

# Crescent Mechanical News

Issue 1: July 2020



## Department of Mechanical Engineering

**B.Tech. in Mechanical, M.Tech. in CAD/CAM, Ph.D.**

Minor Degree on Robotics and 3D Printing

36 Years of Academic Excellence

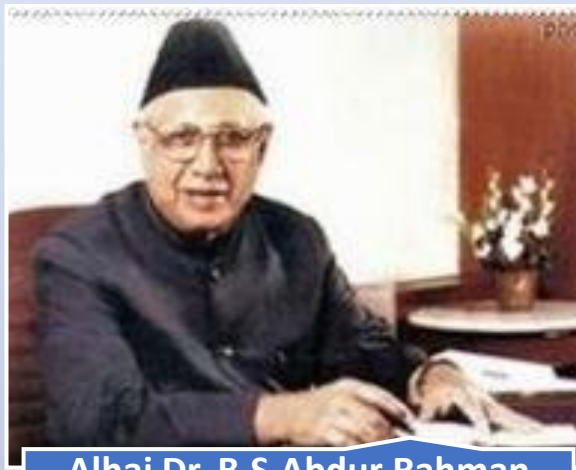
36 faculty members with 14 doctorates

Well-equipped labs with experienced technicians



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Message from School Dean	4
Message from Department Head	4
About the Department	5
Department News	
	New Labs 6
	Funded Projects 7
	Patents 7
	Programs organized 7
Faculty News	
	Journal Publications 13
	Conference Presentations 15
	Videos Published 16
	Programs attended 16
Student News	
	Selective Projects 19
	Conference Presentations 19
	Campus Recruitments 20
	Placement drives 21
	Internships 21
	Sports Achievements 23
	Outreach activities 23
Alumni Corner	24
Editorial Team	25

## Message from School Dean



**Dr. S. Rasool Mohideen**  
Professor & Dean  
School of Mechanical Sciences

- Knowledge production is the main driving factor in human advancement and one of the main objectives of any education Institution. A famous Arabic proverb says, "Everything diminishes when it is used except the knowledge", which is getting multiplied when it is being shared.
- The department of mechanical engineering with its 36 years of excellence has blossomed in to a robust entity, with its state-of-the-art infrastructure, modern teaching pedagogies, zealous research achievements and healthy interactions with the industries.
- I am happy to know that the department has come out with a periodic newsletter and I'm sure that it will certainly help the department to share its knowledge, talents and achievements among the stakeholders.
- I take this opportunity to wish the students and staff all the very best and a grant success in this initiative.

## Message from Department Head



**Dr. H. Siddhi Jailani**  
Associate Professor & Head  
Department of Mechanical Engg.

- I have immense pleasure in bringing out the "Newsletter" of the Department of Mechanical Engineering. The department has conducted various activities such as virtual international conference, AICTE sponsored FDP, and Webinars.
- Many of our faculty members publish their research work in National and International Journals & Conferences. Some of our faculty members were resource persons for various webinars. The students of Mechanical Engineering frequently attend conferences and webinars. The projects of the final year students are as per the current requirement of the Industries. This newsletter will help us to showcase the various achievements of the department.
- I congratulate the editorial team for their sincere effort to bring out the newsletter in time.

## About the Department

The department of Mechanical Engineering started in 1984, is one of the oldest departments of this Institution. Bachelors in Mechanical Engineering, Masters in CAD/CAM, MS/Ph.D. by Research and minor degree programs are offered by us. We also offer Bachelors in Mechanical Engineering under part-time mode for the employees of Apollo Tyres and Mando Automotive Ltd. The programmes of the department were accredited by National Board of Accreditation (NBA).

The department has a new block with wifi connected classrooms, an air-conditioned conference hall, seminar hall, and a department library. Modern multimedia teaching technologies are used to supplement lectures and enhance the quality of teaching. Some of the modern practices like Project/Activity-based learning, Peer-assisted learning are followed. Softwares on different subjects are available at any time for self-learning by students. The department has 36 faculty members out of which 14 are with doctorates and others are pursuing. Experienced technicians are also available in each lab for training the students.

