



Resonance



Newsletter of Mechanical Engineering

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About the Department

The Department of Mechanical Engineering is one of the pioneering departments of SRM IST with a faculty strength of 117. As of now, there are 49 faculty members with PhD qualifications and the remaining 68 are pursuing their research. The department is functionally divided into three broad areas of specialization: (i) Design (ii) Manufacturing and (iii) Thermal Engineering. The National Board of Accreditation had accredited the Mechanical Engineering program in 1997. The B.Tech. - Mechanical Engineering program at Kattankulathur campus is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>. The department also offers M. Tech and Doctoral programs in various specializations. As of now, 23 full-time scholars pursue their doctoral research and recently their stipend has been increased from 16K to 25K. Overall, a lot of activities/achievements were witnessed including publications of 1000+ research papers, 50+ patents, 10+ research projects, and 1000+ conference paper presentations.

Vision: To impart knowledge to our students in an ambience of Humanity, Wisdom, Intellect, Creativity of Innovation, in order to nurture them culturally and Ethically rich professionals with bright future.

Mission #1: To impart quality education to produce mechanical engineers and enhance their skills to become world renowned professionals.

Mission #2: To establish Centers of Research Excellence to inculcate research acumen in faculty and students on the areas like; machining, biomechanics, bio-fuels, composites, and energy.

Mission #3: To provide state-of-the-art education and training programs to the faculty and student fellowship.

Message from Head of the Department



Dear Colleagues,
Greetings!

It is indeed a great pleasure to note that our Department is publishing the newsletter etching every aspect of activities and events held during the odd semester of the academic year 2020-2021. The newsletter aims to bring into view various proceedings, functions, and happenings in the Department. Ours is one of the pioneering departments of SRM Institute of Science and Technology. We offer our students an excellent educational experience that combines intellectual rigor and cross-disciplinary breadth in an organized, student-centered environment.

Despite the uncertainty ahead of us in the new academic year, we know that our highest priority is to ensure our students, faculty, and staff good health and safety while offering the best learning experience to our students, whether they are learning on campus or from home. Our Department has shown a high level of resilience in maintaining research productivity during the past six months, even while facing reduced access to the research facilities. The various events like the first virtual international conference on advances in renewable and sustainable energy systems (ICARSES 2020), the virtual conference, Triboindia 2020, etc., are few examples. I am optimistic that we will continue to play a leadership role in the existing and new research initiatives.

Over the coming year's, we will also seek to expand our alumni connections to provide additional mentorship and support to our current students. Another priority will be to improve diversity and equity in the Department to help a stronger, more inclusive community. Even in the face of a crisis, I trust that our community's long-standing strength will help us meet new challenges, recognize new opportunities, and continue to strive for a higher level of excellence. I thank all our students and faculty members for their contribution to make the semester eventful in various aspects.

I congratulate the team for its great efforts to bring out this newsletter successfully.

Dr. M. Cheralathan

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Funded Projects obtained



Dr. Srihari Dodla received a grant for “Modeling of advanced polycrystalline materials for crystal-plasticity simulations of machining processes” from **SERB** (under Start-up Research Grant) for **Rs. 9,88,900/-**. **Project# SRG/2020/008811**. **PROJECT OUTLINE:** Polycrystalline materials play an important role in designing structural, aerospace components, and the manufacturing industry. This has motivated studies on modeling/simulation tools for high strain-rate machining processes in the manufacturing industry. The current research will build the state of the art advances in multiscale modeling/simulation, which is considered one of the main factors in aiming productivity and product improvement in the manufacturing process. The proposed research integrates the modeling and simulation of different deformation processes at different time and length scales. The high-end components in the aerospace industry are manufactured with advanced machining processes involving difficult-to-machine super alloys. The use of these hard-to-machine alloys in India is increasing dramatically for various applications.



Dr. Shubrajit Bhaumik received a fund of **Rs. 2,71,000/-** (the total worth of Rupees Eighteen Lakhs) for the accepted project titled “Investigation of tribological and rolling contact fatigue analysis of AISI 52100 steel with micro and nano-additives dispersed in vegetable and mineral oil.” from SERB (under TARE Research Grant). **Project # TAR/2018/000202**. **PROJECT OUTLINE:** The work investigated the tribological properties of AISI 52100 bearing steel in the presence of micro and nano additived mineral oil and vegetable oil. It is being observed that the usage of optimized nano additive concentration can reduce the frictional wear and enhance the tribological properties of the lubricants. The formation of stable tribo-films on the tribo pairs significantly enhanced the life of the mating pairs. Additionally, the low coefficient of friction also indicates the possibility of low power consumption during the tribo tests. The present work studied the complex wear mechanisms of the tribo pairs and was able to identify a blend of lubricants with enhanced tribological properties using soft computing techniques. Few of the results of the present work have been published in the following journals:

1. **Shubrajit Bhaumik**, Viorel Paleu, Shrutika Sharma, Sankalp Dwivedi, Sourabj Borkar, M. Kamaraj, 2020, Nano and micro additivated glycerol as a promising alternative to existing non-biodegradable and skin unfriendly synthetic cutting fluids, Journal of Cleaner Production, 263, 121383. IF 7.246.
2. **Shubrajit Bhaumik**, M. Kamaraj, Viorel Paleu, 2020, Tribological analyses of a new optimized gearbox biodegradable lubricant blended with reduced graphene oxide nanoparticles, Journal of Engineering Tribology, IF 1.397.
3. **Shubrajit Bhaumik**, M.Kamaraj, 2020, Artificial neural network and multi-criterion decision making approach of designing a blend of biodegradable lubricants and investigating its tribological properties, Journal of Engineering Tribology, IF 1.397.

Ph.D., awarded

1. **Mr. S. Karuppudaiyan** completed his Ph.D. public viva-voce oral examination on 19th October 2020 Research topic: “Modelling of Longitudinal Elastic Modulus of Bovine Femur and Design of Scaffold structures”. Research supervisor: Dr. D. Kingsly Jeba Singh.
2. **Mr. E. Vijayaragavan** completed his Ph.D. public viva-voce oral examination on 12th November 2020 Research topic: “Study and analysis of an ankle joint to design a pedorthosis for children with cavus clubfoot deformity”. Research supervisor: Dr. T. V. Gopal.
3. **Mr. V. Thirunavukkarasu** completed his Ph.D. public viva-voce oral examination on 31st December 2020 Research topic: “Experimental studies on thermal performance of coiled tube receivers for a solar parabolic dish concentrator”. Research supervisor: Dr. M. Cheralathan.



Mr. S. Karuppudaiyan completed his Ph.D. viva-voce on 19th October 2020, received the degree from Honourable Chief Guest Dr. K. Sivan, Secretary and chairman of ISRO.



Mr. E. Vijayaragavan completed his Ph.D. viva-voce on 12th November 2020, received the degree from Honourable Pro-Chancellor (Administration) Shri Ravi Pachamoothoo.



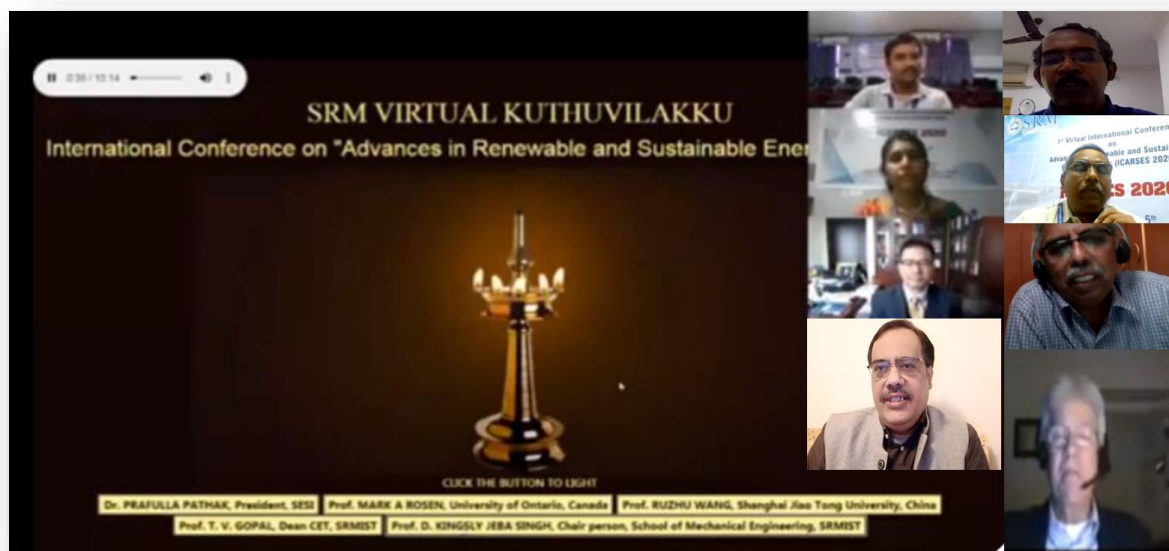
Mr. V. Magesh completed his Ph.D. viva-voce on 19th June 2020 received the degree from Honourable Pro-Chancellor (Administration) Shri Ravi Pachamoothoo.



Mr. V. Mathanraj completed his Ph.D. viva-voce on 14th February 2020 received the degree from Honourable Pro-Chancellor (Administration) Shri Ravi Pachamoothoo.

Events (International Conference / Short-term FDP's & Workshop's) organized

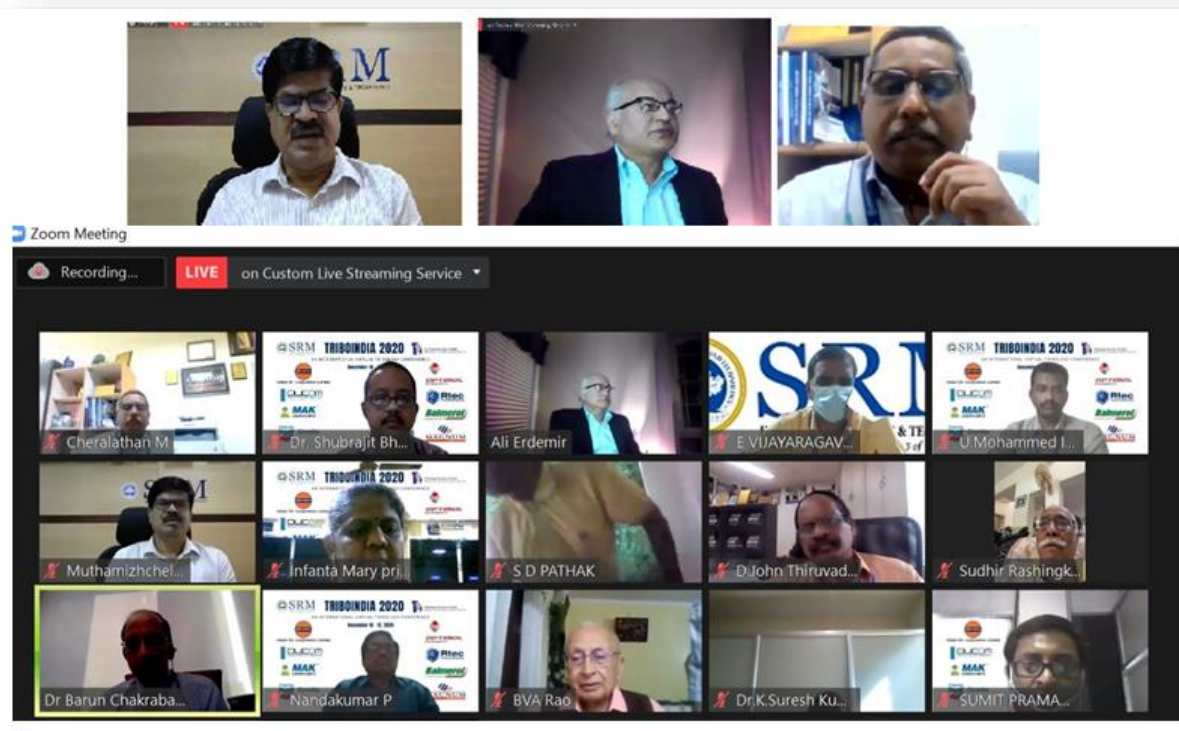
1. **First International Virtual Conference on Advances in Renewable and Sustainable Energy Systems 2020**, organized by the Dept. of Mechanical Engg., SRM IST, Kattankulathur 03rd – 05th December 2020. Convener: **Dr. M. Cheralathan**; Co-Convener: **Dr. K. Suresh Kumar**; **Dr. P. Chandrasekaran**. Organizing Secretaries: **Dr. R. Senthil**; **Dr. S. Manikandan**; **Dr. C. Selvam**.
 - ❖ **Total number** of accepted papers: 120 out of 173. Total number of parallel sessions: 25
 - ❖ Articles presented from across the globe. Notably from Binghampton University, NY, USA, University of Washington, USA, KTH Sweden, TU-Delft Netherlands, Marelli inc, USA, NIT Trichy, NIT Rourkela, JNTU, Anna University, PSG Tech, etc
 - ❖ **Chief Guest for inaugural**: Dr. Prafulla Pathak, President SESI; **Guest of Honor**: Prof. Marc Rosen from University of Ontario Institute of Technology, Canada; and Prof. Ruzhu Wang from Shanghai Jiao Tong University, China.



<Inaugural function of First International Virtual Conference on Advances in Renewable and Sustainable Energy Systems 2020, felicitated and honoured by Prof. T. V. Gopal, Dean, CET, SRMIST; Dr. Prafulla Pathak, President, Solar Energy Society of India >

- ❖ **Plenary Talks**: Prof. Marc Rosen from University of Ontario Institute of Technology, Canada; Prof. Ruzhu Wang from Shanghai Jiao Tong University, China, Prof. Bidyut Bran Saha, Kyushu University Japan, Prof. R. Velraj, Anna University Chennai, Prof. Sivasankaran Harish, The University of Tokyo
 - ❖ **Invited Talks**: Prof. Zafar Said, University of Sharja, UAE; Prof. S. Murugan, NIT Rourkela; Dr. Ravita Lamba, MNIT Jaipur; Prof. V K. Sharma, JNTU; Dr. Chitti Babu, IIITDM; and Prof. S. K Tyagi, IIT Delhi
 - ❖ **Session Chairs**: Prof. Sasidharan, and Dr. Malar from Research Institute, SRM IST, Prof. Edwin Geo, HOD Automobile Engg., Prof. Vijayakumar, HOD, Electrical and Electronics Engg., Prof. Ganapathy Subramaniam, HOD Aerospace Engg., Dr. Sakthivadivel from VIT Vellore, and various faculties from other SRM Campuses, which were co-chaired by our Faculties from SRM IST, Ktr campus.
2. **Five Days International Short-Term Course on "Tribology and Sustainability,"** organized by the Dep. of Mechanical Engg., SRM IST, Kattankulathur, 24th – 28th August 2020. Co-ordinators: **Dr. TVVLN Rao** and **Dr. Jitendra Kumar Kattiyar**.
 - ❖ **Total registered** (no's): 624 (Internal: 04; External: 620 [International: 25])
 - ❖ **Chief Guest** for inaugural: Prof. Harish Hirani, Director, CSIR-CMERI Durgapur; **Guest of Honours**: Dr. TCSM Gupta, Senior Vice President R&D, Quality and Production, Apar Industries Ltd Mumbai and Dr. Prasanta Kumar Padhi, General Manager, Steel Authority of India Ltd Rourkela.
 - ❖ **Guest speakers**: Prof. Ali Sabea Hammood, Head BMME, University of Kufa Iraq presented on "Tribocorrosion of Biomaterials"; Dr. Manjesh Singh, Indian Institute of Technology, Kanpur presented on "Aqueous Lubrication and Polymer Brushes"; Prof. Zahrul Fuadi, Syiah Kuala University, Indonesia presented on "2D material based nanolubricants to achieve green lubrication"; Prof. Arun Kumar Singh, Visvesvaraya National Institute of Technology Nagpur, Maharashtra presented on "Frictional Dynamics of Hard and Soft Solids"; Prof. Abdul Samad Mohammed Head Tribology, KFUPM, Saudi Arabia presented on "Surface Modifications for Tribological Solutions – From Nano to Macro Scale"; Dr. Shahira Liza binti Kamis MJIIT, UTMKL, Malaysia presented on "Polyethylene wear in artificial joints"; Prof. T V K Gupta, VNIT Nagpur, India presented on "Metal Additive Manufacturing with Laser Cladding: A Research Perspective"; Prof. A. P. Harsha, Head, ME, IIT BHU Varanasi, India presented on "Bio-Tribology"; Prof. P. Ramkumar, IIT Madras presented on "Engine Tribology"; Dr. Catlin Pnuciu, Imperial College London, UK introduced on "Achieving a superior design throughout tribological knowledge"; Prof. A. Elaya Perumal, Head Machine Design, Anna University, Chennai, India presented on "Magnesium (Mg) – The Future Materials for Tribo-Mechanical Applications"; Dr. Febin Cyriasc, Scientist, A*Star Singapore presented on "Engine Oil Additives"; Dr. Mir Irfan Ul Haq, SMVD University, Jammu, India presented on "Tribology of Aluminium Composites".
 - ❖ **Chief Guest for Valedictory**: Prof. Hirayama, Kyoto University, Japan; **Guest of Honor**: Prof. A. Elaya Perumal, Head, Machine Design, Dept. of Mechanical Engineering, Anna University, Chennai, India.

3. **TRIBOINDIA 2020**, organized by Tribology Society of India and SRM IST, Kattankulathur 10th – 12th December 2020 at SRM IST, KTR Campus. Conveners: **Dr. Shubhabrata Datta & Dr. Shubrajit Bhaumik**.
- ❖ **Total number** of registered abstract: 102 (External: 80; Internal: 22). Total number of participants: more than 200.
 - ❖ **Chief Guest** for inaugural: Dr. Barun Chakrabarti, L&T Hydrocarbon and Vice President TSI. The inaugural lecture was delivered by Prof. Ali Erdemir, Texas A & M, USA, also the International Tribology Council president.
 - ❖ **Guest Speakers:** Prof. Satish V Kailash, IISc Bengaluru; Prof. R Gnanamoorthy, IIT Madras; Prof. Andreas Almqvist, Luleå University of Technology, Swede; Prof. Zulfiqar A Khan, Bournemouth University, United Kingdom; Prof. T. Liskiewicz, The Manchester Metropolitan University, UK; Dr. Naresh Chandra Murmu, Senior Principal Scientist CSIR-CMERI India; Dr. Chiradeep Ghosh Tata Steel Limited India; Prof. Dr. A. Elaya Perumal, Anna University India; Dr. Md. Khalid Sunway University Malaysia; Prof. Satish C Sharma, IIT Roorkee India; Dr. Balasubramaniam Vengudusamy, Klueber Lubrication Germany; Prof. Hong Liang, Texas A&M University; Prof. Viorel Paleu of Gheorghe Asachi Technical University, Romania; Dr. Debdulal Das Indian Institute of Engineering Science and Technology India; Dr. Amar Patnaik Malaviya National Institute of Technology India; Dr. P. Ramkumar IIT Madras India; Dr. G. Rajaram Thejo Engineering Limited India; Dr. G. Rajaram Thejo Engineering Limited India.



