 17333490, 23001909. (Impact Factor:0.571) Annexure-I.
Ramkumar Thulasiram, Selvakumar Mani, Narayanasamy Pandiaraj & P. Balasundar , “Effect of B4C in Ti-6Al-4V Matrix on Workability Behavior of Powder Metallurgy Composites During Cold Upsetting”, International Journal of Materials Research, HANSER Publications, Vol:109 (12), Page no:1146-1152, 2018. ISSN: 1862, 5282 (Impact Factor:0.748) Annexure-I .
R.Prithivirajan, P.Balasundar , “Characterization of new cellulosic fibers from Morus Alba stem”, Journal of Natural Fibers, Taylor & Francis Publications – Published online: 17 Jan 2018, ISSN: 1544, 0478. (Impact Factor:1.076) Annexure-I
P.Balasundar , P.Narayanasamy, “Characterization of Ferric oxide reinforced magnesium nano-composites processed through microwave sintering/powder metallurgy”, International Journal of Microstructure and Mechanical Properties, Inderscience publishers –Vol:13 (6), Page no:447-453, 2018. ISSN: 1741, 8410 (Impact Factor:0.15)
P.Balasundar , “Extraction and Characterization of new natural cellulosic Chloris barbata fiber”, Journal of Natural Fibers, Taylor & Francis Publications, Vol:15 (3), Page no:436-444, 2018. ISSN: 1544, 0478 (Impact Factor:1.076) Annexure-I .
S.Dinesh Kumar, G.Sai Krishanan, J.Dasa Prakash , “Investigation on mechanical and thermal properties of pcl blended graphene biocomposites”, Polimerose, (Accepted for publication), 2018. ISSN: 1544, 0478 (Impact Factor:1.076) Annexure-I .
Jafrey Daniel James D, S. Manoharan, G. Saikrishnan & S. Arjun , “Influence of bagasse/sisal fibre stacking sequence on the mechanical characteristics of hybrid-epoxy composites”, Journal of Natural Fibers, February 2019.
R.Prithivirajan, P.Narayanasamy & P.Balasundar , "Characterizaiton of musa paradisica l cellulosic natural fibers from agro discarded blossom petal waste", Journal of natural fibers, february 2019 (accepted for publication).

INTERNSHIP COMPANIES

The students in plant training details have been mentioned below.

S No	Name of the Student	Company Name	Start date	End date
1	Akash SA	Wheels India Pvt Ltd	3/12/18	10/12/18
2	Akash V S	ICF	6/12/18	13/12/18
3	Anusha A	GEM Corporation	1/12/18	6/12/18
4	Aravinthan R	Wheels India Pvt Ltd	3/12/18	10/12/18
5	Ashwin Kishore V	ICF	6/12/18	13/12/18
6	Barath R	Wheels India Pvt Ltd	3/12/18	10/12/18
7	Dhivya Prakash V	Brakes India Pvt Ltd	3/12/18	10/12/18
8	Gokulakaren P	ICF	6/12/18	13/12/18
9	Shivanya S M	GEM Corporation	1/12/18	6/12/18
10	Ivon Paul A	ICF	6/12/18	13/12/18
11	Lohesh Srinath S R	Bogwarner Morse Systems	26/11/18	06/12/18
12	Mouleeshwaran P	Lucas TVS	5/12/18	15/12/18
13	Richard Martin G	KCP Ltd	3/12/18	5/12/18
14	Rohith C R	Lucas TVS	3/12/18	10/12/18
15	Rohith Vikram S	KCP LTD	3/12/18	5/12/18
16	Rubesh G	KCP LTD	3/12/18	5/12/18
17	Sabarish VS	MADRAS Engineering Industries Pvt Ltd	26/11/18	06/12/18

18	Sanjana R	Ashok Leyland	11/27/18	12/2/18
19	Shabarish PK	Brakes India Pvt Ltd	3/12/18	10/12/18
20	Sivaraman N	Lucas TVS	3/12/18	10/12/18
21	Srihari V	Brakes India Pvt Ltd	3/12/18	10/12/18
22	Sudharsan S	Lucas TVS	3/12/18	10/12/18
23	Sugumar R	Madras Engineering Industries Pvt Ltd	26/11/18	06/12/18
24	Vignesh R	Precision Industries	30/11/18	8/12/18
25	Vishweshwaran M	GEM Corporation	1/12/18	6/12/18

The following Final Year students have successfully completed their Internships.

S No	Name of the Student	Company Name	Start date	End date
1	Apiyruvan A V R	Rane Groups	01/12/18	15/12/18
2	Badri Vishal J	Wheels Auto Private Limited	17/12/18	1/2/2019
4	Narayanan D	Millennium Industries	1/12/18	31/01/19
5	Praveen A	Millennium Industries	1/12/18	31/01/19
6	Ragul S	Volvo Company	3/12/18	3/1/19
7	Santhoshkumar G	Ashok Leyland Pvt Ltd	4/12/18	3/1/19
8	Sarathkumar M	Ashok Leyland Pvt Ltd	4/12/18	3/1/19
9	Srijith S	Ashok Leyland Pvt Ltd	4/12/18	3/1/19

INDUSTRY INSTITUTE INTERACTIONS

1. BMW India has included Rajalakshmi Institute of Technology as a part of BMW Skill Next Initiative Programme. BMW India has given four cylinder engine and 8 speed Transmission system for training the students.