The department has well-equipped laboratories and workshops such as ROBO Lab – 4.0, Mechatronics Lab, Design Appreciation Lab, Friction Materials Lab, Surface Engineering Lab, CAD Lab, CIM Lab, Dynamics Lab, Fluid Mechanics & Machinery Lab, Machine Shop, Metrology Lab, Material Testing and Characterization Lab, Thermal Engineering Lab, and Basic Workshop. The major softwares available are PTC/ Creo 5, Siemens NX 12.0, ANSYS 2020 Campus solution, HYPERWORKS 2017, LS-DYNA 971\_R7, Mat lab V8 R 2013 a, and Lab VIEW.

The major equipment available for research purpose is ABB Industrial (Welding) Robo, Olivetti S2 – 3D Printer, CNC Turning Center, CNC Vertical Machining Center, Surface Roughness Tester, Coordinate Measuring Machine, Vision System, AE with Digital Scope & GPIB interface, Ultrasonic flaw detector, Pin on Disc Wear Tester, Salt Spray Corrosion Apparatus, Vibration Sensors, shakers and DAQ, Cryogenic Treatment Chamber, Engine Testing Facility, Engine Exhaust Emission Tester, Electrical Discharge Machine, Chase Testing Machine, MMAW Machine, GTAW Machine, GMAW Machine.



## DEPARTMENT NEWS

### New Labs



A Robotics lab is established in association with Prag Robotics Pvt. Ltd. It has 37 computers and a robot for welding applications. This lab offers value-added programs in Artificial Intelligence, Machine Learning and Robotics.



A friction materials Lab is established. The lab is used to determine the wear rate of each brake pad at different brake disc speeds and the applied force on the brake pedal.

## Funded Projects



A financial sanction for an amount of **Rs 18, 30, 000** under Teachers Associateship for Research Excellence (TARE) was awarded to **Dr. Karunanithi Rasu**, for his project titled Synthesis and characterization of  $ZrO_2$  dispersed Ti, Ti-6Al-4V, Ti-6Al-5V, Ti-6Al-7Nb composite for three years by Science & Engineering Research Board of the Department of Science and Technology, Government of India.

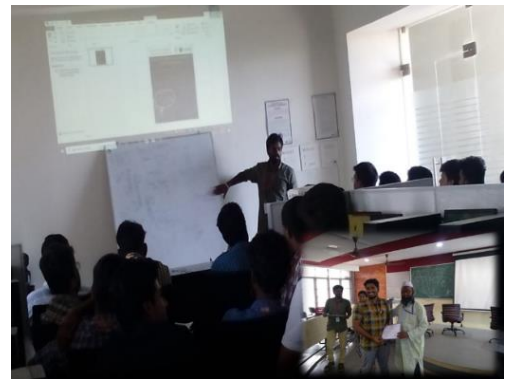
## Patents



An Indian Patent filed for Machining performance of cryogenically treated copper 2 wt.% – Beryllium alloy electrode by **Pervez Ahmed, H. Siddhi Jailani, S Rasool Mohideen** with application No. 202041000083.

## Programs organized

A Two days workshop on “Industrial Design and Conceptualization” was conducted in association with **EQuad Engineering Services Pvt. Ltd.**, on 4<sup>th</sup> & 5<sup>th</sup> February 2020. About 50 students participated in the workshop. The sessions were handled by Mr. Daniel and Mr. Martin who began the workshop by explaining the projects they worked on. At the end of day two, certificates of excellence were provided to the students by Dr. S. Rasool Mohideen, Dean, School of Mechanical Sciences.



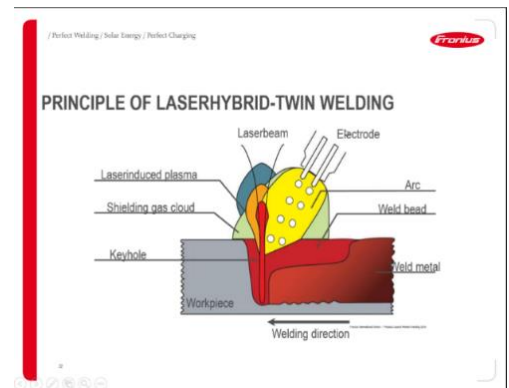
A composite image. The main part shows five men standing in a row in front of a large presentation screen. From left to right: a man in a dark blue shirt and jeans, a man in a light blue shirt and light trousers, a man in a pink shirt and a grey vest, a man in a white shirt and dark trousers, and a man in a blue and white checkered shirt. The screen behind them displays a presentation with the title 'Crescent' and various diagrams and text. An inset photo in the bottom right corner shows a lecture hall with students seated in red chairs, facing a screen displaying a presentation.