< Inaugural function of TRIBOINDIA 2020, presided and honoured by Prof. C. Muthamizhchelvan, Pro Vice Chancellor (E&T), SRMIST; Dr. Barun Chakrabarti, L&T Hydrocarbon and Vice President TSI; Prof. T. V. Gopal, Dean, CET, SRMIST >

4. **Five days workshop on "High-Performance Materials & Applications"**, organized by the Division of Manufacturing, Dep. of Mechanical Engg., SRM IST, Kattankulathur, 02nd – 06th November 2020. Convenor: **Dr. M. Cheralathan**, Co-Convenor: **Dr. U. Mohammed Iqbal**, Co-ordinators: **Dr. I. Infanta Mary Priya, Dr. M. R. Stalin John, Dr. M. Prakash, Dr. A. Arul Jeya Kumar**.
- ❖ **Total registered** (no's) : 176 (Internal: 83; External: 93)
 - ❖ **Chief Guest for inaugural:** Dr. B. Praveen Kumar, ARDE, Pune and presented on "High-Performance Materials for Defence Applications".
 - ❖ **Guest speakers:** Dr. Vijay Petley, GTRE, Pune presented on "Advanced Aero-engine materials: Welding/Composite"; Dr. R. Velmurugan, IIT Madras presented on "Introduction to nanocomposites and its characterization"; Dr. I. A. Palani, IIT Indore presented on "Engineering smart materials for Industry 4.0"; Dr. T. Sundarajan, Head, R&D, Wheel India Ltd., presented on "Materials knowledge for design and development"; Dr. A. S. S. Balan, NIT, Surathkal, presented on "Sustainable machining of high-performance materials"; Dr. S. Aravindhan, IIT Delhi, presented on "Joining of advanced materials"; Dr. Shanmuga Sundaram, DIAT, Pune presented on "Structural high entropy alloys – design, synthesis, and characterizations"; Dr. Mohamed Kamruddin, Associate Director, Accelerator & Nanoscience Group, IGCAR presented on "Novel carbon nanostructures for energy storage application".
 - ❖ **Chief Guest and Speaker for Valedictory:** Dr. Bazil Raj, DRDO, DIAT presented on "Radar materials for stealth application".
5. **Six days FDP on "Recent Advances in Manufacturing Processes and its Research Perspective (RAMPR -2020)"** organized by the Dep. of Mechanical Engg., SRM IST, Kattankulathur 16th – 21st November 2020. Convenor: **Dr. M. Cheralathan**, Co-Convenor: **Dr. U. Mohammed Iqbal**, Co-ordinators: **Dr. N. Harshavardhana, Dr. Deepan Bharathi Kannan T and Mr. J. Santhakumar**.
- ❖ **Total registered** (no's) : 55 (Internal: 23; External: 29)

❖ **Guest speakers:** Dr. Rangasayee Kannan, Postdoctoral Research Associate at Oak Ridge National Laboratory, Alberta, Canada; Dr. Karthic Narayanan R, Visiting Faculty, IIITDM Kancheepuram; Mr. Praveen Sankar, Regional Manager (Engineering), Fronius India Ltd.; Mr. Hari Krishna Devadasan, Sales & Service Engineer, Kemppi India Ltd; Dr. T. Ram Prabhu, Scientist, DRDO, Bangalore; Dr. Senthilkumaran K, Assistant Professor, IIITDM Kancheepuram; Mr. Milind Tavre, Assistant Manager, DCIN/SSD (Drive & Control Academy), Bosch Rexroth India Pvt. Ltd, Bangalore; Dr. I.A. Palani., Associate Professor & Dean Research and Development, Mechatronics and Instrumentation lab, Mechanical Engineering Discipline, Indian Institute of Technology Indore; Mr. K. Bharath Kumar, Senior Manager, Research and Development, Rane NSK Steering Systems Pvt. Ltd., Guduvancherry, Chennai.

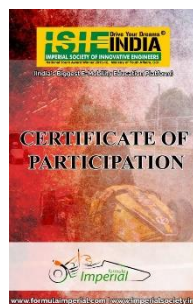
Students Awards/Recognitions

1. **National Winners:** Mr. Ajit S Pathak [Final Year B. Tech Mechanical]; Mr. Rishabh Misra [Final Year B. Tech ECE]; Mr. Shashwat [Final Year B. Tech ECE]; Mr. Adarsh Kumar Singh [Final Year B. Tech ECE] had participated in **Flipkart's GRiD 2.0 Robotics Challenge** and worked on the problem statement "**Autonomous Stair Climbing Robot**" and declared as the **National Winner** from the 6500+ participants to the last nine teams (37 students). Guidance: Dr. Rajesh Agarwal, Assistant Professor, Department of ECE.

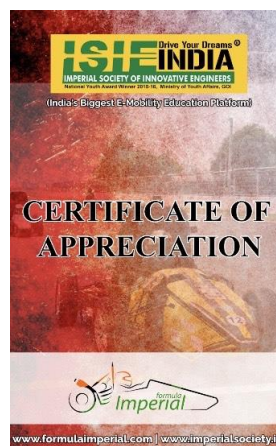


<Mr. Ajit S Pathak [Final Year B. Tech Mechanical] and his team declared as **National Winner @ Flipkart's GRiD 2.0 Robotics Challenge**; for providing a solution on the problem statement "**Autonomous Stair Climbing Robot**" from the 6500+ participants.>

2. **Event Participations:** Mr. Dinnu Bright [Final Year B. Tech Mechanical] & Mr. Yashwanth Kurapati [Second Year B. Tech Mechanical] (Team 1.618) has participated in the final round of "6th edition of formula Imperial 2020" on 7th November 2020 by Imperial Society of Innovative Engineers (ISIE India).
3. **Best Innovation Award:** Mr. Yashwanth Kurapati [Second Year B. Tech Mechanical] (Team 1.618) has won Best innovation, Runner-Up B-Plan & Cost Report, People's Choice Award Winner in the final round of "6th edition of formula Imperial 2020" on 7th November 2020 by Imperial Society of Innovative Engineers (ISIE India).



<Mr. Dinnu Bright & Mr. Yashwanth Kurapati (Team 1.6.18) participated in the Final Round of the 6th Season of Formula Imperial 2020>

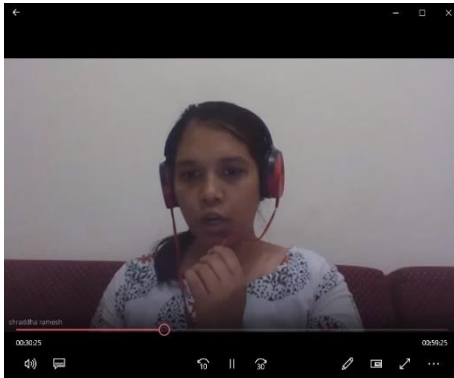


<Team 1.6.18 Best Innovation, Runner Up B-Plan & People's Choice Award in the Final Round of 6th Season of Formula Imperial 2020>



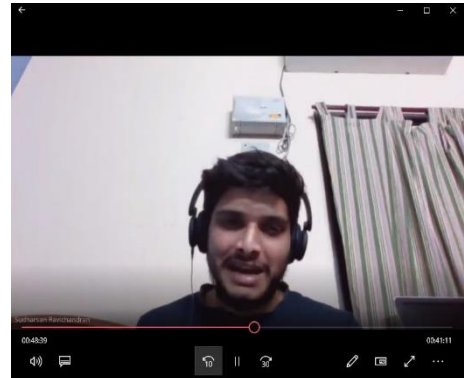
Placement Activities (Connect Session Series)

1. **Connect Session Series 1** arranged with Alumni Speakers working at **L & T Technology Services Ltd.**, as an Associate Engineer – Trainee. Total participant: 98 (Students: 83; Faculty: 11); Alumni speakers: 4 no's. Date: 05th September 2020 (8:00 – 9:30 PM)



Ms. Shraddha R Iyer [2020 Batch]

Associate Engineer – Trainee at L & T Technology Services Ltd.



Mr. R. Sudharsan [2020 Batch]

Associate Engineer – Trainee at L & T Technology Services Ltd.



Mr. T. Keerthi Vasan [2020 batch]

Associate Engineer – Trainee at L & T Technology Services Ltd.



Mr. S. Karthikeyan [2020 batch]

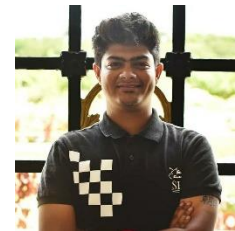
Associate Engineer – Trainee at L & T Technology Services Ltd.

2. **Connect Session Series 2** arranged with Alumni Speakers who are working at **ZS Associates**, as a Business Operations Associate, ZS Associates. Total participant: 225 (Students: 204; Faculty: 21); Alumni speakers: 2 no's. Date: 13th September 2020 (10:00 – 11:30 AM)



Mr. Surendra Singh Taragi [2020 Batch]

Business Operations Associate, ZS Associates



Mr. Aparajito Ganguli [2020 Batch]

Business Operations Associate, ZS Associates

3. **Connect Session Series 3** arranged with Alumni Speakers on preparation ideas for MBA after Engineering. Total participant: 216 (Students: 196; Faculty: 21); Alumni speakers: 2 no's. Date: 07th October 2020 (6:30 – 8:00 PM)



Mr. Sanjay Venkatarraaman [2019 Batch]

Student –II Year, Indian Institute of Management Tiruchirappalli



Mr. Mishu Girdhar [2019 Batch]

Business Development Executive, Unacademy

4. **Connect Session Series 4** arranged with Alumni Speakers who are working at TCS and Infosys Ltd. Total participant: 217 (Students: 196; Faculty: 21); Alumni speakers: 4 no's. Date: 25th September 2020 (6:30 – 8:00 PM)



Mr. Renji John [2019 Batch]
Assistant Systems Engineer, TCS Ltd.,



Mr. Apoorv Singh [2020 Batch]
Assistant Systems Engineer, TCS Ltd.,



Mr. Yajur Nigam [2019 batch]
System Engineer, Infosys Ltd.,



Mr. Mayank Sidana [2019 batch]
System Engineer, Infosys Ltd.,

Alumni Webinars Organized



Mr. Saiduth Ramesh
[2014-2018 Batch]



Mr. Vaibhav Krishna
[2015-2019 batch]



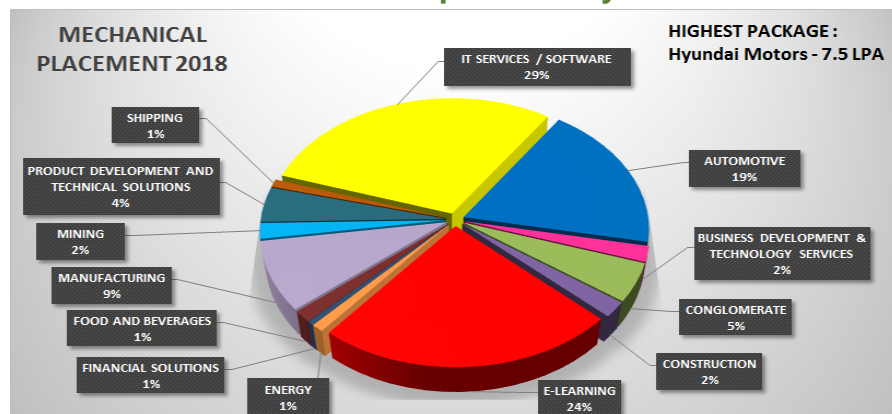
Mr. Sanath Singhal
[2015-2019 batch]



Mr. Shivam Srivastava
[2014-2018 Batch]

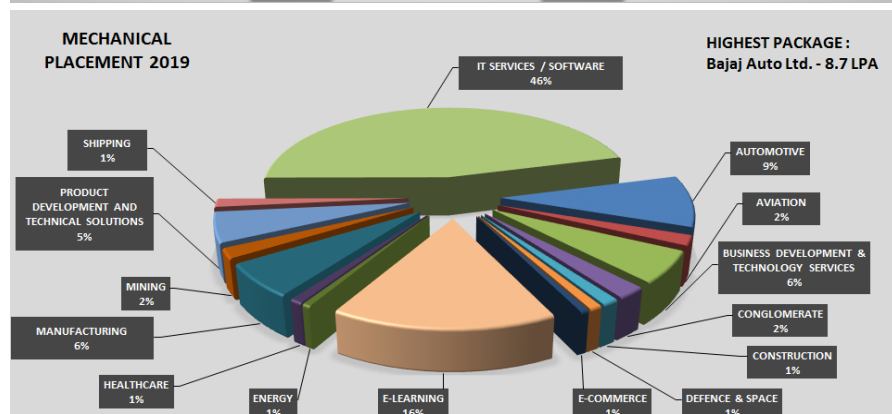
1. Mr. Saiduth Ramesh [2014-2018 batch, B.Tech-Mech] COO and Motorsport Content Lead at SkillShark EduTech delivered a talk on "Application of Mechanical Engineering in Motorsport" on 29th September 2020.
2. Mr. Vaibhav Krishna [2015-2019 batch, B.Tech-Mech], GET, Inline and Field Support and New Project Development, Hyundai Motors India Engineering, Chennai, delivered a talk on "Emission Testing and Control for Bharat Stage – VI" on 11th July 2020.
3. Mr. Sanath Singhal [2015-2019 batch, B. Tech-Mech], Design Drafter, Flowserve Corporation delivered a talk on "Continuous Improvement Program – Time to Change" on 11th July 2020.
4. Mr. Shivam Srivastava [2014-2018 Batch, B.Tech-Mech], Assistant Manager, DRI Mechanical, Jindal Steel and Power Limited, Angul, Odisha, delivered a talk on "Production of Steel through DRI Technology" on 02nd August 2020.

Placement Statistics for the past three years



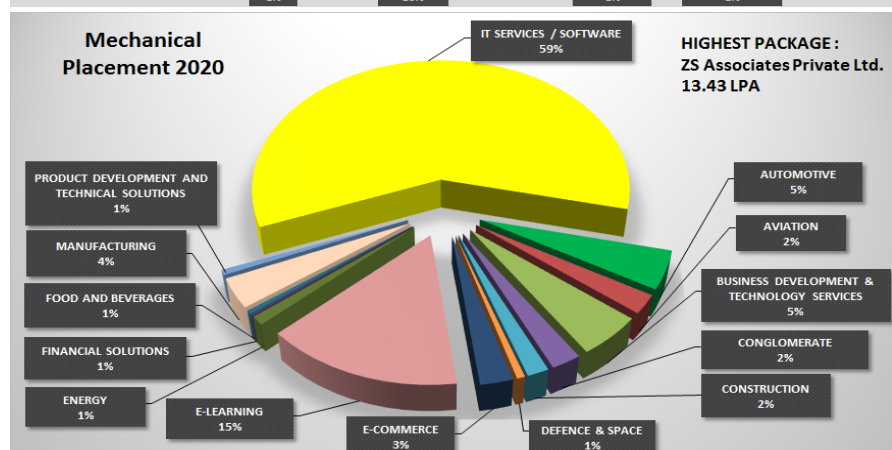
Placement 2018

Highest package: 7.5 LPA from Hyundai Motors



Placement 2019

Highest package: 8.7 LPA from Bajaj Auto Ltd.,



Placement 2020

Highest package: 13.43 LPA from ZS Associates Private Ltd.,

Placement 2021 (ongoing: 1st August 2020 to 27th January 2021):

- ❖ Number of students enrolled: 256
- ❖ No. of Companies visited: 27
- ❖ Number of students placed: 98
- ❖ Total number of offers: 121
- ❖ Five students got placed with a maximum package of 12.5 LPA
- ❖ 72 Students got placed in day 1 and day 2 companies with a package of 3.5 to 3.8 LPA
- ❖ 13 students got placed in core companies with a package of 5 to 9 LPA
- ❖ Ten students got a double offer, three students got a triple offer, and one student got four offer
- ❖ Four interactive (motivation) sessions were conducted for final year students under Connect Series. Resources persons: Alumni students.
- ❖ Notable companies visited: CTS, TCS, Wipro, Infosys, Capgemini, Amazon, ANAND Automotive Pvt. Ltd., Climber Knowledge and Careers Pvt. Ltd., Hero Motorcorp, Hindustan Unilever Ltd., L&T Tech. Services, Practo Technologies Pvt. Ltd., Unschoo, Varroc group, Practo.

Industry-Academia Collaboration

1. **MoU Signed:** A MoU is signed between **SRM IST** and **Rane NSK Steering Systems Pvt., Ltd.**, Guduvancherry, Chengalpattu District on 07th October 2020. Co-ordinators: **Dr. U. Mohammed Iqbal** (SRM IST) & Mr. K. Bharath Kumar (Rane NSK). **Purpose:** Project collaboration, Internship, Placement, Industrial visit, Consultancy, FIIP, and Post-doc Assistance and Training. Following are the collaborative activities carried out so far:

- ❖ A team of 40 members (faculty, students, and research scholars) visited Rane NSK limited on 19th November 2019, as a part of a two days workshop on recent trends in Sustainable Green Manufacturing organized by the Department of Mechanical Engineering, SRMIST.
- ❖ A faculty of SRMIST, **Mr. S. Muralidharan**, Assistant Professor, Department of Mechanical Engineering, has been offered FIIP in Rane NSK Ltd., Guduvancherry, for 15 days in December 2019.
- ❖ A consultancy project for **Rs. 82,600** was received from Rane and completed by **Dr. Shubrajit Bhaumik**, Asst. Professor, Department of Mechanical Engineering on 23-5-2020 in Tribology area.
- ❖ Two students (Mr. M. Sanjay, 2nd Year M. Tech - CAD, and Mr. G. Saravanan, 2nd Year M. Tech - CIM) got internship projects for one year from June 2020 to May 2021.
- ❖ Two more new project collaborations are initiated and are in progress. Many more collaborative activities are now possible with this MoU, such as industry-sponsored lab facilities, industry-funded projects, etc.

2. **SRM IST and Wagner High-Quality Lubricants, Germany** doing collaborative research activity on “Nano-lubricants – the next-generation lubricant.” Collaborators: **Dr. Shubrajit Bhaumik** (SRM IST) & Dr. Walter Wagner and Dr. Aruphan Mukherjee (Wagner High-Quality Lubricants, Germany).