2. The department has made effective steps to organize industrial visits for students to give them a view about the industrial code of conduct. The following are the companies to which departmental students visited in the past few months

Sl. No	Industry Name	Date	Students
1	MICRONE INDUSTRIES N0.117, Sidco Industrial Estate, Pattaravakkam Railway Station Road Chennai - 600 098.	19-07-2018	III Year
2	Venu Engineering Service Pvt Ltd. A-10 Sipcot Industrial park, Pillaipakkam Village, sriperumbadur kanchipuram	20-09-2018	II Year

3	ATV precision components (p) ltd 19, New SIDCO Industrial Estate, Maraimalainagar, Chennai - 603 209.	26-09-2018	III Year
4	M&H Progressive skills private Ltd, Chennai.	05-02-2019	II Year
5	M&H Progressive skills private Ltd, Chennai.	06-02-2019	II Year
6	Nobel Tech India Private Ltd, Kancheepuram.	26-02-2019	II Year

3. Mr.S.Prabu, Asst. Professor visited L&T Rubber Processing machinery, Vedal Village, Highway, Kanchipuram – 631 561 on October 10th, 2018.
4. Mr.G.Manimaran, Asst. Professor visited Brakes India, TVS Industries, Padi on October 12th, 2018. These Industrial visits are arranged through PALS, IIT.

PRIZES, AWARDS AND RECOGNITIONS

1. Dr.G.Suresh, Associate professor and Mr.S.Yuvaraj, Assistant Professor have secured Elite ranking in NPTEL online tests.
2. The following students of our department successfully completed NPTEL course.

S.No	Course Name	Name	Final Score	Topper
1	Product Design and Innovation	Mr.M.Mohana Krishnan (IV Year)	82	Topper of 5% in this course
2	Robotics	Mr.K.Arjun (II Mech)	88	Topper of 5% in this course

3. The details of University Rank holders for the batch 2014-2018 have been mentioned below.

Sl. No	Student Name	Anna University Rank
1	Mr.P.Surya	22
2	Mr.K.M.Mithleshvarraj	30
3	Miss.S.Anusha	41
4	Mr.S.Sankara Kumar	50

4. Dr.S.Dinesh Kumar is invited to deliver a Lecture in “National Level One day workshop on Non Destructive Testing” conducted by Royal NDT Academy, Chennai.



5. Mr.P.Balasundar is appreciated to act as reviewer in Materials Research Express, IPO publishers. (listed in Annexure – 1 journals)

RESEARCH ACTIVITIES

Research Grants

1. Dr.R.Ragu, Vice Principal has received a fund Rs.20000 from DST for conducting 3 days Entrepreneurship awareness camp.
2. Dr.S.K.Rajesh Kanna and Mr.N.Lingaraj have received Rs.20000 as a research grant from Institute of Engineers for the project titled “Development of Semi-Automatic Integrated Guidance System for Side Mirrors and Headlamps to Enhance the Drivers Vision Assistance in Automobiles”.
3. Dr.S.Dinesh Kumar has received Rs.315000 as a research grant from AICTE for STTP on “Research Methodologies in Mechanical Sciences”.
4. Dr.S.Dinesh Kumar has received Rs.350000 as a research grant from AICTE for STTP on “3D Printing – Concepts, Methods and Applications”.

Consultancy Received

1. Dr.G.Suresh has received two consultancy works from M/s. TIDC INDIA (A Unit of Tube Investments of India Ltd.), Chennai. The details are,
 - a. Project Title: "Establish correlation between interference, plate hole finish and push out forces -Formed/Tube/Extruded/Turned Bush and Pin" for an amount of Rs.10,000.
 - b. Project Title: "Establish correlation between link plate waist width and Fatigue strength of chain - To understand the optimum waist width for superior fatigue strength " for an amount of Rs.10,000
2. Mr.C.Murugan successfully completed the consultancy project on ‘Revere Engineering of Three Wheeler Chassis’ and received an amount Rs.75000 from Power Automobiles, Chennai.
3. A Non-Disclosure Agreement is signed between **Centre for Advanced Manufacturing (CAM)** and **Frisbee Robotics Pvt. Ltd., Chennai** for carrying out consultancy project on “Design and Fabrication of Automated Low Cost welding Machine” on 28/02/2019. Mr.S.Yuvaraj and Mr.N.Sivashanmugam have received the project. The total cost of the project is Rs.96,500/.

Research Status

1. Mr.G.Muthu, Associate Prof./Mech.Dept. has successfully completed his Ph.D Public Viva-Voce for the thesis titled " Numerical and Experimental investigations on standalone solar thermoelectric generator " on 28/07/2018 at National Institute of technology (NIT), Trichy.



2. Mr.S.Yuvaraj has successfully submitted Synopsis titled “Assessment on the Haptic and Perceptual Characteristics of an Anthropomorphic Soft Finger Tip for Robotic Grippers”

HIGHER STUDIES

The faculty members of our department conduct GATE coaching classes for our students in week end. Around 50 students have registered and are being trained.