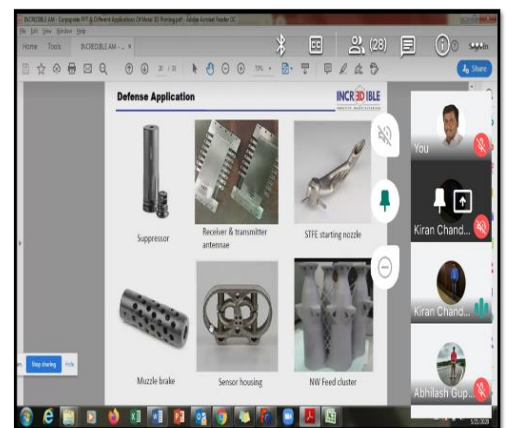
The webinar on “**Electric Vehicle (EV) design**” was organized in collaboration with the corporate product marketing center **SIEMENS** on 25<sup>th</sup> April 2020. The presentation was delivered by **Mr. Pradeep Singh of PLM team SIEMENS**. The webinar offers a brief introduction about the EV and the importance of Mechanical and Automobile Engineering in the current automotive industries. The presentation delivers a detailed view of the electric motor control system and Heat dissipation unit of the EVs.



The webinar on “**Career Opportunities in Welding**” was organized in collaboration with Fronius India on 28<sup>th</sup> April 2020. The presentation was delivered by **Mr. Azhagappan. Suman of Fronius India**. This program is specially designed for students and young minds who are looking for a prospectus career. The webinar offers a brief introduction to career opportunities in welding and its importance in the field of Mechanical Engineering.



The webinar on “**Basics of 3D Printing Technologies & Its Industrial Applications**” was organized in collaboration with the **Incredible Additive Manufacturing Pvt. Ltd.**, Pune on 21<sup>st</sup> May 2020. The presentation was delivered by **Mr. Kiran Chandwadkar and Mr. Abhilash Guptha** of the Marketing team of IPM Division, Pune. The webinar offers a brief introduction to the 3D Printing technology and its importance and requirement in the field of Mechanical and automobile students, towards their project work. The presenter also explained the step-by-step process of 3D printing using various Additive Manufacturing processes.



The webinar on “**Six Sigma White Belt**” was organized in collaboration with the Vision Excellence on 23<sup>rd</sup> May 2020. The presentation was delivered by **Dr. Gopal Sivakumar** of Vision Excellence. The presentation covered six sigma phases such as to define, measure, analyze, improve and control with industrial examples and focused on the internship and job opportunity available in the industry. The presenter motivated the students to approach the industries confidently, and get industrial exposure through In-plant Training, internships and industrial visits.



The webinar on “**Battery Operated Electric vehicle**” was organized in collaboration with **PM Tech Innovator** on 26<sup>th</sup> May 2020. The presentation was delivered by **Mr. Pranav Ramanlal Mistry** of PM Tech Innovator. The webinar introduced battery-operated electric vehicle (BEV). BEV is a type of electric vehicle (EV) that exclusively uses chemical energy stored in rechargeable battery packs, with no secondary source of propulsion (e.g. hydrogen fuel cell, internal combustion engine, etc.). BEVs include motorcycles, bicycles, scooters, skateboards, railcars, watercraft, forklifts, buses, trucks, and cars.