- ❖ The present work investigated the tribological properties of greases containing MoS₂ and Microceramic nano additives using a four-ball tribometer. The anti-wear tests were conducted at 750N, 1200rpm while ASTM D 2596 was followed to investigate the extreme pressure properties of the greases. The compiled results of the greases were compared with a commercially available Roll Neck Bearing grease. It was observed that the frictional coefficient and the wear scars in anti-wear tests of MoS₂ and Microceramic nano additives added grease (LI 400 and LI 200) was similar; however, commercially available KH 100 and CG exhibited low frictional coefficient than MoS₂ and Microceramic nano additives added grease, however, the Microceramic nano additives added greases exhibited an exceptional enhanced extreme pressure property as compared to MoS₂ grease, KH 100 and CG. The weld load of micro ceramic added greases were 8000N for LI 400 and 5000N for LI 200 while the weld load of the MoS₂ grease was 4000N and 2000N for both KH 100 and CG, thus indicating a high load-bearing capacity in case of Microceramic nano additives added greases (highest in LI 400 followed by LI 200) than MoS₂. The least weld load was for KH 100 and CG which was about 2000N. It is to be noted that the wear scars for CG was much higher than KH 100 at extreme pressure conditions, indicating lower load-bearing capacity of CG than KH 100, and also indicating the last non seizure load to be much less than KH 100. Thus, even though the weld load was similar for both KH 100 and CG, high wear scars prevailing in CG indicate plausible high metal to metal contact at high loads.

3. Board of Directors of ACeS, the Board of Directors of AIST, the Board of Trustees of ASM International, and the Board of Directors of TMS have granted a “CHARTER” for the establishment and conduct of a **Material™ Advantage Student Chapter** at SRM IST, Kattankulathur. The purpose of Material™ Advantage (The Student Program for Materials Science and Engineering) is to create a connection with premier institutes and industries; scholarships to attend conferences abroad; associating with 4 partnering international association. **Coordinator: Dr. Shubrajit Bhaumik** (SRM IST)



< Material™ Advantage Student Chapter >



< Members of Material™ Advantage Student Chapter >



Consultancy Work Completed

1. **Dr. Shubrajit Bhaumik** received a project titled "Understanding the wear properties of the industrial greases received from the field" from **Rane NSK Ltd.**, **Project Worth: Rs. 1,50,000/-**.
2. The Department received **Rs 6490/-** through Rane NSK Ltd's consultancy activity for utilizing our facilities in Metallurgy Lab. **Mr. D. Selwyn Jebadurai** coordinates this consultancy work.
3. The Department received **Rs 38232/-** from NIFT, Chennai, for consultancy activity provided on Robotics and Automation. **Dr. S. Prabhu, Dr. S. Murali, and Mr. Ch. Vasanth Kumar** coordinates this consultancy work.
4. The Department received **Rs 38232/-** from NIFT, Hyderabad, for consultancy activity provided on Robotics and Automation. **Dr. S. Prabhu, Dr. S. Murali, and Mr. Ch. Vasanth Kumar** coordinates this consultancy work.

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4. **Sethuramalingam Prabhu**, JRV Sai Kiran, Uma Mohan. A method for optimizing the process of robotic nano spray painting and a controller thereof. Application Number: 202041052747, Filed on 03/12/2020 and Published: 11/12/2020.
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14. **G. Balaji**, **K. Suresh Kumar**, **M. Cheralathan**. A Catalyst Composition for Reducing Emission and a Process for its Preparation. Application Number: 202141002211A, Filed on 18/01/2021 and Published: 22/01/2021.
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72. **Thavamani Jeyaraj, Kumar Pankaj**, "Numerical analysis of rectangular minichannels by using different mass flux and heat flux", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
73. **V.Praveena**, Akshaykumar U, Nishad T, "Experimental study on alcohol fumigation in a CI engine energized with waste cooking oil", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
74. Hemant Chatterji, Amit Varakhedkar [Passed out B.Tech Mechanical] and **Rajendran Senthil Kumar**, "Convective heat transfer effects on a circular cylinder partially covered with porous media", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
75. Varun Viswanathan, Amit Varakhedkar [Passed out B.Tech Mechanical] and **Rajendran Senthil Kumar**, "Natural convective heat transfer effects on a circular cylinder covered with porous media", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
76. Akash Pravinkumar Patel[Passed out B.Tech Mechanical], Divyang Bhatnagar [Passed out B.Tech Mechanical], Shaik. Subhani [Passed out M.Tech. solar energy], **Rajendran Senthil kumar**, "Numerical study on double slope solar still with positive and negative slope", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
77. Pelluru Suresh, **V Mathan Raj**, "Performance and emission characteristic studies on crdi diesel engine fuelled with jatropha green diesel, International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
78. **V. Praveena**, Udayan Sharma, Sanjay Kumar Prajapat, "Effect of injection timing on alcohol-biodiesel-diesel ternary blends in a CI engine", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.

79. **S. Arul kumar, V. Mathanraj**, "Experimental investigation of heat transfer of concentric triple pipe heat exchanger coupled with blossom fins", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
80. **A. Sathishkumar**, Mrithul S, K S Aditya Kashyap and **M. Cheralathan**, "Analysis on thermal transport properties of carbon based NFPCM in different concentrations for CTES applications, International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
81. **G. Balaji**, M. Karthik, G. Dinakaran, P. Vasanth Kumar, "Experimental investigation of plastic oil blends on crdi engine for various fuel injection pressures", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
82. Chinmaya Rath, Mukund Gupta, Nilanshu Ghosh, **Ramalingam Senthil**, "Exergetic optimization of a concentrated solar receiver with latent heat storage", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
83. **P Sundaram** and A Kalaiselvan, "Study on solidification characteristics of di-water based phase change material for cooling applications", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
84. **P Sundaram** and A Kalaiselvan, "Experimental investigation of thermal storage system for milk cooling application", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
85. S. Premkumar, **G. Balaji**, "Study on efficient removal of NO from CI engine exhaust gas by wet scrubbing method using NaOH solution", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
86. S. Chandra Sekhar, **K. Sathiyamoorthy**, M. Sreenivasulu, M. Venkatesan, "Effect of performance and emission characteristics on the direct injection diesel engine fueled with bio-diesel blends using metal oxide nanoparticles", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
87. **K. Sathiyamoorthy**, B. Gokula Krishnan, R. Gautham Kumar, A. Naren, "Numerical and experimental analysis of vertical axis wind turbine for NACA0018", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
88. **Mathanraj Vijayaragavan**, Ganapathy Subramanian Lalgudi Ramachandran, **Panneer Selvam Srinivasan**, "Effect of EGR In compression ignition engine with simarouba oil and hydrogen as alternate fuel in dual fuel technique", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
89. **P. Udayakumar, G.Kasiraman**, "Experimental Investigation Of Performance And Emission Characteristics Of Ci Engine Fuelled With Linseed Oil With Di-Methyl Carbonate," International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
90. **Panneerselvam S, Mathanraj V**, Experimental investigation of performance and emission characteristics of CI engine fuelled with linseed oil with methanol additives", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
91. **P Sundaram** and A Kalaiselvan, "Study on solidification behaviour of heat exchanger with pcm encapsulated spherical container for space cooling applications, International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
92. R. Sathish Kumar, **G. Balaji, M. Cheralathan, K. Sureshkumar**, "Reduction of carbon dioxide emission from diesel engine fuelled with plastic pyrolytic oil using modified charcoals", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
93. **R K Barathraj, R Senthil kumar**, Mini and micro channel heat exchangers in solar thermal systems: A review", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
94. Niank Shah, **C. Selvam, S. Manikandan**, "Application of phase change material in thermal energy systems and overview: a review paper", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
95. B. Sabarish, **M. Cheralathan**, "Comparative study on phase change material based thermal energy storage for onboard ship and building cooling application," International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
96. **K.Sathiyamoorthy**, R. Rajendran, S Chandra Sekhar, "experimental analysis of wind turbine of high- speed air available from industrial exhaust of rectangular flat blade", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
97. **Mr. M. Dhanasekaran**, "Experimental Studies on Mechanical Behaviour of Titanium Aluminide at Eutectoid Transformation," International Conference on "Advancement and Futuristic Trends in Mechanical and Materials Engineering (AFTMME-20), Organized by Society of Materials & Mechanical Engineers, 19-20 December 2020
98. **Dr. I. Infanta Mary Priya**, "Tribo-mechanical behavior assessment of magnesium-based fibre metal laminates" TRIBOINDIA 2020, organized by Department of Mechanical Engineering, SRMIST, under the aegis of Tribology Society of India from 10th December to 12th December 2020 at SRMIST.

Guest lecture delivered by our faculty

1. **Dr. T. V. V. L. N. Rao** delivered an invited talk on "Analysis of Slip Texture Configuration in Bearings" at One Week Short Term Course (STC) on Tribology for Sustainable Development (20th -24th July), 2020.

2. **Dr. Jitendra Kumar Katiyar** delivered an expert lecture in an online AICTE sponsored Short Term Training Program (STTP) series on RECENT ADVANCES IN TRIBOLOGY and SURFACE ENGINEERING, Department of Mechanical Engineering, Saintgits College of Engineering, Kottayam, Kerala, 14th -19th September 2020.
3. **Dr. Jitendra Kumar Katiyar** delivered an expert talk on Composite Materials for Various Engineering Applications in a 2-week workshop on Recent Developments of Nanocomposites and smart materials in the Aerospace Industry, Marri Laxman Reddy Group of Institutions, Hyderabad, 9th September 2020.
4. **Dr. Jitendra Kumar Katiyar** delivered an expert talk on Fundamentals of Surface Engineering and Its Applications in FDP on Researches in Surface Engineering for Reliable Tribology, Girijananda Chowdhury Institute of Management and Technology (GIMT), Guwahati, Assam, 1st September 2020.
5. **Dr. Jitendra Kumar Katiyar** delivered an expert talk on MEMS Tribology in Faculty Development Program on Recent Research Trends in Tribology, Girijananda Chowdhury Institute of Management and Technology (GIMT), Guwahati, Assam, 5th August 2020.
6. **Shubrajit Bhaumik** delivered a lecture on "Surface Characterization of Lubricated Surfaces," 6-Day AICTE Sponsored STTP on Recent Advances in Tribology and Surface Engineering: Surface Characterization and Treatments in Tribology, November 23-28, 2020, SAINTGITS COLLEGE OF ENGINEERING, Kottayam, Kerala.
7. **Dr. Jitendra Kumar Katiyar** delivered an expert talk on Tribo-mechanical Properties of Self-lubricated SU-8 Composites for MEMS Application in 9th China International Conference on Tribology (CICT 2020) Chengdu, China, 15 September- 18 September 2020.
8. **Dr. Jitendra Kumar Katiyar** delivered an expert talk on Wear Monitoring in Manufacturing in One Week AICTE-ATAL Academy Sponsored Short Term Training Program on Mechanical Manufacturing & Monitoring using MATLAB (MMM-2020), organized by in Visvesvaraya National Institute of Technology, Nagpur, December 14-18, 2020.
9. **Dr. Jitendra Kumar Katiyar** delivered an expert talk on Influence of Reinforcement on Composites Properties for Structural Application of Aircraft in 6 days online short time training program (STTP) on the title Advancements in Aerospace Materials: Modeling, Testing and Manufacturing to be sponsored by Center for Faculty Development Anna University, Chennai, organized by Hindusthan College of Engineering and Technology, Coimbatore, 7-12 December 2020.
10. **Dr. Jitendra Kumar Katiyar** delivered an expert talk on Surface Characterization and Treatments in Tribology, Department of Mechanical Engineering, SAINTGITS College of Engineering, Kottayam, Kerala, 23 -28 November 2020.
11. **Dr. Jitendra Kumar Katiyar** delivered an expert talk on the Influence of hybrid nanoparticle additives on lubricants' tribological properties in turning operations in 5 days AICTE ATAL Academy Sponsored Online Faculty Development Program on Green Technology & Sustainability Engineering organized by GITAM School of Technology, Bengaluru, 16 - 20 November 2020.
12. **Dr. Jitendra Kumar Katiyar** delivered an expert talk at the 1st International Conference on Future Trends in Materials and Mechanical Engineering (ICFTMME-2020), organized by SRM Institute of Science and Technology Delhi NCR Campus, Ghaziabad, 6-7 November 2020 through online mode.
13. **Dr. S. Murali** delivered a motivational, technical talk titled "Importance of Core Engineering" in Induction Program Organized by Department of Mechanical Engineering, Dr. Mahalingam College of Engineering Technology, Pollachi, 24th November 2020.
14. **Dr. U. Mohammed Iqbal** delivered a technical talk titled "Research Aspects On Novel Metal Forming Techniques" in Two days Online International Seminar on "Recent Research Advances and Emerging Technologies in Mechanical Engineering" Organized by the Department of Mechanical Engineering, Integral University, Lucknow, 27th November 2020.
15. **Dr. S. Datta** delivered a Keynote lecture titled "Artificial Intelligence for Designing Materials with Improved Performance" at the 9th International Workshop on Soft Computing Applications (SOFA 2020) organized by "Aurel Vlaicu" University of Arad, Romania. 27-29 November 2020
16. **Dr. R. Senthil** delivered a lecture on "Research Perspective in Solar Energy" at Galgotia University, Bhopal, 28th August 2020.
17. **Dr. R. Senthil** delivered a lecture on "Energy Storage Characteristics, Surface treatment, Durability, Sustainability and Micro Structural Evaluation of Smart and Phase Change Materials and its Application" in the AICTE-Short terms training program, 30th July 2020.
18. **Dr. R. Senthil** delivered a lecture on "Utilization of PCM in Solar Thermal Energy Storage" in six-days AICTE sponsored STTP on Thermal Energy Storage at Sairam Institute of Technology, Tambaram West, Chennai, 14th September 2020.
19. **Dr. R. Senthil** delivered a lecture on "Project-based Learning-Staff perspective" in six-days AICTE sponsored STTP on "Enhancing Research and Development through Project-based Learning to achieve outcome-based education in engineering" at Sri Krishna College of Technology, Coimbatore, 24th October 2020.
20. **Dr. R. Senthil** delivered a lecture on "Project-based Learning" in Sri Krishna College of Technology, Coimbatore, 08th December 2020.
21. **Dr. R. Senthil** delivered an invited talk on "SDG 7: Affordable and Clean Energy: Effective Utilization of Solar Energy using Thermal Energy Storage," Organized by the Centre for Environmental and Nuclear Research, SRMIST, 21st November 2020.
22. **Dr. T. Lakshmanan** delivered a lecture on "Solar Collectors and its Research Perspective" in ATAL AICTE FDP at Velammal Engineering College, Chennai, 19 September 2020.
23. **Dr. S. Prabhu** delivered a lecture on "Multi-objective optimization using Grey relational and TOPSIS Technique" in the AICTE sponsored STTP on "Innovative Techniques for Sustainable Energy Development through Modeling of Mechanical Processes – (SERIES-II)" at the Department of Mechanical Engineering, KLN College of Engineering, Madurai, 19th September 2020.
24. **Mr. C. H. Vasanth Kumar** delivered a lecture on "IoT enabled smart homes and indoor environment" through Engineers without Borders, India, SRM IST, Kattankulathur Chapter on 11 November 2020.
25. **Dr. T. Lakshmanan** delivered the lecture in the topic "Blooms taxonomy based assessment " through online webinar in Velammal Institute of technology, Pancheti on 09-01-2021

Awards/Recognitions (Faculty)

1. Invited Speaker: **Dr. Sumit Pramanik** invited as speaker for the International Conference & Exposition on Mechanical, Material and Manufacturing Technology (ICE3MT2020), 9-10th October, 2020, Organized by CVR COLLEGE OF ENGINEERING, Hyderabad.
2. Guest Editor: **Dr. S. Prabhu** appointed as a "Guest Editor" for the "Journal of Thermal Analysis and Calorimetry (JTAC) with indexed in SCI (IF: 2.731)
3. International Ambassador: **Dr. Shubrajit Bhaumik** appointed as "International Ambassador" by Surface Ventures, United Kingdom.