#### **Innovation Concept 3 ( Latest Design )**

**Highest surface area covered to get maximum mileage ( 600 Kms /Charge)**

-Main battery storage will be in Chassis - 60 %  
Top frame with hood - 20 %  
Other section joining - 20 %

-You will find that all batteries connected in series will hold power for running car weighing 1 Ton to 500 to 600 Kms per charge

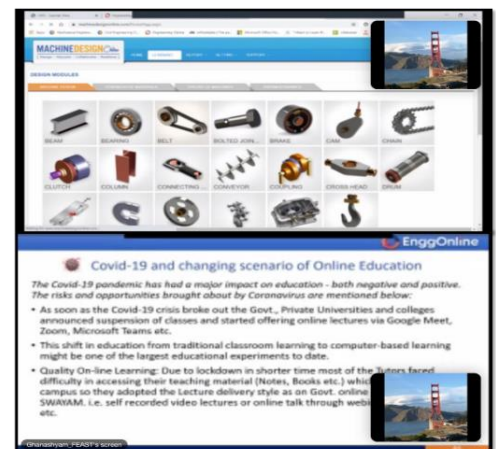


He demonstrated various Innovative techniques developed by him which were adopted by several auto giants like Volkswagen, Tesla etc., He emphasized the students become entrepreneurs confidently with their new ideas regarding the battery-operated electric vehicle. Besides, funding agencies specifically for innovative ideas toward BEV are listed by the presenter.

The webinar on “**Modification of oxidation properties of sulfide mix towards frictional stability in NAO brake pad**” was organized in collaboration with **Rimsa Metal Technology**, Barcelona, Spain on 04<sup>th</sup> June 2020. The presentation was delivered by **Dr. Carlos Lorenzana**, **Technical Director-R&D of Rimsa**. The webinar offers a brief introduction to various sulfides used in the brake pad. Tin sulfide being too expensive, brake friction composite formulators throughout the world are searching for an alternative without compromise on the performance. The speaker emphasized amalgamating FeS and Tin sulfide to improve the oxidation properties of the mix. In addition to the researchers, academicians and students, formulators and testing engineers from several OEMs and Aftermarket manufacturers from friction material Industries attended the webinar and had a fruitful discussion at the end of the webinar.



The webinar on “**Engineering Online**” was organized in collaboration with the **FEAST Software Product Development, Pvt. Ltd.**, Mumbai on 20<sup>th</sup> June 2020. **Mr. Ghanashyam Wargay** and **Mr. Nithin Bhatt** of the Lead team, Mumbai, delivered the presentation. The webinar introduced the Learning Management system offered by FEAST. This platform can also offer Augmented Reality (AR) techniques to explain the fundamental concepts in engineering. Faculty members participated in the webinar and got benefited.



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## FACULTY NEWS

### Journal Publications

1. Sasikumar, C., **Manokar, A. M.**, Vimala, M., Winston, D. P., Kabeel, A. E., Sathyamurthy, R., & Chamkha, A. J, "Experimental studies on passive inclined solar panel absorber solar still," *Journal of Thermal Analysis and Calorimetry*, vol. 139, pp. 3649-3660, 2020.
2. Ramalingam, S., **Rasool Mohideen, S.**, Manigandan, S., & Prem Anand, T. P., "Hybrid polymer composite material for robotic manipulator subject to single link flexibility", *International Journal of Ambient Energy*, vol.136, no.1, pp. 1-19, 2019.
3. **Ravi Kumar, S**, Kanagasabapathy, H, **Muralidharan V**, "Fault Diagnosis of self-aligning troughing rollers in using k-star algorithm", *Materials Today Proceedings*, ICMMM 2019, pp 341-349, 2019.
4. Mahboob E. Afshan, **Selvakumar, A. S.**, Velraj, R., & Rajaraman, R. "Effect of aspect ratio and dispersed PCM balls on the charging performance of a latent heat thermal storage unit for solar thermal applications". *Renewable Energy*. pp. 1-32, 2019.
5. Kabeel, A. E., **Muthu Manokar, A.**, Sathyamurthy, R., Prince Winston, D., El-Agouz, S. A., & Chamkha, A. J, "A review on different design modifications employed in inclined solar still for enhancing the productivity," *Journal of Solar Energy Engineering*, vol. 141, no. 3, pp.1-12, 2019.
6. Gunasegaran, V, **Muralidharan, V**, "Fault Diagnosis of Spur Gear System through Decision Tree Algorithm using vibration signal", *Materials Today Proceedings*, ICMMM 2019, 22 3232-3239, 2020.
7. **Md. Javeed Ahmed, Balaji, M. A. S.**, Saravana Kumar, S. S., & Senthamaraikannan, P.A, "Comprehensive Physical, Chemical and Morphological Characterization of Novel Cellulosic Fiber Extracted from the Stem of Elettaria Cardamomum Plant", *Journal of Natural Fibers*, pp. 1-12. 2019.
8. **Varun Kumar Arulvizhi, Selvakumar Al. S., Ravikumar, N**, Dinesh, B and Abdur Rahman K, "Free vibration study of Nd:YAG Laser Welded Stainless steel 316 joints reinforced with Stellite Powder", *Materials Today Proceedings*, ICMMM 2019, 22 pp. 1369-1373, 2020.
9. **Varun Kumar A, Balasrinivasan, M**, Varun Kumar, R, Balachandar, K, **Siva Kumar, C**, "Temperature Distribution Study of Friction Stir Welded Aluminum Alloy 7075-T6 joints Reinforced with SiC Powders", *Materials Direct*, 22, pp.1333-1340, 2020.
10. **Mahashar Ali, J, Siddhi Jailani, H**, Murugan, M, "Surface roughness evaluation of electrical discharge machined surfaces using wavelet transform of speckle line images", Elsevier, Measurements, 149, 107029, 2020.