4. Guest Editor: **Dr. Shubrajit Bhaumik** appointed as "Guest Editor" for the special issue "Tribological Properties of 2D Materials and Liquid Crystals", in the Journal "Crystal" with indexed in SCIE (IF: 2.404).
5. Expert Member: **Dr. S. Datta** is selected as an expert member for the PROJECT MONITORING AND REVIEW COMMITTEE of DRDO Young Scientists' Laboratory for Smart Materials (DYSL-SM), Hyderabad.
6. Collaboration: Engineers without Borders (EWB), SRM IST, Kattankulathur chapter started the collaboration with EWB Srilanka Team.
7. Excellence in Reviewing: **Dr. R. Senthil** received a certificate of "Excellence in Reviewing" from the Journal of Engineering Research and Reports, 23rd September 2020.
8. Best Academician Award: **Dr. R. Senthil** received an award for the "SAS Best Academician Awards 2020 (Engineering Category)" from the SAS Society, 03rd August 2020.
9. Coordinator: **Dr. R. Senthil** was appointed as the Coordinator for Solar Energy Society of India (SESI) - SRMIST Regional Chapter.
10. Chief Guest: **Dr. R. Senthil** acted as Chief-Guest for the inauguration of 6 days AICTE sponsored STTP on Enhancing Research and Development of Project-Based Learning at Sri Krishna College of Technology, Coimbatore, 02nd November 2020.
11. Reviewer & Examiner: **Dr. R. Senthil** evaluated and acted as an external examiner of a PhD. Thesis of Sri Satya Sai University of Technology and Medical Sciences, Bhopal, Madhya Pradesh.
12. DC Member: **Dr. R. Senthil** acted as DC member for the first DC meeting at Government Engineering College, Bargur, Krishnagiri on 27.01.2021.
13. Member of Advisory Committee: **Dr. R. Senthil** acted as an Advisory Committee Member for International Conference on Recent Advances in Renewable Energy Sources 2021, 26-27 February 2021, Organized by Government Engineering College Banswara, Rajasthan.
14. Session Chair: **Dr. U. Mohammed Iqbal** served as one of the Session chairs in the International Conference on "EMERGING TRENDS IN DESIGN, MANUFACTURING, MATERIALS AND THERMAL SCIENCES (ETDMMT 2020), Department of Mechanical Engineering B.S. Abdur Rahman Crescent Institute of Science, Chennai, Tamilnadu, India 24th September 2020.
15. Session Chair: **Dr. U. Mohammed Iqbal** acted as one of the Session chairs in the virtual International Conference on tribology, TRIBOINDIA 2020, organized by the Department of Mechanical Engineering, SRMIST, Kattankulathur, 10th December 2020.
16. Session Chair: **Dr. Sumit Pramanik** acted as one of the Session chairs in the International Conference & Exposition on Mechanical, Material and Manufacturing Technology (ICE3MT2020), 9-10th-October-2020, Organized by CVR COLLEGE OF ENGINEERING, Hyderabad.
17. Reviewer: **Dr. S. Prabhu** received reviewer appreciation from the 13th International UNIMAS Engineering Conference 2020 (EnCon 2020) organizers, held from 27-28 October 2020 (Online) by UNIMAS, Sarawak, Malaysia.
18. Reviewer: **Dr. S. Murali** received reviewer appreciation from the 13th International UNIMAS Engineering Conference 2020 (EnCon 2020) organizers, held from 27-28 October 2020 (Online) by UNIMAS, Sarawak, Malaysia.
19. Session Chair: **Dr. S. Murali** served as one of the Session chairs in the International Conference on Applications in Computational Engineering and Sciences (IconACES 2020), 30-31 October 2020, VIT Chennai.
20. Session Chair: **Dr. T. Rajasekaran** acted as one of the Session chairs in the AICTE Sponsored 3rd (Virtual) International Conference on Materials, Manufacturing and Mechanical Engineering for Sustainable Developments (ICMSD2020) is organized by the Department of Mechanical Engineering of Sri Sai Ram Institute of Technology, 19th – 20th November 2020.
21. Session Chair: **Dr. I. Infanta Mary Priya** served as one of the Session chairs in the First International Conference on Advances in Renewable and Sustainable Energy System (ICARSES 2020), Department of Mechanical Engineering, SRM IST, Kattankulathur, 03-05 December 2020.
22. E-lab content prepared: **Dr. A. Vijaya** created the video e-lab content on a profile projector experiment for the Metrology lab.
23. Appreciation: **Mr. S. Shakthivel** received a certification of appreciation from School of Mechanical and Chemical Engineering and Chemical Engineering of Wollo University, Ethiopia in association with University- TVET-Industry-Institution linkage for participating International Level Quiz on Automobile Engineering, 24th December 2020.
24. Reviewer: **Dr. S. Manikandan** received the offer to evaluate a Ph.D. thesis from the University of Malta, European Union, October 2020.
25. Best Paper Award: **Ambigai. R, Prabhu. S**, "Centrifugal Casting and Characterization of Functionally Graded LM6 Alloy" International conference on Materials, Manufacturing, and Machining for Industry 4.0 (ICMMM 2.0), organized by the Department of Mechanical Engineering, Bannari Amman Institute of Technology, Sathyamangalam 9th to 10th August 2020.
26. Best Paper Award: **M.D. Kathir Kaman, M. Cheralathan**, "Experimental investigation on thermal properties of graphene-based nanofluids for cooling applications," International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
27. Best Paper Award: **R. Sathish Kumar, G. Balaji, M. Cheralathan, K. Sureshkumar**, "Reduction of carbon dioxide emission from diesel engine fuelled with plastic pyrolytic oil using modified charcoals," International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
28. Best Paper Award: **Chinmaya Rath, Mukund Gupta, Nilanshu Ghosh, R. Senthil**, "Exergetic optimization of a concentrated solar receiver with latent heat storage," International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
29. Best Paper Award: **Avipsita Das, V. Thirunavukkarasu, M. Cheralathan**, "Desiccant materials for the production of water from humid air using concentrated solar power," International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
30. Best Paper Award: **Joji Johnson, S Manikandan** "Solar radiation model of bifacial photovoltaic module for tropical latitude zone" International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
31. Best Paper Award: **V. Mathan Raj, Akshay Manoj**, "Improvement in performance and combustion of Crdi engine with Simarouba blended fuel as an alternative fuel", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.

32. **Best Paper Award:** V. Rajasekar, C. Prabhu, T. Prakash, "Experimental investigation on the performance and emission characteristics of a crdi engine with lemon grass oil and orange oil blends," International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
33. **Best Paper Award:** M. Gunasekaran, Rinku Mukherjee "Analysis of aerodynamic hysteresis in echelon formation", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.
34. **Best Paper Award:** N. Vijay Krishna, S. Manikandan, C. Selvam "The state of the art review on thermal management techniques for the thermoelectric cooler", International Conference on Advances in Renewable and Sustainable Energy Systems, Department of Mechanical Engineering (ICARSES), SRM IST, Kattankulathur, 3rd – 5th December 2020.

Short-term Workshop / Seminar / Webinar / FDP organized

1. **Webinar on "Framing Approach Note for Industrial Consultancy: Key Learnings,"** jointly organized by the Dep. of Mechanical Engg., SRM IST, Kattankulathur & The Institution of Engineers (India) Kattankulathur Local Centre, 05th September 2020. Co-ordinator: **Dr. T. Deepan Bharathi Kannan.**
2. **Six days workshop on "New Product Development and Entrepreneurship opportunities,"** jointly organized by the Dep. of Mechanical Engg., SRM IST, Kattankulathur and Binghamton University, New York, USA, 07th – 12th September 2020. Co-ordinator: **Mr. E. Vijayaragavan.**
3. **Webinar on "Research Methods in Industry along with Industry 4.0,"** by Dr. Tilak Raj Gupta jointly organized by the Mechanical Engineering Association (MEA) of Dep. of Mechanical Engg., SRM IST, Kattankulathur & The Institution of Engineers (India) Kattankulathur Local Centre, 14th September 2020. Co-ordinator: **Dr. A. Vijaya.**
4. **Webinar on "Role of Engineers in the Indian Army"** by Major General Raju K Subramani, Indian Army organized by the Dep. of Mechanical Engg., SRM IST, Kattankulathur 15th September 2020. Co-ordinator: **Mr. E. Vijayaragavan.**
5. **Three days workshop on "Modern Foundry Practices in Industry"** organized by the Division of Manufacturing, Dep. of Mechanical Engg., SRM IST, Kattankulathur, 15th – 17th September 2020. Co-ordinators: **Dr. Shubhabrata Dutta, Mr. M. Dhanasekaran, Mr. S. Sasikumar.**
 - ❖ **Total registered** (no's) : 40 (Internal: 24; External: 16)
 - ❖ **Guest speakers:** Dr. K. H. Renukananda, Senior Design Engineer, GROHE Team, EASi, Allgis Group, Koramangala, Bangalore presented on "Importance of Casting Simulation in Design, Problem Solving, and Research"; Dr. V. S. Saravanan, General Manager, Indo Shell Cast Private Limited, Coimbatore presented on "Recent Trends and Development in Indian Foundry Industry"; Mr. A. Jeyabal, Head, Foundry Division, Ashok Leyland Limited, presented on "Impact of Foundry in Automotive Industry"; Mr. RS. Ramanujam, Deputy General Manager (Operations), Sundaram Fasteners Ltd., Autolac division (Foundry), SIPCOT, Gummidipoondi presented on "Insights into the process of Lost foam and 3D printing"; Dr. Himanshu Khandelwal, Department of Foundry Technology, National Institute of Foundry & Forging Technology, Ranchi presented on "Industry 4.0 in Foundry Industries"; Prof. P. P. Chattopadhyay, Director, National Institute of Foundry & Forging Technology, Ranchi presented on "A Roadmap of Foundry Technology Towards Industry 4.0"; Mr. N. Visvanathan, Chief Executive Officer, Ammarun Foundries, Coimbatore presented on "Clean, Green and Zero waste discharge foundry".
6. **Guest lecture on "Innovations in India – The way forward"** by Dr. Sathya Prasad Mangalaraman, Vice President – Product Development, Ashok Leyland organized by the Dep. of Mechanical Engg., SRM IST, Kattankulathur 19th September 2020. Co-ordinator: **Mr. E. Vijayaragavan.**
7. **Webinar on "Realising mechanisms behind machines"** by Mr. Tamizh Inian, Founder – Frigate organized by the Dep. of Mechanical Engg., SRM IST, Kattankulathur 25th September 2020. Co-ordinator: **Mr. E. Vijayaragavan.**
8. **Webinar on "TRIBOLUB CONNECT" & "Lubrication in Steel Industries"** by Wagner German Oils, Germany organized by the Department of Mechanical Engineering, SRM IST, Kattankulathur, 26th September 2020 and 28th September 2020. Co-ordinator: **Dr. Shubrajith Bhaumik.**
9. **Webinar on "Introduction to Stock Market and Investments"** by Mr. Inian Xavier, SRM Alumnus & Founder Director – Eminent Systems and Services Private Limited organized by the Dep. of Mechanical Engg., SRM IST, Kattankulathur 02nd October 2020. Co-ordinator: **Mr. E. Vijayaragavan.**
10. **Three days workshop on "Rotors and Bearing Systems (RBS 2020)"** organized by the Dep. of Mechanical Engg., SRM IST, Kattankulathur, 24th – 26th November 2020. Co-ordinators: **Dr. C. Sharavankumar and Mr. Arokya Agustin.**
11. Engineers without Borders, India, SRM IST, Kattankulathur Chapter, organized "Charity tournament (Valorant) play for a cause" on 11th December 2020.

Events attended by Students

1. Ms. R. V. Nanditta [Third Year B. Tech Mechanical] attended an online non-credit course on Initiating and Planning Projects by the University of California Irvine on 29th July 2020.
2. Ms. R. V. Nanditta [Third Year B. Tech Mechanical] attended an online non-credit course on Fundamentals of Fluid Power by the University of Minnesota on 12th March 2020.
3. Ms. R. V. Nanditta [Third Year B. Tech Mechanical] attended an online non-credit course on Fundamentals of waves and vibrations by Ecole Polytechnique on 04th April 2020.
4. Mr. R K R Mallolan [Third Year B. Tech Mechanical] attended a CADD Training Program by CADD Centre on 17th December 2019.
5. Mr. Kunal Goyal [Third Year B. Tech Mechanical] attended a Workshop on Challenges and Opportunities with Hybrid Electric Vehicles by SRM IST AARUUSH 2020, on 13th June 2020.

6. Mr. G. Aswath [Third Year B. Tech Mechanical] attended a Workshop on Advanced Energy Conversion Technologies by SRM IST from 27 - 31 May 2020.
7. Mr. G. Aswath [Third Year B. Tech Mechanical] Participated in SAE Auto Quiz 2020 by Vadapalani, SRM IST, on 19th May 2020.
8. Ms. Saloni Gupta [Third Year B. Tech Mechanical] attended a Training Program on Introduction to Artificial Intelligence by Simple Learn on 18th May 2020.
9. Ms. Saloni Gupta [Third Year B. Tech Mechanical] attended a Workshop on Advanced Energy Conversion Technologies by SRM IST from 27 - 31 May 2020.
10. Mr. Tanay Surekha [Third Year B. Tech Mechanical] attended an online workshop on IC Engine Dismantling and Designing by Axpino Technologies on 19th July 2020.
11. Mr. Cembeti TharunKumar [Third Year B. Tech Mechanical] attended an online workshop on New Product Development & Entrepreneurship Opportunities (NPD&EO) by Centre for Lean And Six Sigma (CLASS), from 07 – 12 September 2020.
12. Mr. Yashwanth [Third Year B. Tech Mechanical] attended an online workshop on Crash Course on Python by Google from 27th July to 7th September 2020.
13. Mr. Ritik Nair [Third Year B. Tech Mechanical] attended an online non-credit course on Fundamentals of waves and vibrations by Ecole Polytechnique on 04th April 2020.
14. Mr. Aneth Ram. C [Third Year B. Tech Mechanical] attended a workshop on Modern foundry practices in industries by SRM IST, from 03-05 October 2020.
15. Mr. Arjun R Nair [Third Year B. Tech Mechanical] attended a workshop on Fundamentals of Surface Engineering by NPTEL from 14th September to 19th December 2020.
16. Mr. Neelesh Edupuganti [Third Year B. Tech Mechanical] attended a workshop on Advanced Engineering Systems in Motion: Dynamics of Three Dimensional (3D) Motion by Coursera, from 28th July to 07th September 2020.
17. Mr. Aditya Vijay Singh [Third Year B. Tech Mechanical] attended a workshop on Digital Manufacturing and Design by Coursera, from 09th to 22nd July 2020.
18. Mr. Dheeraj Sai D V [Third Year B. Tech Mechanical] attended a workshop on Automotive Body in White (BIW) by Skyy Rider Institutions, from 05th to 06th September 2020.
19. Mr. Aryan Sharma [Third Year B. Tech Mechanical] attended a Capability Development workshop by Tata Steel from 28th May to 14th June 2020.
20. Mr. Sai Satyaprakash Nayak [Third Year B. Tech Mechanical] attended a workshop on Basic Automobile Familiarisation by Ashok Leyland & Skyy Rider Institutions from 28th September to 07th October 2020.
21. Mr. Sai Satyaprakash Nayak [Third Year B. Tech Mechanical] attended a workshop on Modern foundry practices in industries by SRM IST, from 03-05 October 2020.
22. Mr. Sai Satyaprakash Nayak [Third Year B. Tech Mechanical] attended a workshop on Car Designing Concepts by Axpino Technologies on 23rd August 2020.
23. Mr. Sai Satyaprakash Nayak [Third Year B. Tech Mechanical] attended a workshop on ABS, EBD & ESP- Safety Features in Vehicles by Skyyrider institutions on 11th August 2020.
24. Mr. Sai Satyaprakash Nayak [Third Year B. Tech Mechanical] attended a workshop on Electric Power Systems by Coursera from 1st to 29th May 2020.
25. Mr. Sai Satyaprakash Nayak [Third Year B. Tech Mechanical] attended a workshop on Industry 4.0 by the TATA Capability development program from 1st to 7th July 2020.
26. Mr. Tanmay Katoch [Third Year B. Tech Mechanical] attended a workshop on AUTOCAD training by Internshala Trainings from 15th March to 26th April 2020.
27. Mr. Tanmay Katoch [Third Year B. Tech Mechanical] attended a workshop on Power generation through hydro and solar energy by the National power training institute from 8th to 26th June 2020.
28. Mr. Vedant Srivastava [Third Year B. Tech Mechanical] attended a workshop on Advanced Automobile Familiarization by Ashok Leyland Ltd. & Skyy Rider Institutions from 21st September to 07th October 2020.
29. Mr. Vedant Srivastava [Third Year B. Tech Mechanical] attended a workshop on Excel for Beginners: Functions, formulas, shortcuts, and more by Udemy on 18th July 2020.
30. Mr. Vedant Srivastava [Third Year B. Tech Mechanical] attended a workshop on Complete Machine Learning by Udemy on 16th May 2020.
31. Mr. Vedant Srivastava [Third Year B. Tech Mechanical] attended a workshop on Compressor by Tata Steel on 12th May 2020.
32. Mr. Vedant Srivastava [Third Year B. Tech Mechanical] attended a workshop on AI for Everyone by Stanford University from 1st July to 31st August 2020.
33. Mr. Vedant Srivastava [Third Year B. Tech Mechanical] attended a workshop on Step into Robotic Process Automation by GUVI on 5th October 2020.
34. Mr. Vedant Srivastava [Third Year B. Tech Mechanical] attended a workshop on Heat Treatment of Steel by Tata Steel on 13th May 2020.
35. Mr. Adithya A [Third Year B. Tech Mechanical] attended a workshop on Solidworks: Become a Certified Associate Today (CSWA) by Udemy on 24th July 2020.
36. Mr. Priyajeet Saxena [Third Year B. Tech Mechanical] attended a workshop on Advanced Automobile Familiarization by Ashok Leyland from 21st September to 07th October 2020.
37. Mr. Shivam Kumar [Third Year B. Tech Mechanical] attended a workshop on Electric Power Systems by Coursera from 1st April to 19th May 2020.
38. Mr. Shivam Kumar [Third Year B. Tech Mechanical] attended a workshop on Campus Ambassador by Careers 360 from 21st May to 21st June 2020.