11. Logesh, K, Hariharasakthisudhan, P, **Surya Rajan, B**, Arul Marcel Moshi, A, Khalkar, V, "Effect of multi-walled carbon nano-tube on mechanical behavior of glass laminate aluminum reinforced epoxy composites", *Polymer Composites*, pp.1-12, 2020;.
12. Hariharasakthisudhan, P, **Surya Rajan, B** and Sathickbasha, K, "Inspiration of reinforcements, manufacturing methods, and microstructural changes on wear behavior of metal matrix composites - a recent review", *Materials Research Express*, 7, 012006, 2020.
13. Logesh, K, Hariharasakthisudhan, P, Arul Marcel Moshi, A, **Surya Rajan, B and Sathickbasha, K**, "Mechanical properties and microstructure of A356 alloy reinforced AlN/MWCNT/graphite/Al composites fabricated by stir casting", *Materials Research Express*, 7, 015004, 2020.
14. Hariharasakthisudhan, P, **Sathickbasha, K, Surya Rajan, B** and Jeyanthram, V, "Steady-state wear Behavior of Multi-Scale Hybrid Composite - AA6061/Al<sub>2</sub>O<sub>3</sub> (μm)/EN31 Steel Tribo System", *Journal of Tribology*, Vol.142/011702-1, 2020.
15. Logesh, K, Hariharasakthisudhan, P, **Surya Rajan, B**, Arul Marcel Moshi, A, Khalkar, V, "Effect of multi-walled carbon nano-tube on mechanical behavior of glass laminate aluminum reinforced epoxy composites", *Polymer Composites*, pp. 1-12, 2020.
16. Kabeel, A.E., RavishankarSathyamurthy, **Muthu Manoka,r A**, Swellam W. Sharshir, Essa, F.A., Ammar, H. Elshiekh, "Experimental study on tubular solar still using Graphene Oxide Nano particles in Phase Change Material (NPCM's) for fresh water production", *Journal of Energy Storage*,28, 101204, 2020.
17. Arun Kumar, S, Suresh Mohan Kumar P, Ravishankar Sathyamurthy, **Muthu Manokar, A**, "A study of life cycle conversion efficiency and CO<sub>2</sub> role in the pyramid shape solar stills - comparative analysis", *Elsevier, Groundwater for Sustainable Development*, 11, 100413, 2020.
18. **Ravikumar Natarajan, Ravi, Sivakumar C, Varun Kumar Arulvizhi, Balasrinivasan, M**, "Drag Optimization of Multi-Axle Commercial Vehicle Model using Ansys Fluent", *SAE International*, ISSN 0148-7191.
19. SivakumarVaithilingam, SakthivelThirumalai Gopal, Senthil Kumar Srinivasan, **Muthu Manokar, A**, Ravishankar Sathyamurthy,Ganapathy Sundaram Esakkimuthu, Ravinder Kumar, Mohsen Sharifpur, "An extensive review on thermodynamic aspect based solar desalination techniques", *Journal of Thermal Analysis and Calorimetry*, 2020.
20. **Muthu Manokar, A**, Vimala, M, Prince Winston, D, **Rajendran, D.R.**, Ravishankar Sathyamurthy, Kabeel, A.E., "Year around distilled water production, energy and economic analysis of solar stills - A comparative study", *Heat Transfer Wiley*, 1-12, 2020.

21. **Muthu Manokar, A**, Vimala, M, Prince Winston, D, **Rajendran, D.R.**, Ravishankar Sathyamurthy, Kabeel, A.E., "A comparative study of 3E (energy, exergy, and economy) analysis of various solar stills, *Heat Transfer Wiley*, 1-16, 2020.
22. Gurukarthik Babu Balachandran, Prince Winston David, Gokul Rajendran, Mohamed Nasrulla Akbar Ali, Vignesh Radhakrishnan, Ramkumar Balamurugan, **MuthumanokarAthikesavan**, Ravishankar Sathyamurthy, "Investigation of performance enhancement of solar still incorporated with Gallus gallusdomesticus cascara as sensible heat storage material, *Environmental Science and Pollution Research*, 2020.
23. Rajendran Duraisamy Ramalingam, Ganapathy Sundaram Esakkimuthu, Jawahar Paulraj, Kabeel Abd Elnaby, **MuthumanokarAthikesavan**, Ravishankar Sathyamurthy, Sivakumar Vailthilingam, "Inferences on the effects og geometries and heat transfer fluids in multi-cavity solar receivers by using CFD", *Springer Renewable Energy and Water Sustainability*, 2019.
24. **Varun Kumar Arulvizhi and SelvakumarAlandur Somasundaram**, BSACIST, "Free vibrational characteristics of Dual Side Nd:YAG Laser Welded Stainless steel 304 joints reinforced with Al<sub>2</sub>O<sub>3</sub>, Micro Powder Particles", *SAE International*, ISSN 0148-7191.
25. **Muthu Manokar, A**, "Experimental study on effect of different mass flow rate in an inclined solar panel absorber solar still integrated with spiral tube water heater", 13<sup>th</sup> Gulf Water Conference - Water in the GCC: Challenges and innovative Solutions, 2019.
26. **Muthu Manokar, A**, Kabeel A.E., Ravishankar Sathyamurthy, Mageshbabu D, Madhu B, Anand P, ParandhamanBalakrishnan, "Effect of mass flow rate on fresh water improvement from inclined PV panel basin solar still", *Materials Today*, 2020.

## Conference Presentations

- **Dr.Serajul Haque** presented a paper in the International Conference on Fuzzy Logic and Neural Network Approaches For Engineering Solutions organized by JEAR and Hexacube, India during the period of 29.4.2020 to 30.4.2020.
- **Dr. K. Mohamed Bak** presented the paper in the International Conference on advances in mechanical engineering (ICAME- 2020) organized by SRM Institute of Science and Technology, Chennai on 24.2.2020.

## Videos Published

- **Dr. A. Arockia Julias** published a series of short videos on YouTube for Mechanics of Composite Materials with a total duration of 1 hr 20 minutes.
- **Dr. A. Arockia Julias** published a series of short videos on YouTube for CNC programming with a total duration of about 1 hr.
- **Dr. S. Jeavudeen** published a series of short videos on YouTube for Gear Train with a total duration of 1 hr 25 minutes.
- **Dr. S. Jeavudeen** published short videos on YouTube for PLC and Tips for MS Word with a total duration of about 1 hr.
- **Mr. J. Mahashar Ali** published a series of short videos on YouTube for Engineering Mechanics with a total duration of about 1 hr 35 minutes.