39. Mr. Shivam Kumar [Third Year B. Tech Mechanical] attended a workshop on Intellectual Humility: Science by The University of Edinburgh, from 1st May to 29th June 2020.
40. Mr. Shivam Kumar [Third Year B. Tech Mechanical] attended a workshop on Introduction to Psychology by Yale University from 1st May to 30th June 2020.
41. Mr. Pranay Sharma [Third Year B. Tech Mechanical] attended a workshop on Industrial Training by Minda Industries Ltd., from 05th to 8th June 2020.
42. Mr. Pavan Kalyan Marella [Third Year B. Tech Mechanical] attended a workshop on Machine Learning for All by the University of London from 1st June to 07th July 2020.
43. Mr. Sourav Kashinath More [Third Year B. Tech Mechanical] attended a workshop on Effective Problem-Solving and Decision-Making by Coursera from 1st March to 17th April 2020.
44. Mr. Sourav Kashinath More [Third Year B. Tech Mechanical] attended a workshop on Managing Your Money: MBA Insights for Undergraduates by the University of California from 1st March to 22nd April 2020.
45. Mr. Sourav Kashinath More [Third Year B. Tech Mechanical] attended a workshop on Work Smarter, Not Harder: Time Management for Personal & Professional Productivity by the University of California from 1st March to 18th April 2020.
46. Mr. Kelvin Saji Mathew [Third Year B. Tech Mechanical] attended a workshop on Data Science Math Skills by Duke University from 1st March to 6th May 2020.
47. Mr. Mohit Kumar Soni [Third Year B. Tech Mechanical] attended a Techfest by IIT Bombay on 20th July 2020.
48. Mr. Mohit Kumar Soni [Third Year B. Tech Mechanical] attended a workshop in Salfar Foundation on 27th June 2020.
49. Mr. Mohit Kumar Soni [Third Year B. Tech Mechanical] attended a workshop on Learn to Design your Solar Home System by SRM IST on 9th August 2020.
50. Mr. Mohit Kumar Soni [Third Year B. Tech Mechanical] attended Umang APP Quiz Expert by India's Government on 28th October 2020.
51. Mr. Mohit Kumar Soni [Third Year B. Tech Mechanical] attended Quiz on Insolvency and Bankruptcy Code by India's Government on 4th November 2020.
52. Mr. Mohit Kumar Soni [Third Year B. Tech Mechanical] attended AutoCAD 2020: 2D and 3D by CADCIM Technologies on 23rd June 2020.
53. Mr. Mohit Kumar Soni [Third Year B. Tech Mechanical] attended Advanced Fluid Mechanics by UDEMY on 12th July 2020.
54. Mr. Mohit Kumar Soni [Third Year B. Tech Mechanical] attended After Effects CC: The Complete Motion Graphics Design and VFX by UDEMY on 13th July 2020.
55. Mr. Mohit Kumar Soni [Third Year B. Tech Mechanical] attended Heat Treatment of Steel by TATA Steel from 18th May to 18th July 2020.
56. Mr. Mohit Kumar Soni [Third Year B. Tech Mechanical] attended Industrial Water System by TATA Steel from 18th May 2020.
57. Mr. Mohit Kumar Soni [Third Year B. Tech Mechanical] attended a workshop on Compressor by TATA Steel from 18th July 2020.
58. Mr. Abhishek J Nair [Third Year B. Tech Mechanical] attended a workshop on Data Science Math Skills by Duke University from 1st June to 27th July 2020.
59. Mr. Abhishek J Nair [Third Year B. Tech Mechanical] attended a workshop on Communication and Interpersonal Skills at Work by the University Of Leeds And Institute Of Coding from 1st November to 15th November 2020.
60. Mr. Om Rajesh Kurapati [Third Year B. Tech Mechanical] attended a workshop on Introduction to Mechanical Engineering Design and Manufacturing with Fusion 360 by Autodesk from 1st April to 11th May 2020.
61. Mr. Shubham Saurabh [Third Year B. Tech Mechanical] attended a workshop on Initiating and Planning Projects by the University of California, Irvine Division of Continuing Education from 2nd August to 6th September 2020.
62. Mr. Shubham Saurabh [Third Year B. Tech Mechanical] attended a Virtual Factory Visit for Student Mentors by ISHRAE on 29th July 2020.
63. Mr. Shubham Saurabh [Third Year B. Tech Mechanical] attended a New Product Development & Entrepreneurship Opportunities workshop by MSME-Technology Development Centre (PPDC) from 9th July to 9th December 2020.
64. Mr. Ananya Kumar Mehta [Third Year B. Tech Mechanical] attended a workshop on hybrid vehicles tech by SRM SAE on 10th October 2020.
65. Mr. Ananya Mehta [Third Year B. Tech Mechanical] attended a Virtual Factory Visit by Blowtech on 17th October 2020.
66. Mr. Ananth Adikari [Third Year B. Tech Mechanical] attended an online course by NPTEL from 2nd January to 5th March 2020.
67. Mr. Himanshu Tahelyani [Third Year B. Tech Mechanical] attended a workshop on New Product Development & Entrepreneurship Opportunities by SRM IST from 7th September to 12th September 2020.
68. Mr. Siddarth raj [Third Year B. Tech Mechanical] attended National Informatics center training from 27th May to 28th June 2020.
69. Mr. Pravesh Chandran [Third Year B. Tech Mechanical] attended Skill Lync on 10th August 2020.
70. Mr. Niranjana Oommen [Third Year B. Tech Mechanical] attended a workshop on Hybrid Vehicles and Technology Advancement by SRM IST on 10th October 2020.
71. Mr. Niranjana Oomen [Third Year B. Tech Mechanical] attended a workshop on the Three Days Online Workshop on Rotor and Bearing Systems by SRM IST from 24th November to 26th November 2020.
72. Mr. Adarsh Chetan Garle [Third Year B. Tech Mechanical] attended a workshop on Modernized Automotive Dynamics by SRM IST from 8th October to 9th October 2020.
73. Priyanshu Dhudhuani [Second Year B. Tech Mechanical] participated in "Online national-level quiz on AI and robotics" organized by the holy Mary institute of technology and science.
74. Priyanshu Dhudhuani [Second Year B. Tech Mechanical] participated in workshop "Fusion 360" on 27TH September 2020 by AUTO DESK
75. Priyanshu Dhudhuani [Second Year B. Tech Mechanical] participated in the virtual workshop in "CNC programming" on 10TH September 2020 by SKYY RIDER Institution.
76. Priyanshu Dhudhuani [Second Year B. Tech Mechanical] participated in a national level quiz on cyber security and scored 93%, organized by Sanjivani College of engineering and technology.

77. Mr. Aryan Raj [Second Year B. Tech Mechanical] attended a Bootcamp on Electric Vehicle Simulation & Component Sizing, 13th & 14th August 2020.
78. Mr. Aryan Raj [Second Year B. Tech Mechanical] attended a Workshop on Regenerative Braking System in Electric Vehicle, Skyy Rider Institutions, 8th September 2020.
79. Mr. Joy Banerjee [Second Year B. Tech Mechanical] attended a Workshop on Hybrid Electric Vehicle Technology by NSDC, 20th August 2020.
80. Mr. Joy Banerjee [Second Year B. Tech Mechanical] attended a Workshop on Regenerative Braking System in Electric Vehicle by Skyy Rider, 8th September 2020.
81. Mr. Joy Banerjee [Second Year B. Tech Mechanical] attended a Seminar on the Role of students in atmanirbhar Bharat in energy by Energy Swaraj Foundation, 2nd October 2020.
82. Mr. Joy Banerjee [Second Year B. Tech Mechanical] attended a Workshop on Bosch Online Training, 08th October 2020.
83. Mr. Md Danish Reyaz [Second Year B. Tech Mechanical] attended a Skyy Rider Workshop on Carburettor vs. F. I. Engine 11th October 2020.
84. Mr. Md Danish Reyaz [Second Year B. Tech Mechanical] attended a Skyy Rider Workshop on Design for Additive manufacturing with NX 12th October 2020.
85. Mr. Md Danish Reyaz [Second Year B. Tech Mechanical] attended a Skyy Rider Workshop on Diesel Particulate Filter in BS-VI Technology 13th October 2020.
86. Mr. Md Danish Reyaz [Second Year B. Tech Mechanical] attended a Skyy Rider Workshop on EV Battery Recycling Technology on 14th October 2020.
87. Mr. Md Danish Reyaz [Second Year B. Tech Mechanical] attended a Skyy Rider Workshop on Regenerative Braking System on 15th October 2020.
88. Mr. Md Danish Reyaz [Second Year B. Tech Mechanical] attended a Skyy Rider Workshop on CNC Programming using MasterCAM on 16th October 2020.
89. Mr. Md Danish Reyaz [Second Year B. Tech Mechanical] attended a Skyy Rider Workshop on Advancements in Mechatronics 06th November 2020.
90. Mr. Rohit Sumit Kundu [Second Year B. Tech Mechanical] attended a Workshop on Bosch Online Training, 29th October 2020.
91. Mr. Bhaskar Jha [Second Year B. Tech Mechanical] attended a Workshop on Fusion 360 - Autodesk, by Aarush, 26th & 27th September 2019, SRMIST, KTR.
92. Mr. Bhaskar Jha [Second Year B. Tech Mechanical] attended a Workshop on Mercedes Engine Design and Overhauling Workshop, AMZ Automotive by Aarush, 28th & 29th September 2019, SRMIST, KTR.
93. Mr. Palaparthi Tejus Swaraj [Second Year B. Tech Mechanical] completed a short course on Learn to Design your Own Solar Home System by Energy Swaraj Foundation, 5th August 2020.
94. Mr. Dipak Gupta [Second Year B. Tech Mechanical] attended a digital leadership training, 20th December 2020.
95. Mr. Dipak Gupa [Second Year B. Tech Mechanical] attended an IMUN online conference of the Australian embassy, 2nd and 3rd January 2021.
96. Mr. Dipak Gupa [Second Year B. Tech Mechanical] was certified a Certificate of Commitment by Central Vigilance Commission.
97. Mr. Shivam Kumar Jha [Second Year B. Tech Mechanical] attended a Learn to design your own solar home system by energy swaraj foundation on 09th August 2020.
98. Mr. M. Ramnaath [First Year M. Tech Robotics] attended a one-week FDP on Mechatronics: Introduction, Modeling and Simulation, and Research by Chennai Institute of Technology, 06th – 10th July 2020.
99. Mr. Aryan Raj [Second Year B. Tech Mechanical] attended a Webinar on the Role of Youth in Attaining Atmanirbhar Bharat in Energy, Energy Swaraj Foundation, 2nd October 2020.
100. Mr. Joy Banerjee [Second Year B. Tech Mechanical] attended a Webinar on Electric Vehicle Simulation Essentials by Skill India, 10th October 2020.
101. Mr. Md Danish Reyaz [Second Year B. Tech Mechanical] attended a Webinar on promoting products that are Made in India by Be Vocal About Local 02nd August 2020
102. Mr. Joy Banerjee [Second Year B. Tech Mechanical] attended a Webinar on Automotive Safety Systems by Skyy Rider, 16th September 2020.
103. Mr. Rohit Sumit Kundu [Second Year B. Tech Mechanical] attended a Webinar on Hybrid Electric Vehicle Technology by NSDC, 20th August 2020.
104. Mr. Rohit Sumit Kundu [Second Year B. Tech Mechanical] attended a Webinar on Fundamentals of Turbocharger by Skill India, 24th August 2020.
105. Mr. Palaparthi Tejus Swaraj [Second Year B. Tech Mechanical] attended a Webinar on Cyber Safety Essentials for Parents and Students by IEEE, 25th May 2020.
106. Mr. Palaparthi Tejus Swaraj [Second Year B. Tech Mechanical] attended a Webinar on the Role of Youth in Attaining Atmanirbhar Bharat in Energy by Energy Swaraj Foundation, 02nd October 2020.
107. Mr. MD Shahbaz [Second Year B. Tech Mechanical] attended a Webinar on the role of youth in attaining atmanirbhar Bharat in Energy by Energy Swaraj Foundation on 2nd October 2020.
108. Mr. MD Shahbaz [Second Year B. Tech Mechanical] attended a webinar on modern foundry practices in the industry organized by the Department of mechanical engineering, SRM institute of science and technology, during 03-05 October 2020.
109. Mr. Sangram Kumar Sahoo [Second Year B. Tech Mechanical] attended a Webinar on the role of youth in attaining atmanirbhar Bharat in Energy by Energy Swaraj Foundation on 2nd October 2020.

110. Mr. Bhaskar Jha [Second Year B. Tech Mechanical] attended a Webinar on the Role of Youth in Attaining Atmanirbhar Bharat in Energy by Energy Swaraj Foundation, 02nd October 2020.
111. Mr. Palaparthi Tejus Swaraj [Second Year B. Tech Mechanical] attended a next-generation electronic systems webinar conducted by IIT Madras. 01st October 2020.
112. Mr. Sangram Kumar Sahoo [Second Year B. Tech Mechanical] attended a next-generation electronic systems webinar conducted by IIT Madras 06th October 2020.
113. Mr. Aditya Naman Chaturvedi [Second Year B. Tech Mechanical] attended a Webinar on the Role of Youth in Attaining Atmanirbhar Bharat in Energy, by Energy Swaraj Foundation, 02nd October 2020.
114. Mr. Apurva Jhunjhunwala [Second Year B. Tech Mechanical] attended a Webinar on the Role of Youth in Attaining Atmanirbhar Bharat in Energy by Energy Swaraj Foundation, 02nd October 2020.
115. Mr. Hardik Goenka [Second Year B. Tech Mechanical] attended a Webinar on the Role of Youth in Attaining Atmanirbhar Bharat in Energy by Energy Swaraj Foundation, 02nd October 2020.
116. Mr. Jagannath Pradhan [Second Year B. Tech Mechanical] attended a Webinar on the Role of Youth in Attaining Atmanirbhar Bharat in Energy by Energy Swaraj Foundation, 2nd October 2020.
117. Ms. Keerthana Dinesh [Second Year B. Tech Mechanical] attended a Webinar on the Role of Youth in Attaining Atmanirbhar Bharat in Energy by Energy Swaraj Foundation, 02nd October 2020.
118. Mr. Nimmagadda Sailesh [Second Year B. Tech Mechanical] attended a Webinar on the Role of Youth in Attaining Atmanirbhar Bharat in Energy by Energy Swaraj Foundation, 02nd October 2020.
119. Mr. Shreyansh Chauvedi [Second Year B. Tech Mechanical] attended a Webinar on the Role of Youth in Attaining Atmanirbhar Bharat in Energy by Energy Swaraj Foundation, 02nd October 2020.
120. Mr. R. R. Suryanarayanan [First Year M. Tech Robotics] attended a Webinar on the Internet of Things (IoT) using Amazon AWS organized by Finland Labs, 19th – 30th October 2020.
121. Mr. R. R. Suryanarayanan [First Year M. Tech Robotics] attended a Webinar on Artificial Intelligence & Machine Learning using Python organized by Finland Labs, 02nd – 13th November 2020.

Events (FDP/ Seminar/Workshop/ Short term Course/Webinar/Technical Talk) attended by Faculty

1. **Dr. U. Mohammed Iqbal**, has participated in AICTE sponsored one Week Online STTP on "POWDER METALLURGY TECHNOLOGIES FOR 3D PRINTING" Organised by Department of Mechanical Engineering, Mepco Schlenk Engineering College, Sivakasi, from 17th August to 22nd August, 2020.
2. **Mr. Sundar Singh Sivam S.P** attended FDP on Recent Trends in Mechanical & Industrial Engineering organised by Department of Mechanical Engineering, Jyothi Institute of Engineering & Technology, held from 17th - 21st Aug 2020,
3. **Mr. Sundar Singh Sivam S.P** attended short term course on "Composite Materials: Micro to Nano – Fabrication Characterization and Modelling Including Additive Manufacturing" organised by Department of Mechanical Engineering Rajalakshmi Engineering College, from 31st August 2020 to 05th September 2020.
4. **Dr. U. Mohammed Iqbal**, has participated in five days virtual international short term course on "Tribology and Sustainability" Organised by Department of Mechanical Engineering, SRM Institute of Science and Technology, Kattankulathur, from 24th to 28th August, 2020.
5. **Mr. Senkathir S** has participated in the one-day online workshop on "FRICTION ASSISTED STIR TECHNOLOGY (FAST-2020) held on 12th September 2020, organized by INDIAN INSTITUTE OF WELDING (IIW)-INDIA.
6. **Mr. Saravanakumar. R**, has participated in the one-day online workshop on "FRICTION ASSISTED STIR TECHNOLOGY (FAST-2020) held on 12th September 2020, organized by INDIAN INSTITUTE OF WELDING (IIW)-INDIA.
7. **Mr. J. Santhakumar** has participated in five days virtual international short-term course on "Tribology And Sustainability" Organised by the Department of Mechanical Engineering, SRM Institute of Science and Technology, Kattankulathur, from 24th August to 28th August 2020.
8. **Dr. U. Mohammed Iqbal** has participated in TEQIP-III sponsored one Week Online STTP on "INNOVATION AND RESEARCH IN WELDING, JOINING AND CUTTING TECHNOLOGY" Organised by the Department of Mechanical Engineering, National Institute of Technology, Silchar, Assam, India from 07th September to 11th September 2020.
9. **Mr. Shakhthivel S** attended 5 days Online Certification Program on Introduction to MATLAB & Simulink organized by Agimus Academy from 19th-23rd Oct 2020,.
10. **Mr. V. G. Unmasker** attended FDP on "High-Performance Materials & Applications (HPMA-2020)" organized by the Mechanical department, SRMIST, held from 2nd to 6th November 2020
11. **Mr. I. Aathisugan** participated in the Virtual Five days FDP on "High Performance on Materials & Applications (HPMA-2020) organized by the Department of Mechanical Engineering, SRM Institute of Science and Technology in association with the Mechanical Engineering Association held from 2nd – 6th November 2020.
12. **Dr M Prakash**. Associate Professor of SRMIST attended FDP on 3D Printing and Design at IIITDM, Kurnool held on 19/10/2020 to 23/10/2020 organized by department of manufacturing engineering
13. **Mr. Senkathir. S** attended Five Days Virtual Faculty Development Program On High-Performance Materials & Applications (HPMA-2020) From 2nd to 6th November 2020 organized by the Department of Mechanical Engineering, SRM Institute of Science and Technology, Kattankulathur
14. **Mr. Veeranaath. V** attended Virtual FDP on "High Performance on Materials and Applications" organized by the Department of Mechanical Engineering, SRM Institute of Science and Technology, Kattankulathur
15. **Mr. R. Saravanakumar** attended five days of online short term courses on "Modeling Approach in Micro_machining Processes" held on 26th-30th October 2020, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar

16. **Mr. R. Saravanakumar** attended in five days of online short term courses on "Modeling Approach in Micro_machining Processes" held on 26th-30th October 2020, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar
17. **Mr. Ramprasath B** attended workshop on Friction Assisted Stir Technology (FAST - 2020) held on 12/09/2020 organized by The Indian Institute of Welding -Chennai branch
18. **Mr. Sundar Singh Sivam S.P** Application of Intelligent Optimization Techniques for Engineering Research (Phase- 3) 10th Sep to 16th Sep 2020 Bannari Amman Institute of Technology Department of mechanical engineering
19. **Mr. S. Dinesh** attended a workshop on " Basic Statistics with R Programming" at SRM Institute of Science and Technology held from 14th to 19th September 2020, organized by the Centre for Statistics, SRM Institute of Science and Technology
20. **Mr. Sundar Singh Sivam S.P** has successfully participated in the Six Days Online National level Faculty Development Program on "Cryogenics & Superconductivity – A Research Perspective" organized by the Department of Mechanical Engineering from 21/09/2020 to 26/09/2020
21. **Dr. S. Murali** attended FDP on "Biomedical Instrumentation & IoT" at AICTE Training and Learning (ATAL) Academy held on 21-09-2020 to 25-09-2020 organized by Sri Krishna College of Technology.
22. **Dr. M Prakash** attended the FDP on " Sensors Technology" at Dr. Ambedkar Institute of Technology, Bangalore, held on 21.9.2020 to 25.9.2020, organized by the Department of Telecommunication
23. **Mr. Sundar Singh Sivam S.P** has participated in one week online Faculty Development Program on "Interdisciplinary Approaches to Promote Sustainability using Green Technologies (IASGT-20)" sponsored by TEQIP-3 (NPIU-MHRD, Govt. of India) and organized by the Department of HEAS, University College of Engineering & Technology, Bikaner Technical University, Bikaner from September 16 -20,2020.
24. **Mr. ABBURI LAKSHMAN KUMAR**, Assistant Professor of SRM Institute of science and technology, participated & completed AICTE Training And Learning (ATAL) Academy Online FDP on "3D Printing & Design" from 2020-9-7 to 2020-9- 11 at Sri Krishna College of Engineering and Technology.
25. **Mr. Muralidharan. S** attended FDP on High-Performance Materials & Applications at SRMIST held on 2/11/2020 organized by the Department of Mechanical Engineering, SRMIST, and Kattankulathur.
26. **Mr. Santhakumar J** attended five days FDP on high-performance materials and application held on 2-6 November 2020, organized by Mechanical Engineering, SRMIST, Kattankulathur.
27. **Dr. I. Infanta Mary Priya** attended FDP on "Recent advances in Manufacturing Processes and its research perspective (RAMPR - 2020)" at SRM Institute of Science and Technology held between 16.11.2020 to 21.11.2020, organized by the Department of Mechanical Engineering, SRMIST.
28. **Dr. M Prakash**, Associate Professor, attended FDP on "Recent Advances in Manufacturing Processes and its research perspective (RAMPR-2020)" on 16th -21st November 2020 held on SRM Institute of Science and Technology organized by the Department of Mechanical Engineering.
29. **Mr. I. Aathisugan** has actively participated in the Virtual Six days FDP on Recent Advances in Manufacturing Processes, and its Research Perspective (RAMPR-2020) " organized by the Department of Mechanical Engineering, SRM IST, Kattankulathur held between 16th - 21st November 2020.
30. **Mrs. R. Ambigai** participated in Six days online Faculty Development Program on "Recent Advances in Manufacturing Processes and its Research Perspectives" (RAMPR - 2020) organized by the Department of Mechanical Engineering, SRM IST, in association with MEA and IEI from 16th Nov to 21st Nov 2020.
31. **Mr. Abburi Lakshman Kumar** attended a six-day virtual FDP program on "Recent Advances in Manufacturing Processes and Its Research Perspective (RAMPR - 2020)" held on 16 to 21st November 2020 organized by Mechanical Department SRMIST, Chennai-603203.
32. **Dr. Vijaya A** attended FDP on Recent Advances In Manufacturing Processes and Its Research Perspective (RAMPR – 2020) at SRMIST held on 16th-20 Nov 2020 organized by the Department of Mechanical Engineering, SRM Institute of Science and Technology, Kattankulathur
33. **Mr. Sampath Kumar. S** attended FDP on " Recent advances in Manufacturing Processes and its research perspective (RAMPR - 2020)" organized by the Department of Mechanical Engineering, SRM Institute of Science and Technology held between 16.11.2020 to 21.11.2020
34. **Mr. Manoj Samson R** attended FDP on " Recent advances in Manufacturing Processes and its research perspective (RAMPR - 2020)" organized by the Department of Mechanical Engineering, SRM Institute of Science and Technology held between 16.11.2020 to 21.11.2020
35. **Dr. Deepan Bharathi Kannan. T** attended FDP on " Recent advances in Manufacturing Processes and its research perspective (RAMPR - 2020)" organized by the Department of Mechanical Engineering, SRM Institute of Science and Technology held between 16.11.2020 to 21.11.2020
36. **Mr. Senkathir S** attended FDP on "Recent advances in Manufacturing Processes and its research perspective (RAMPR - 2020)" organized by the Department of Mechanical Engineering, SRM Institute of Science and Technology held between 16.11.2020 to 21.11.2020
37. **Mrs. Deborah Serenade Stephen** attended an FDP on the topic "Recent Advances in Manufacturing Processes and its Research Perspectives." from 16th -21st November 2020 Organised by Mechanical Engineering Department, SRMIST
38. **Mr. S.P Sundar Singh Sivam** attended FDP on "Recent advances in Manufacturing Processes and its research perspective (RAMPR - 2020)" organized by the Department of Mechanical Engineering, SRM Institute of Science and Technology held between 16.11.2020 to 21.11.2020
39. **Dr. I. Infanta Mary Priya** attended a webinar on the topic "Dedicated Outdoor Air System" on 22.8.2020 from 6.00 to 7.00 PM Organised by ISHRAE Coimbatore Chapter
40. **Dr. A. RAZAL ROSE** attended a Webinar on the topic "Shape Memory Materials - An overview of principles, processing, applications and current trends" on 20-7-2020 Organised by the Department of Mechanical Engineering, SSN College of Engineering.
41. **Dr. A Razal Rose** attended a Webinar on the topic "High-fidelity imaging to assess the local structure-property relationships of weld sub-regions" on .21-07-2020 time 10 -1.00 pm Organised by SSN College of Engineering, Chennai

42. **Dr. A Razal Rose** attended a Webinar on the topic "Friction based Additive Manufacturing for Industry 4.0" on 22.07-2020 time 2 pm - 4 pm Organised by SSN College of Engineering Chennai
43. **Dr. Vijaya** attended a webinar on the topic FRAMING APPROACH NOTE FOR INDUSTRIAL CONSULTANCY: KEY LEARNINGS on 5.8.20 organized by the Department of Mechanical Engg, SRMIST."
44. **Mr. N. Karthikeyan** attended a Webinar on the topic "Research opportunities in metal matrix composites and its applications in the industry" on 05 Sep 2020. time 10:00 - 11:00 AM Organised by Department of Automobile Engineering
45. **Mr. Murugesan R** attended a Webinar on the topic " Abstracting and Indexing – How to get indexed and how to increase research impact" on 09.09.2020, 4.30 PM Organized by Springer Nature in collaboration with Delcon
46. **Mrs. R. Ambigai** attended a Webinar on the topic " Searching tips & techniques for effective usage of EBSCO Database" on 20.7.2020 organized by SRM IST
47. **Mr. I.Aathisugan** has participated in the online webinar on Framing Approach Note for Industrial Consultancy: Key Learnings organized by SRM Institute of Science and Technology, Department of Mechanical Engineering, Kattankulathur on 05-09-2020.
48. **Mr. Muralidharan. S**, participated in the online webinar on " Framing Approach Note for Industrial Consultancy: Key Learnings" on 5th Sep 2020, 10.00 AM organized by the Department of Mechanical Engineering, SRM Institute of Science and Technology.
49. **Mr. Senkathir S** "Framing Approach Note for Industrial Consultancy: Key Learnings" organized by SRM Institute of Science and Technology, Department of Mechanical Engineering in association with Mechanical Engineering Association (MEA) & The Institution of Engineers (India) Kattankulathur, Local Centre on 5th Sep 2020, 10.00 AM."
50. **Mr. T. Deepan Bharathi Kannan** attended Webinar on "Framing Approach Note for Industrial Consultancy: Key Learnings" organized by SRM Institute of Science and Technology, Department of Mechanical Engineering on 5th Sep 2020, 10.00 AM.
51. **Mr. Sampath Kumar .S** attended Webinar on "Framing Approach Note For Industrial Consultancy: Key Learnings" organized by SRM Institute of Science and Technology, Department of Mechanical Engineering on 5th Sep 2020, 10.00 AM.
52. **Mr. Saravanakumar. R** attended the webinar "Abstracting & Indexing- how to get indexed and how to increase the research impact" of a webinar series on "All about scientific publishing-Trends, Nuances, tools ethics, etc" organized by SPRINGER-NATURE in collaboration with DeLCON-DBT E-library consortium, held on 9th September 2020.
53. **Dr. Harshavardhana** attended a technical talk on "Research opportunities in metal matrix composites and its applications in the industry" organized by the Department of Automobile Engineering, SRMIST, held on 5/9/2020.
54. **Dr. Harshavardhana** attended a technical talk on "New materials for modern Era" organized by the Department of Metallurgy Engineering, Jain University, held on 12/8/2020.
55. **Mr. Muralidharan.S** has participated in the webinar on "Industrial approach on Fatigue Testing in Product Development Process" held on 28.09.2020 organized by the Automobile department, SRMIST
56. **Mrs. R. Ambigai** attended a Webinar on the topic Awareness of National Education Policy 2020 on 21/9/20, Organised by UBA, SRM IST.
57. **Dr. Vijaya A** attended three days webinars series on the Modern Foundry Practices in Industry at SRM IST held on 3rd-5th Oct 2020, organized by the Department of Mechanical Engineering, SRMIST, Kattankulathur
58. **Mr. Senkathir S** attended "Modern Foundry Practices In Industry" organized by the Department of Mechanical Engineering, SRM Institute of Science and Technology, during 03 - 05 October 2020.
59. **Mr. I. Aathisugan** has participated in the three-day webinar series on "Modern Foundry Practices in Industry" organized by the Department of Mechanical Engineering, SRM Institute of Science and Technology, during 03-05 October, 2020.
60. **Dr. I. Infanta Mary Priya** attended a webinar on the topic "Failure Analysis" on 30.10.2020, from 7 to 8 pm, organized by the Department of Mechanical Engineering in association with the SRMIST Material Advantage student chapter
61. **Mr. R. Saravanakumar** of SRM Institute of Science and Technology attended a three days webinar series on "Modern Foundry Practices in Industry" organized by the Department of Mechanical Engineering, SRM institute of science and technology, During 03-05 October 2020
62. **Mr. Saravanakumar. R** attended the webinar "Abstracting & Indexing- how to get indexed and how to increase the research impact" of a webinar series on "All about scientific publishing-Trends, Nuances, tools ethics, etc. organized by SPRINGER- NATURE in collaboration with DeLCON-DBT E-library consortium, held on 9th September 2020, time from 4.15 p.m to 6.15 p.m
63. **Dr. S. Prabhu** attended a Webinar on the topic "Framing approach note for Industrial consultancy: Key Learnings" on 5th September 2020 at 10.00 am, Organised by the Department of Mechanical Engineering, SRMIST.
64. **Mr. Abburi Lakshman Kumar** participated in the online webinar on " Framing Approach Note for Industrial Consultancy: Key Learnings" organized by SRM Institute of Science and Technology, Department of Mechanical Engineering in association with Mechanical Engineering Association (MEA) & The Institution of Engineers (India) Kattankulathur Local Centre on 5th Sep 2020.
65. **Dr.I.Infanta Mary Priya** attended a Webinar on the topic "Awareness of National Education Policy 2020" on 21.9.2020 from 2.00 to 3.30 PM Organized by Unnat Bharat Abhiyan Cell, SRM Institute of Science and Technology.
66. **Dr. M.R. Stalin John** attended a Webinar on the topic "FRAMING APPROACH NOTE FOR INDUSTRIAL CONSULTANCY: KEY LEARNINGS" on 5/9/2020 time 10 am organized by Mechanical Department, SRM IST
67. **Mr. V.G.Umasekar** attended a Webinar on the topic "Effective ways of writing research article" on 25.07.2020, 11 AM to 12.30 PM organized by SRM University-AP
68. **Mr. D. Selwyn Jebadurai** attended a Webinar on the topic "FRAMING APPROACH NOTE FOR INDUSTRIAL CONSULTANCY: KEY LEARNINGS" on 5th Sept. 2020 at 10 am Organized by the Department of Mechanical Engineering, SRMIST
69. **Mr. D. Selwyn Jebadurai** participated in a Webinar on the topic "Blockchain Technology" on 15th Sep. 2020 3:00 pm Organized by Central Manufacturing Technology Institute, Bengaluru
70. **Mr. V.G.Umasekar** attended a Webinar on the topic "Industrial approach on Fatigue Testing in Product Development Process" on 28.09.20 time 9 AM to 10:30 AM Organised by SRM Institute of Science and Technology

71. **Dr. A. Vijaya attended** a Webinar on Building Minimum Viable Product for Start-ups on 8th, Nov 2020, 10 am – 12 pm organized by the Department of Information Technology in association with National Cyber Safety and Security Standards, ISTE & CSI – SRM Vadapalani Campus.
72. **Mr. S. Arokya Agustin** attended a Webinar in 12th Summer School in Tribology 21-25 July 2020.
73. **Mr. C. Bala Suthagar** attended a Webinar (1 day) at NNRG Hyderabad.
74. **Mr. J. Daniel Glad Stephen** attended a Webinar (5 days) on Workshop on Examination Reforms, SRM IST.
75. **Dr. V. Magesh** attended a Webinar series (4 days) by Wiley Publications.
76. **Dr. S. Karuppudaiyan** attended a Webinar series (4 days) by Wiley Publications.
77. **Dr. S. Karuppudaiyan** attended a workshop (1 day) by SRM IST, AP.
78. **Dr. S. Karuppudaiyan** attended a Webinar (5 days) on Workshop on Examination Reforms, SRM IST.
79. **Mr. D. Kumaran** attended a Webinar (5 days) on Workshop on Examination Reforms, SRM IST.
80. **Mr. D. Raja** attended an international faculty development program (5 days), SRM IST Ramapuram campus.
81. **Mr. D. Raja** attended The BodhiTree and SAFE Tools for Effective Online Teaching: A Hands-On Workshop by Teaching Learning Centre (ICT) at IIT Bombay.
82. **Mr. D. Raja** attended a Webinar (5 days) on Workshop on Examination Reforms, SRM IST.
83. **Dr. E. Vijayaragavan** attended a Webinar (5 days) on Learn to Publish by Wiley.
84. **Dr. E. Vijayaragavan** attended a Webinar (5 days) on Workshop on Examination Reforms, SRM IST.
85. **Dr. E. Vijayaragavan** attended a Workshop (5 days) on New Product Development and entrepreneurship opportunities, jointly organized by SRM IST and MSME TDC Agra, and Binghamton University, USA.
86. **Dr. P. Nandakumar** attended a Webinar on “Atma Nirbhar Bharat: The Role of Collaboration” by Dr. B.S. Murthi, Director, IIT Hyderabad on 7/11/2020.
87. **Dr. E. Vijayaragavan** attended a Webinar (1 day) on Publishing Ethics in Biomedicine & Life Sciences Research by Springer Nature on 16.09.2020.
88. **Mr. S. Arokya Agustin** attended a Short Term Training Programme Series on Recent advances in Tribology and Surface Engineering by Saintgits college of Engineering, Kottayam Kerala 17.08.2020 to 22.08.2020.
89. **Dr. E. Vijayaragavan** attended a Webinar (1 day) on Artificial intelligence in Business Management by ENFUSE - SRM IST, Kattankulathur on 23.09.2020
90. **Dr. E. Vijayaragavan** attended a Webinar (1 day) on “Awareness of National Education Policy 2020” by Unnat Bharat Abhiyan Cell, SRM IST, Kattankulathur on 21.09.2020.
91. **Mr. D. Kumaran** attended a Webinar (1 day) on “Awareness of National Education Policy 2020” by Unnat Bharat Abhiyan Cell, SRM IST, Kattankulathur 21.09.2020.
92. **Mr. A. Vinoth** attended a Webinar (1 day) on “Awareness of National Education Policy 2020” by Unnat Bharat Abhiyan Cell, SRM IST, Kattankulathur on 21.09.2020.
93. **Dr. P. Nandakumar** attended a Webinar (1 day) on “Awareness of National Education Policy 2020” by Unnat Bharat Abhiyan Cell, SRM IST, Kattankulathur on 21.09.2020.
94. **Mr. K. Jegadeesan** attended an AICTE Sponsored Six Days Virtual Short Term Training Program on Finite Element Method for Engineering Applications” by Sri Sai Ram Engineering College 7.09.2020 to 12.9.2020.
95. **Dr. V. Magesh** attended a six-day FDP on “New Product Development & Entrepreneurship Opportunities” by CLASS, SRMIST on 7.09.2020.to 12.9.2020.
96. **Mr. D. Kumaran** attended a six-day FDP on “New Product Development & Entrepreneurship Opportunities” by CLASS, SRMIST on 7.09.2020.to 12.9.2020.
97. **Dr. Shrihari Dotla** attended a workshop on “Artificial Intelligence (AI), Machine Learning, Deep Learning its Applications” by EduxLabs from 9.9.2020 .to 21.9.2020.
98. **Mr. D. Kumaran** attended a Webinar (1 day) on “Patent Protection for Innovation Driven Institutions” by TurnIO on 29.08.2020.
99. **Mr. D. Kumaran** attended a six-day workshop on “Cryogenics & Superconductivity – A Research Perspective” by Coorg institute of technology on 21.09.2020.to 26.9.2020.
100. **Mr. A. Vinoth** attended a Webinar (1 day) on Material Informatics- The Emerging Paradigm of Material Design” by Maulana Abul Kalam Azad University Of Technology, West Bengal, INDIA 16.07.2020.
101. **Mr. A. Vinoth** attended a Webinar (1 day) on Materials challenge in Post COVID situation” by Tata Steels Ltd on 25.0.2020.
102. **Dr. E. Vijayaragavan** attended a Webinar (1 day) on the Resume building by ENFUSE - SRM IST, Kattankulathur on 05.10.2020.
103. **Dr. E. Vijayaragavan** attended a Webinar (1 day) on the Industrial approach on Fatigue Testing in Product Development Process by SRM IST, Kattankulathur, on 28.09.2020.
104. **Mr. K. Jegadeesan** attended International Virtual Workshop on Advancements In Design And Materials For Product Development by VIT Vellore on 3.10.2020 to 4.10.2020.
105. **Mr. N. Arun** attended a six-day workshop on “Finite element method in Engineering Application” by SAI RAM Engineering College on 5.10.2020.to 10.10.2020.
106. **Dr. E. Vijayaragavan** attended a Technical Talk on Failure analysis by SRM Material Advantage, SRM IST, Kattankulathur on 30.10.2020.
107. **Dr. E. Vijayaragavan** attended a webinar on “Webinar on Electric Bus Development” by Meenakshi Sundararajan Engineering College on 5.11.2020.
108. **Mr. K. Jegadeesan** attended a Five Days Online FDP on “Recent Advancements in Composite Materials and Structures” by SRM IST from 2.11.2020 to 6.11.2020.
109. **Mr. N. Arun** attended a Five Days Online FDP on “High Performance on Materials & applications” by SRM IST from 2.11.2020 to 6.11.2020.
110. **Dr. E. Vijayaragavan** attended a Webinar on LIFE IN MOTORSPORT” by ASME Student Section SRM IST on 15.11.2020.
111. **Mr. K. Jegadeesan** attended a one-week online AICTE Short Term Training Programme (Phase II) on “Finite Element Analysis with Ansys Workbench” Department of Mechanical Engineering, Srinivasa Ramanujan Institute of Technology, Ananthapuramu from 09/11/2020 to 16/11/2020.

- 112.**Dr. E. Vijayaragavan** attended an FDP (5 days) on “Recent Advances In Manufacturing Processes and Its Research Perspective (RAMPR – 2020), Department of Mechanical Engineering, SRM IST, Kattankulathur. 16/11/2020.
- 113.**Dr. M. Kamaraj** attended an FDP (5 days) on Enhancing Research and Development through Project Based Learning to Achieve Outcome Based Education in Engineering, Sri Krishna College of Technology, Coimbatore. 22.10.2020.
- 114.**Dr. M. Kamaraj** attended an FDP (5 days) on High-Performance Materials & Applications – HPMA 2020, Department of Mechanical Engineering, SRM IST, Kattankulathur. 2/11/2020.
- 115.**Mr. C. Subramanian** attended an FDP (3 days) on Rotor and Bearing Systems (RBS-2020) Department of Mechanical Engineering, SRM IST, Kattankulathur, 24/11/2020.
- 116.**Mr. N. Arun** attended an FDP (3 days) on Rotor and Bearing Systems (RBS-2020) Department of Mechanical Engineering, SRM IST, Kattankulathur, 24/11/2020.
- 117.**Dr. P. Nandakumar** attended an FDP (6 days) on Automotive Friction Materials, Department of Automobile Engineering, SRM IST, Kattankulathur, 14th – 19th December 2020.
- 118.**Dr. G. Balaji** attended a Webinar (5 days) on Workshop on Examination Reforms, SRM IST.
- 119.**Dr. G. Balaji** attended a Webinar on Turbocharged IC Engines & Market Expectations, St.Joseph College of Engineering.
- 120.**Dr. G. Balaji** attended a Webinar on Two-phase cooling in modern electronic systems, SAEINDIA, Aerospace, SRMIST.
- 121.**Dr. R. Senthil** attended a Webinar (5 days) on Workshop on Examination Reforms, SRM IST.
- 122.**Dr. R. Senthil** attended a Webinar on Dedicated Outdoor Air System by ISHARE SKEC.
- 123.**Dr. R. Senthil** attended a Webinar on Chiller plant Manager by ISHRAE Southern Chapter, Coimbatore.
- 124.**Dr. R. Senthil** attended a Webinar on Innovation and IPR by Sri Ramakrishna College of Engineering, Coimbatore.
- 125.**Dr. R. Senthil** attended a Webinar on effective writing research articles by Pro VC, SRM University, AP.
- 126.**Dr. R. Senthil** attended a Webinar on A short course of Solar home design by Energy Swaraj Foundation, Mumbai.
- 127.**Dr. R. Senthil** attended a Webinar on Coal fundamentals and utilization by Xavier Engineering College.
- 128.**Dr. R. Senthil** attended a Webinar on Research and Funded Projects by IEI Local Chapter, Chennai.
- 129.**Mr. P. Sudhakar** attended a Webinar on Effective ways of writing research article by Pro VC, SRM University, AP.
- 130.**Mr. P. Sudhakar** attended a Webinar on Two-phase cooling in modern electronic systems, SAEINDIA, Aerospace, SRMIST.
- 131.**Mr. P. Sudhakar** attended a Webinar on Under standing of OBS studio and Stream Yard of e content and line streaming by Dr,MGR Deemed university.
- 132.**Mr. P. Sudhakar** attended a Webinar on Learn to Publish by Wiley Publisher.
- 133.**Dr. V. Thirunavukkarasu** attended a Webinar on Understanding of OBS studio and Stream Yard of e-content and line streaming by Dr. MGR Deemed university.
- 134.**Dr. V. Thirunavukkarasu** attended a Webinar on Solar Thermal Energy Storage by SCAD College of Engineering and Technology, Tirunelveli.
- 135.**Dr. V. Thirunavukkarasu** attended a Webinar on Application of PCM Nanofluids in Thermal Power Plants, Francis Xavier Engineering College, Tirunelveli.
- 136.**Dr. V. Thirunavukkarasu** attended a Webinar on Learn to Design your own Solar Home System, Energy Swaraj Foundation.
- 137.**Mr. G. Manikandaraja** attended a Webinar on Advancements in foundry industries and career opportunities for Mechanical Engineers by SRMIST Vadapalani
- 138.**Mr. G. Manikandaraja** attended a Webinar on Nuances of Scientific Publishing by Centre of Excellence Power Engineering and Clean Energy Integration.
- 139.**Mr. G. Manikandaraja** attended a Webinar on Lattice boltzmann CFD - An overview of theory and applications by SRMIST, Kattankulathur.
- 140.**Mr. G. Manikandaraja** attended a Webinar on Effective ways of writing research articles by SRMIST, AP.
- 141.**Mr. G. Manikandaraja** attended a Webinar on Recent development in solar energy and storage technologies by ST.Joseph College of Engineering and Technology.
- 142.**Mr. K. Sathiyamoorthy** attended a Webinar on Design Thinking and Innovation in Engineering & Technology by Raj Kumar Goel Institute of Technology, UP.
- 143.**Mr. K. Sathiyamoorthy** attended a Webinar on New Ideas and Innovations in the Technology and Use of IoT in Telecommunications by Raj Kumar Goel Institute of Technology, UP.
- 144.**Mr. K. Sathiyamoorthy** attended a Webinar on Recent technological advances in Power Systems and Power Electronic Drives by Sreenidhi Institute of science and technology, Hyderabad
- 145.**Mr. K. Sathiyamoorthy** attended a Webinar on Exploring the Nuances of Deep Learning for Research Applications - A Deeper Experiences by Karunya ITS, Coimbatore.
- 146.**Mr. K. Sathiyamoorthy** attended a Webinar on Innovative Techniques for Sustainable Energy Development through Modelling of Mechanical Process - (SERIES-II) by KLN College of Engineering, Pottapalayam, Sivagangai District, Tamilnadu.
- 147.**Mr. K. Sathiyamoorthy** attended a Webinar on Recent Trends in Mechanical & Industrial Engineering by VNR VJiet, Hyderabad.
- 148.**Mr. K. Sathiyamoorthy** attended a Webinar on Project management- E2E –Vision by Prathyusha Engineering College Chennai.
- 149.**Mr. K. Sathiyamoorthy** attended a Webinar on Technology Design and Management in Future urban Environment: Research challenges and Opportunities by The Institution of Engineering and Technology.
- 150.**Mr. K. Sathiyamoorthy** attended a Webinar on Challenges and opportunities for Engineers in Electric design and development by JAIN University, Bengaluru.
- 151.**Mr. J. Thavamani** attended a Webinar on Predictive CFD using converge CFD software by Aerospace Dept, SRMIST.
- 152.**Mr. J. Thavamani** attended a Webinar on Research perspectives in solar thermal energy storage by School of Mechanical Engineering, Galgotias University.
- 153.**Mr. J. Thavamani** attended a Webinar on Learn to Design your own Solar Home System by Energy swaraj Foundation.

154. **Mr. J. Thavamani** attended a Webinar on Emerging Technologies for sustainable Universe by SEEK.
155. **Mr. N. Vijay Krishna** attended a Webinar on Two phase cooling in Modern electronic systems by SAEINDIA, Aerospace, SRMIST
156. **Mrs. V. Praveena** attended a Webinar on Recent trends on automotive new product development by Satyabama Institute of Science and Technology.
157. **Mrs. V. Praveena** attended a Webinar on Effective ways of writing research articles by SRM University, AP.
158. **Dr. C. Selvam** attended a Webinar on Awareness of National Education Policy 2020 by SRMIST.
159. **Dr. C. Selvam** attended a Webinar (5 days) on Workshop on Examination Reforms, SRM IST.
160. **Mr. D. Premnath** attended a Webinar on An overview of HVAC commissioning by ISHRAE Coimbatore Chapter.
161. **Mr. D. Premnath** attended a Webinar on An introduction to Durkeesox Air Dispersion system by ISHRAE Coimbatore Chapter.
162. **Mr. D. Premnath** attended a Webinar on Humidity control in HVAC systems by ISHRAE Coimbatore Chapter.
163. **Mr. D. Premnath** attended a Webinar on Design of experiments by Christ Jyothi Institute of Technology & Science, Jangaon.
164. **Mr. D. Premnath** attended a Webinar on Overview of vapour absorption system by ISHRAE Coimbatore Chapter.
165. **Mr. D. Premnath** attended a Webinar on Multistage evaporative cooling by ISHRAE Coimbatore Chapter.
166. **Mr. D. Premnath** attended a Webinar on Solar thermal energy storage by SCAD college of Engineering and Technology, Tirunelveli.
167. **Mr. D. Premnath** attended a Webinar on Nuances of Scientific Publishing by IEEE SB Galgotias University.
168. **Mr. D. Premnath** attended a Webinar on training programme on family safety by ISHRAE, Coimbatore chapter.
169. **Mr. D. Premnath** attended a Webinar on Basics of air distribution by ISHRAE, Coimbatore chapter.
170. **Mr. D. Premnath** attended a Webinar on Effective ways of writing research article by SRM University, AP.
171. **Mr. D. Premnath** attended a Webinar on Research perspectives in solar thermal energy storage by School of Mechanical Engineering, Galgotias University.
172. **Mr. D. Premnath** attended a Webinar on Learn to Design your own Solar Home System by Swaraj Foundation in association with SRM IST.
173. **Mr. D. Premnath** attended a Webinar on Awareness of National Education Policy 2020 by SRMIST.
174. **Mr. V. Rajasekar** attended a Webinar on Renewable energy in Indian Universities by SESI,
175. **Mr. P. Sudhakar** attended a Webinar on Awareness on National Educational Policy 2020, SRMIST, KTR.
176. **Dr. T. Lakshmanan** attended a Webinar on Awareness on National Educational Policy 2020, SRMIST, KTR.
177. **Mrs. V. Praveena** attended a Webinar on Awareness of National Education Policy 2020 by SRMIST.
178. **Mrs. V. Praveena** attended a Webinar on Industrial approach on Fatigue testing in product development process by SRMIST.
179. **Mr. G. Manikandaraja** attended a Webinar on Industrial approach on Fatigue testing in product development process by SRMIST.
180. **Mr. D. Premnath** attended a Webinar on Industrial approach on Fatigue testing in product development process by SRMIST.
181. **Mr. D. Premnath** attended a Webinar on Awareness of National Education Policy 2020 by SRMIST.
182. **Mr. J. Joji Johnson** attended a Webinar on Energy Literacy - Energy Swaraj Foundation by Energy Swaraj Foundation.
183. **Mr. J. Joji Johnson** attended a Webinar on Awareness of National Education Policy 2020 by SRMIST.
184. **Mr. J. Joji Johnson** attended a Webinar on Newer Methods and Challenges of Engineering Learning by Government college of technology, Coimbatore & Innovent engineering solutions Pvt. Ltd., Bangalore.
185. **Mr. J. Joji Johnson** attended a Webinar (5 days) on Workshop on Examination Reforms, SRM IST.
186. **Dr. G. Balaji** attended an FDP on Energy Engineering by AICTE.
187. **Mr. P. Sudhakar** attended a Webinar on Doing Science without Borders, SRM University, AP.
188. **Dr. R. Senthil** attended a Technical talk on Energy Conservation SRMSIT Materials Advantage Chapter.
189. **Mr. J. Thavamani** attended an AICTE sponsored one-week STTP on Smart materials, Automation and its future impact on humans(Part1)SAFIH 2020.
190. **Mr. J. Thavamani** attended a Webinar on Industrial approach on Fatigue Testing in Product Development Process, SRMIST.
191. **Mr. J. Thavamani** attended a Webinar on CFD in turbomachinery industry, SRMIST.
192. **Dr. P. Chandrasekaran** attended a five days FDP on High performance on materials and applications, SRMIST.
193. **Dr. P. Chandrasekaran** attended a Webinar on 'Atma Nirbhar Bharath' by SRM University, AP.
194. **Mr. P. Sudhakar** attended a Webinar on Enhancing research and development through project-based learning to achieve outcome-based education in engineering, Sri Krishna College of Engineering, Coimbatore.
195. **Mr. P. Sudhakar** attended a Webinar on CFD in turbomachinery industry, SRMIST.
196. **Mr. P. Sudhakar** attended a Webinar on Data to discovery in information security by SRM University, AP.
197. **Mr. P. Sudhakar** attended a Webinar on The role of collaborations by SRM University, AP.
198. **Dr. V. Thirunavukkarasu** attended a Workshop on Energy Conservation and CFD Analysis in Buildings by the ISHRAE Student Chapter of Easwari Engineering College, Chennai.
199. **Dr. R. Senthil** attended ATAL 5 days FDP on ROAD - Response Effectiveness, Organising Self, Attitudinal Shift, Decision Making, Maulana azad national institute of technology.
200. **Dr. P. Chandrasekaran** attended a Webinar on Ayurveda for COVID-19, SRMIST.
201. **Dr. P. Chandrasekaran** attended a Webinar on University Distinguished Lecture titled Pursuit of Excellence: Institution Building by SRM University, AP.
202. **Mr. P. Sudhakar** attended a Webinar on Art of Science in the Time of Virus and Beyond: The Brave New Worl delivered by Prof. Ashutosh Sharma by SRM University, AP.
203. **Mr. P. Sundaram** attended an FDP on Automotive friction materials, SRMIST.
204. **Mrs. V. Praveena** attended an FDP on Automotive friction materials, SRMIST.
205. **Mrs. V. Praveena** attended a Webinar on An overview of shock wave boundary layer interaction and its control, SRMIST.
206. **Mrs. V. Praveena** attended an FDP on Rotor and Bearing Systems (RBS-2020), SRMIST.

207. **Mr. R. K. Barathraj** attended a Webinar on Lab on Chip by the Defence Institute of advanced technology, Pune.
208. **Dr. E. Vijayaraghavan** attended a Six Days FDP on Automotive Friction Materials by Dept. of Automobile Engg., SRMIST from 14 – 19 December 2020.
209. **Mr. K. Jegadeesan** attended a National Level online workshop on LabVIEW programming & Applications by the National Institute of Technology, Karnataka, Surathkal, from 26th – 27th December 2020.
210. **Mr. K. Jegadeesan** attended a three-day workshop on Research and Development Activities by Sri Sai Ram Engineering College, West Tambaram, Chennai, from 28th – 30 December 2020.
211. **Mr. K. R. Arun Prasath** attended five days workshop on Advances in Vibration Analysis by IIT BHU from 28th December to 02nd January 2021.
212. **Mr. S. Shakhivel** attended a webinar on International Webinar Series on the Latest Trends in Automobile (HORSEPOWER -2020) on 19-12-2020, organized by the School of Mechanical and Chemical Engineering of Wollo University Ethiopia, in association with University-TVET-Industry-Institution linkage.
213. **Dr. A. Arul Jeya Kumar** attended an FDP on High Performance Materials and Application by SRMIST, Kattankulathur from 02 – 06 November 2020.
214. **Dr. A. Arul Jeya Kumar** attended an International Faculty Development Programme (by IQAC & HR Service) by Idhaya Engineering College for Women from 31st July – 01st August 2020.
215. **Dr. A. Arul Jeya Kumar** attended a Virtual international short term course on Tribology & Sustainability by SRMIST, Kattankulathur from 24 – 28 August 2020.
216. **Dr. A. Arul Jeya Kumar** attended a workshop on Framing approach note for Industrial consultancy – Key Learnings by SRMIST, Kattankulathur on 05th September 2020.
217. **Dr. Sumit Pramanik** received Certification for participation university distinguished lecture series, first University Distinguished Lecture titled "Doing Science Without Borders" delivered by Prof. Ajay K. Sood, IISc, Bengaluru and organized by SRM University-AP held on 17th October 2020.
218. **Dr. Sumit Pramanik** attended SRMIST - Industry Interaction with SPRAY Engineering Devices Ltd. Punjab, India on 09th October 10.2020.
219. **Dr. Sumit Pramanik** received Certification seminar on 1st Module of Webinar Series on "Nanoscience and Nanotechnology", organized by School of Technology, Pandit Deendayal Petroleum University, Gandhinagar, India, September 11-13, 2020.
220. **Dr. Sumit Pramanik** participated in the 6-Day (One Week) Technical Education (AICTE), New Delhi sponsored online Short Term Training Programme (STTP) Series on RECENT ADVANCES IN TRIBOLOGY AND SURFACE ENGINEERING: Series 1 of 4 - Introduction to Tribology and Surface Engineering organized by the Department of Mechanical Engineering of Saintgits College of Engineering, Kottayam from 17th to 22nd August, 2020.

Online course completed

1. **Mr. Priyanshu Dhudhuani** [Second Year B. Tech Mechanical] completed a course "build a simple app in JAVA" at Coursera.
2. **Mr. Priyanshu Dhudhuani** [Second Year B. Tech Mechanical] completed a course "build a full website using word press" at Coursera.
3. **Mr. Priyanshu Dhudhuani** [Second Year B. Tech Mechanical] completed a course "programming for everybody" at Coursera.
4. **Mr. Priyanshu Dhudhuani** [Second Year B. Tech Mechanical] completed a course "create your first game by python" at Coursera.
5. **Mr. Joy Banerjee** [Second Year B. Tech Mechanical] completed a course "Python Programming" at IIT Kanpur.
6. **Mr. D. Raja** completed a 4-week course "Beyond the Sustainable Development Goals (SDGs): Addressing Sustainability and Development" at Coursera.
7. **Mr. D. Raja** completed a 4-week course, "Machine Design Part I" at Coursera.
8. **Mr. D. Raja** completed a 4-week course, "Principles and practices of management."
9. **Mr. D. Kumaran** completed a 4-week course, "Minitab."
10. **Mr. D. Kumaran** completed a 4-week course "Certified Publons Peer Reviewer."
11. **Mr. P. Susai Manickam** completed the 4-week course "Beyond the Sustainable Development Goals (SDGs): Addressing Sustainability and Development" at Coursera.
12. **Mr. P. Susai Manickam** completed a 4-week course, "Machine Design Part I" at Coursera.
13. **Mr. Vamsi Krishna D** completed a 4-week course, "Arduino robotics with the mbot" at Udemy.
14. **Mr. D. Kumaran** completed a 12-week course, "Lean Six Sigma Black Belt" at Future Learn
15. **Mr. D. Kumaran** completed a 4-week course, "Fundamentals of Graphic Design" at Coursera.
16. **Mr. Sundar Singh Sivam S.P** completed "Fundamental of graphics design." conducted by CaLARTS at Coursera.
17. **Dr. S. Murali** completed "Digital Thread: Components," conducted by the University of Buffalo at Coursera.
18. **Dr. A. Vijaya** completed "Signal Processing on RAMP" conducted by MathWorks Training services offered through MATLAB.
19. **Mr. S. Bharath Subramaniam** completed "Introduction to solar cells" at Coursera.
20. **Mr. S. Bharath Subramaniam** completed "Renewable energy and green building entrepreneurship" at Coursera.
21. **Mr. S. Bharath Subramaniam** completed "Electric power systems" at Coursera.
22. **Mr. S. Bharath Subramaniam** completed "Learn to Design your own Solar Home System" at Energy swaraj foundation - AICTE.
23. **Mr. S. Bharath Subramaniam** completed "Introduction to solar power" at Udemy.
24. **Mr. S. Bharath Subramaniam** completed "The ultimate off grid solar energy course" at Udemy.
25. **Mr. N. Vijay Krishna** completed "Thermal Processing of Foods" at NPTEL Platform.
26. **Mr. D. Premnath** completed "Energy and Green Building Entrepreneurship" at Coursera.
27. **Mr. D. Premnath** completed "The Sustainable Development Goals - A global, transdisciplinary vision for the future" at Coursera.
28. **Mr. D. Premnath** completed "Beyond the Sustainable Development Goals (SDGs): Addressing Sustainability and Development" at Coursera.

29. **Dr. V. Magesh** completed “Engineering Drawing and Computer Graphics” 12-week course at NPTEL/Swayam.
30. **Mr. D. Raja** completed “Fundamentals of Artificial Intelligence” 12-week course at NPTEL/Swayam
31. **Mr. D. Raja** completed “Engineering Drawing and Computer Graphics” 12-week course at NPTEL/Swayam.
32. **Mr. K. R. Arunprasath** completed “Engineering Metrology” course at NPTEL/Swayam.
33. **Mr. V. G. Umasekar** completed “Fundamentals of Manufacturing Processes” course at IIT Roorkee offered through NPTEL/Swayam.
34. **Dr. R. Senthil** attended a one-day webinar on “Energy Materials, Devices and Characterization” organized by the NRC SRM on 09-07-2021.

New Programmes Introduced

Full-time Program

1. **B. Tech Mechanical and Automation (Full-time)** will be offered at Kattankulathur Campus from the forthcoming academic year 2021-2022.
2. **B. Tech Mechanical Engineering with Specialization in Artificial Intelligence and Machine Learning (Full-time)** will be offered at Kattankulathur Campus from the forthcoming academic year 2021-2022.

New Centers Launched

1. Center for composites and advanced materials

- This center will have three different laboratories, including Composite and Advanced Materials Manufacturing Lab, Materials Modeling and Simulation Lab, and Biomaterials Engineering lab. The manufacturing lab will focus on developing Fiber-reinforced composites, nano, and hybrid composites, biomaterials and bio-composites, friction materials, Ionic polymer-metal composites, light-alloy, and composites, metallic foams, and high entropy alloys. The modeling and simulation lab will focus on numerical simulations of the manufacturing process, microstructure, and component using tools like finite element and finite volume methods; multi-scale modeling of advanced materials, manufacturing processes, and components and integrated computational materials engineering using tools like density functional theory simulations, molecular dynamics simulations, CALPHAD simulations, phase field simulation, etc. Also, will do prescriptive analytics-based innovations of advanced materials, manufacturing processes, and components using Artificial Intelligence and Machine Learning.

Advisors: Prof. J. N. Reddy (Texas A&M University, US); Prof. Debes Bhattacharyya (University of Auckland, New Zealand)

Coordinators (SRMIST): Prof. Shubhabrata Datta; Dr. M. Kamaraj; Dr. P. V. Jeyakarthikeyan.

2. Center for thermal energy storage research

Background and objectives of the lab: Ozone Cell, Ministry of Environment, Forest & Climate Change Government of India proposed India Cooling Action Plan to reduce the cooling demand, refrigerant demand, and cooling energy requirements significantly by the year 2037-38. We propose Solar Cooling and thermal energy storage techniques for cold storage of agricultural products, building cooling/heating, occupational thermal comfort, and atmospheric water generation systems to achieve these goals. These research areas of national importance / thrust area will be explored in the thermal energy storage lab in collaboration with reputed national/international research centers.

Advisors: Prof. R. Velraj (Anna University, Chennai); Prof. S. C. Kaushik (Indian Institute of Technology, Delhi)

Coordinators (SRMIST): Prof. M. Cheralathan.

RESEARCH AREAS

1. Cool Thermal Energy Storage

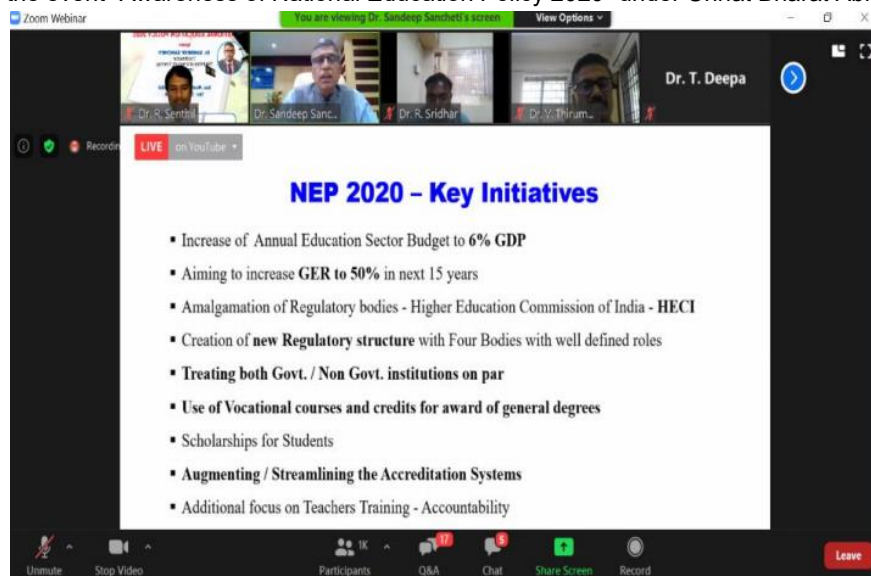
- a. Characterization
- b. Thermal energy storage performance for various applications.
- c. Development of eco-friendly/alternative refrigerants.
- d. Heat Transfer properties evaluation and stability analysis

2. Solar Thermal Energy Storage

- a. Energy Storage in receiver
 - b. Thermal performance enhancement studies of collection and storage systems
3. **Building Energy Storage**
 - a. Building energy modelling
 - b. Building energy conservation
 - c. Thermal energy storage in walls and roofs
4. **Thermal Management applications**
 - a. Solar PV systems
 - b. Thermoelectric devices
 - c. Electronic devices
5. **Nano enhanced Phase change Materials**
 - a. Characterization
 - b. Heat transfer enhancement techniques for various PCMs.
 - c. Heat Transfer properties evaluation and stability analysis
 - d. Heat transfer applications
6. **Computational Research**

Outreach Activity

1. **Dr. R. Senthil** delivered lecture on “Activity-based Learning of Engineering Concepts & National Education Policy 2020” for School Teachers and students under UBA-SRMIST Village Adoption Scheme through SRM IST Webinar on 26.09.2020.
2. **Dr. R. Senthil** coordinated the event “Awareness of National Education Policy 2020” under Unnat Bharat Abhiyan Cell, SRM IST.



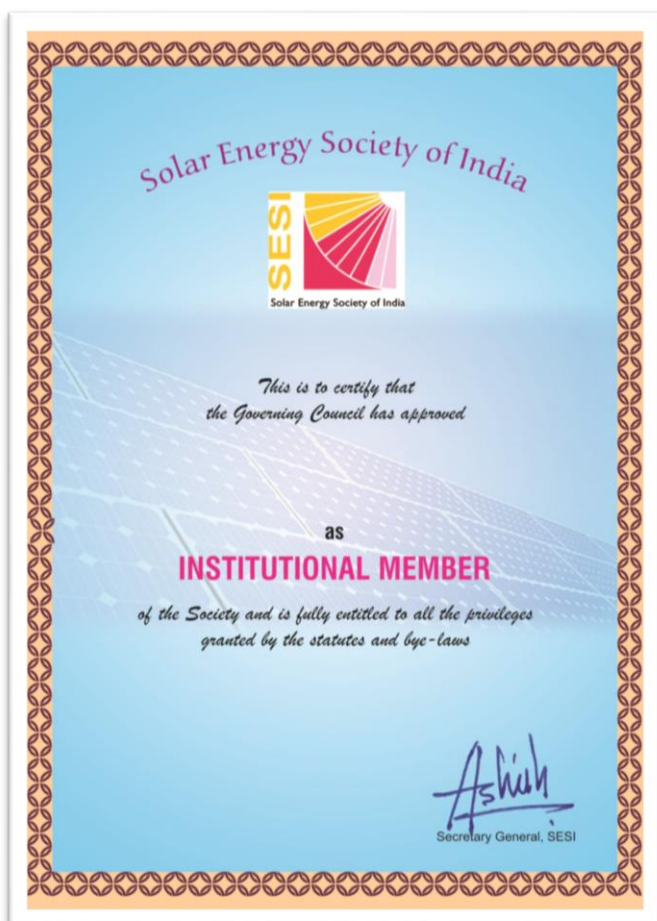
< Online awareness Webinar by Prof. Dr. Sandeep Sancheti, ViceChancellor/SRMIST to 1500+ audiences (Zoom 1k + 935 in YouTube)>

3. **Dr. R. Senthil** coordinated the Student Solar Ambassador 2020 Online event with 220+ students' registration on October 2, 2020. It is an SRMIST-Energy Swaraj Foundation joint-event.
4. **Dr. R. Senthil** submitted a Report on Sustainable Development Goal (SDG) 7: Affordable and Clean Energy to The Dean, CENR, SRMIST on 29.11.2020 for the Times Impact World Rankings 2021.
5. **Dr. R. Senthil** and Mr. Maruthamuthu, AME (Elec), Maintenance department submitted Report on Renewable Power Generation of SRMIST, Kattankulathur Campus for AICTE Clean and Smart Campus Award 2020 to The Dean/CENR on 20.12.2020.
6. **Dr. M. Cheralathan** and **Dr. R. Senthil** participated in the massive tree plantation camp conducted at Thenmelpakkam village, one of the eight adopted villages by UBA-SRMIST, on 14th October 2020.



<Unnat Bharat Abhiyan (UBA 2.0) – SRM IST, KTR, Tree Planation Day at Thenmelpakkam Village, Chengalpattur District>

Solar Energy Society of India (SESI)



The **Solar Energy of India (SESI)**, established in 1978, having its Secretariat in New Delhi, is the Indian Section of the International Solar Energy Society (ISES). Its interests cover all aspects of renewable energy, including characteristics, effects and methods of use, and it provides a common ground to all those concerned with the nature and utilization of this renewable non-polluting resource. The Society is interdisciplinary in nature, with most of the leading energy researchers and manufacturers of renewable energy systems and devices of the country as its members. High academic attainments are not a prerequisite for membership and any person engaged in research, development or utilization of renewable energy or in fields related to renewable energy and interested in the promotion of renewable energy utilization can become a member of the society.

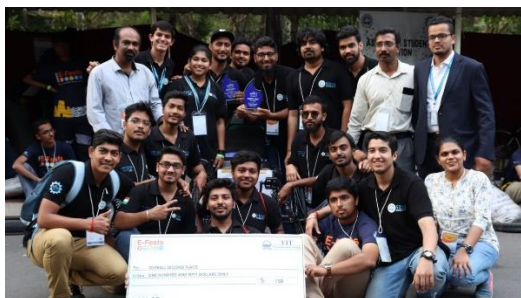
SRMIST got institutional membership from Solar Energy Society of India. All the students and faculty members are invited to become a member of SESI.

Students Teams

Super IGNITORS: Team Super Ignitors is a workstation where like-minded stimulus people compile to find technical, educational, and co-operative excellence for the team. The main core motive is the group chained's systematic development under proper leaders, the board of directors, mentors, technical leads, and members adjoining us in this travel. It's the team participating in various RC car events held in different IITs and NITs. Past 1-year Team has gone to multiple IITs and NIT, representing SRM in the other events.



ELECRUISERS: Team Elecruisers is the official E BAJA student team of SRM Institute of Science and Technology, Kattankulathur, Chennai. The team participates in E-BAJA SAE INDIA, Which is an intercollegiate design competition. The team makes electric ATV; the team comprises students from different departments ECE, EEE, Mech, etc. The team was established in 2016 under the mechanical Department of the mechanical engineering department. The group promotes E-mobility and aims at innovating sustainable development.



HYBRUTOS RACING: Team Hybrutos Racing is the official Formula Hybrid team of SRM Institute of Science and Technology, Chennai. Our team is one of the most promising and reputed hybrid racing teams in India. We are a group of 32 dedicated and devoted engineering students from different departments who come together as a cohesive unit to develop a hybrid race car. We give in all of our strength to make a difference in transportation and racing by giving a more sustainable transportation option to society.

SOLAREON: Team SOLAREON started as a vision of students and faculty members to develop a futuristic car powered by green energy/solar power. The team's mission is to develop an eco-friendly vehicle that could replace the existing fossil fuel-based internal combustion engine vehicles. This is achieved by taking part in events with other competitors working on the same platform, honing our skills, and developing new technologies and techniques to better our car. Team SOLAREON is a multi-disciplinary team consisting of students from different departments like Mechanical, Electrical, Electronics, Computer Science, etc., specializing in their area of expertise and working together to develop solar-powered vehicles.

Infi Alpha Hyperloop: Team Infi Alpha Hyperloop is a technical team of undergraduates based in SRM Institute of Science and Technology, working on the research, development, and design of the Hyperloop System. We aim to implement the first feasible Hyperloop route in India as a pilot project and set up a Pan-India Network foundation. The team comprises of 19 core members divided according to their fields of expertise into four broad domains, namely: 1.Structures Design and Analysis; 2.Propulsion and Braking; 3.Electronics and Embedded Systems; 4.Corporate Relations



ODYSSEY: Team Odyssey is a team of engineering students from various branches pursuing their Bachelor of Technology degrees from SRMIST, Kattankulathur. The theme selected by team Odyssey was "Surveillance of a Ship," which required the teams to build a vehicle capable of approaching a ship two kilometers from the coast undetected and conducting surveillance of its deck twenty meters from sea level. This required the team to build an amphibious vehicle—more than technical expertise and experience.



SRM_HPVP, IAM3D, ASME-SRM: Team SRM_HPVP, Team IAM3D, and ASME-SRM participated in various events and received various achievements. Our SRM_HPVP participated in the following activities at E-FEST: Women's drag race, Men's drag race, Endurance race. Our IAM3D participated in ASME's Innovative Additive Manufacturing 3D Challenge. The team SRM_HPVP secured 2nd Prize in the Women's drag race among 40 teams in the ASIA PACIFIC E-FEST. The team IAM3D acquired 2nd price in the Innovative Additive Manufacturing 3D Challenge among 18 groups in the ASIA PACIFIC E-FEST.



Upcoming Events

1. International Conference on Advances in Thermal Engineering and Applications (ICATEA 2021) during **March 19-20, 2021** (<https://www.srmist.edu.in/icatea-2021/>). This conference aims to bring together academia and engineers from all over the world to deliberate upon the challenges, opportunities, and advances in Thermal Energy Systems and its Applications. It provides a forum for both researchers and industry personnel to share their knowledge, experience, and research findings in various aspects of thermal engineering.

Topics included (but not limited to): Advanced Energy Systems; Alternative Energy; Biofuels; Computational Fluid Dynamics; Cogeneration and Combined Cycle; Electrolysis; Energy Economics and Policies; Energy Control Systems; Energy / Exergy Analysis; Energy Storage; Fluid Flow and Heat Transfer; Hydraulic Machines; Fuel Cells System; Gas Turbine; Gasification; Geothermal Energy; Hybrid Energy Systems; Hydrogen Energy Production, Etc.

Abstract submission: icatea2021@srmist.edu.in. The papers presented at the conference will be considered for publication in SCI/SCIE, WOS and Scopus indexed journals after peer review.



2. Virtual International Conference on Recent Advances in Manufacturing Engineering Research (ICRAMER 2021) during **April 15-16, 2021** (<https://www.srmist.edu.in/icramer-2021/>). The primary goal of the conference (ICRAMER 2021) is to promote research and developmental activities in the area of Manufacturing, and to share the scientific information between researchers, developers, engineers, scientists, students, and practitioners are working around the world. It also provides a premier interdisciplinary platform for researchers, practitioners, and educators to present and discuss the most recent innovations, trends, and concerns, and practical challenges encountered and solutions adopted in the fields of recent advances in manufacturing research and applications.

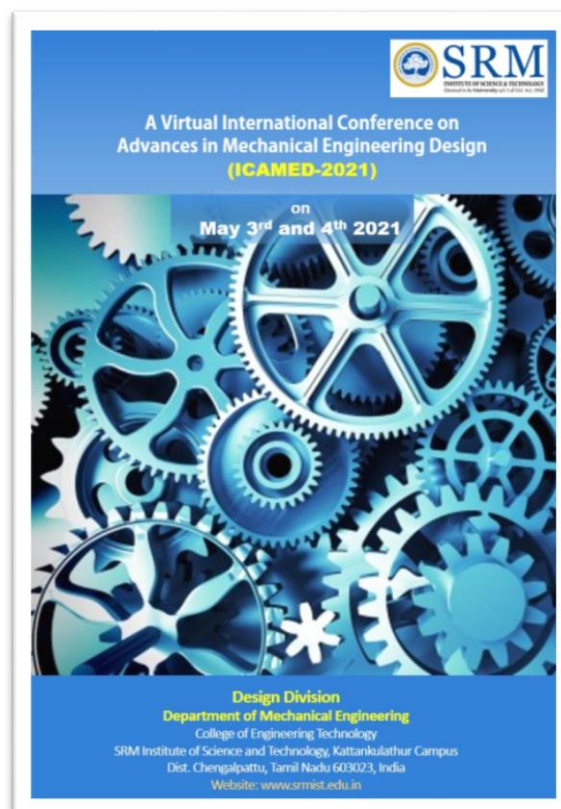
Topics included (but not limited to): Advance Optimization and characterization techniques; Advances in Additive Manufacturing; Advances in Machine Tool Design; Advances in Materials Technology; Advances in Metal Cutting Technology; Advances in Metal Joining; Bio Materials; CAD/CAM/CAE/Reverse Engineering; Industry 4.0; Machine Vision; MEMS/NEMS; Tribology; Non-Destructive Testing; Etc.

Abstract submission: icramer2021@srmist.edu.in. The papers presented at the conference will be considered for publication in SCI/SCIE, WOS and Scopus indexed journals after peer review.

3. A Virtual International Conference on Advances in Mechanical Engineering Design (ICAMED 2021) from **May 3rd to 4th 2021** (<https://www.srmist.edu.in/icatea-2021/>). This conference aims to bring together passionate people from academia and engineers from industries, scientists from research labs, researchers from R&D institutions and from educational institutions all over the world to deliberate upon the challenges, opportunities, and advances in Mechanical Engineering Design in the wake of creating newer opportunities in addressing the emerging requirements in the society.

Topics included (but not limited to): Finite element methods, Experimental mechanics, Biomechanics and ergonomics/bio medical and image processing, modelling, and simulation, Optimization techniques, AI / ML applications, Collaborative design, Design of experiments, Design for manufacture, Vibration and noise, Condition monitoring and signal processing, Tribology, Multi-body dynamics, Nonlinear mechanics, etc.

Abstract submission: icamed2021@srmist.edu.in . The papers presented at the conference will be considered for publication in WOS/ Scopus indexed journals after peer review.



4. International Conference on Friction, Wear and Lubrication (FWL 2021) during October 7th – 9th 2021 (<http://www.asmchennaichapter.com/>). This conference is jointly

organized by ASM International Chennai Chapter; Material Advantage Student Chapter and Department of Mechanical Engineering, SRM IST, Kattankulathur. Papers are invited from Scientists, Academicians, and Practicing Engineers for technical sessions in the following areas (from nanoscale to bulk materials).

Topics included (but not limited to): Surface treatments, composites, coatings, fretting, corrosion, bio-mimetics, wear modelling and reliability, contact mechanics, surface damage due to cavitation, sustainable approaches of controlling friction, Etc. List of supporting journals confirmed so far:

1. Special Issue: Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, Impact Factor 1.397.

2. Regular Issue: Tribology International. Impact Factor 4.271.

Please visit the ASM ICC website (<http://www.asmchennaichapter.com/>) to submit your abstracts. For any clarification, please write to fwl2021@srmist.edu.in.



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