## Programs attended

- Dr. R. Karunanithi participated in the workshop on “Computational Materials Modeling& Simulation (CMMS 2020)” conducted by Under CoE (in Advanced Materials), TEQIP-III at the National Institute of Technology Durgapur.
- Dr. Mohamed Bak K participated in the workshop on “Thingworx IIOT (Internet of Things)” organized by Adroitec Ltd, Chennai on 08.01.2020.
- Dr. A.S. Selvakumar participated in the workshop on “National Initiative for Technical Teachers Training” conducted by NITTR Chennai in partnership with AICTE on 20.2.2020.
- Mr. Syed Shaul Hameed attended the FDP – “Introduction to programming with Matlab” organized by Vanderbilt University, USA during the period of 1.3.2020 to 26.4.2020.
- Dr. Mohamed Bak K attended the Webinar on “Patents and Intellectual Property” organized by CIIC, BSAR Crescent Institute of Science and Technology, Chennai on 26.4.2020.
- Dr. Mohamed Bak K participated in the Online Webinar on “Art of Fundraising for Entrepreneurs”, organized by CIIC, BSAR Crescent Institute of Science And Technology, Chennai on 29.04.2020.
- Dr. A. Arockia Julias, Dr.Serajul Haque, Dr. S. Jeavudeen, Dr.M.Thirumurugan, attended the online FDP on “Moodle Learning Management System” organized by the Department of Computer Science, Kaypeeeyes College of Arts & Science, Kotagiri, in association with Spoken Tutorial Project, IIT Bombay, MHRD, Govt of India during the period 29.4.2020 to 1.5.2020.

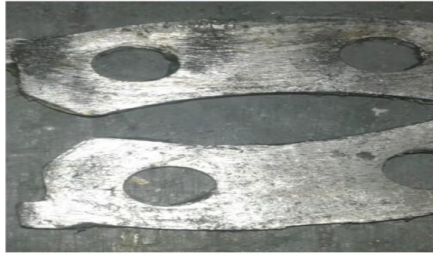


- Dr. Mohamed Bak K participated in the Online Webinar on “ Blue Ocean strategy for startups to swim across the Covid 19”, organized by CIIC, BSAR Crescent Institute of Science And Technology, Chennai on 07.05.2020.
- Dr. Mohamed Bak K participated in the Online Webinar on “10 Steps to Become an Entrepreneur”, organized by CIIC, BSAR Crescent Institute of Science And Technology, Chennai on 13.05.2020.
- Dr.M.Thirumurugan attended the FDP on “Novel Materials and its Industrial Applications” Organized by Karpagam College of Engineering, Coimbatore during the period of 13.5.2020 to 18.5.2020.
- Mr. Jamesha Ibrahim. K, Mr. S. Syed Zubair attended the Webinar on “Effective and Efficient Online Teaching in the Age of Corona, A Hands-On Workshop” organized by IIT Bombay during the period of 14.5.20 to 16.5.2020.
- Dr.M.Thirumurugan attended the Workshop on “Additive Manufacturing” Organized by S.A.Engineering College, Chennai during the period of 15.5.2020 to 16.5.2020.
- Dr. Mohamed Bak K participated in the Online Webinar on “Getting started with AWS” organized by CIIC, BSAR Crescent Institute of Science And Technology, Chennai on 19.5.2020.
- Mr. S. Syed Zubair attended the Webinar on “Online Workshop - Scientific Writing for Journals” organized by Springer Nature, India on 20.5.2020.
- Dr. Mohamed Bak K participated in the Online Webinar on “ Strategies for Low Budget Research” organized by CIIC, BSAR Crescent Institute of Science And Technology, Chennai on 20.05.2020.
- Dr. A.S. Selvakumar, B. Surya Rajan participated in the webinar on “Basics of 3D Printing Technologies & Its Industrial Applications”, organized by the Department of Mechanical Engineering, BSACIST with collaboration Incredible AM Pvt. Ltd., Pune On 21.05.2020.
- Dr. Mohamed Bak K participated in the Online Webinar on “ Nano tech-enabled advanced apparels make your life proof”, organized by CIIC, BSAR Crescent Institute of Science And Technology, Chennai on 22.05.2020.
- Dr. Mohamed Bak K attended the Webinar on “Various Project Opportunities for DST Funding–Strategies on International Cooperation” organized by the Department of Science & Technology, Government of India and organized by the Office of Research, ESPAC and HR & FTA on 23.5.2020.
- Mr. S. Syed Zubair participated in the online workshop on “Effective and Efficient Online teaching in the age of Corona, A hands-on Workshop”, IIT Bombay on 24.05.2020.
- Mr. S. Syed Zubair participated in the online workshop on “Automotive and Transportation design”, ISIEINDIA on 27.05.2020.

- Dr. Mohamed Bak K participated in the Online Webinar on “Startup Innovation Ecosystem”, organized by CIIC, BSAR Crescent Institute of Science And Technology, Chennai on 29.05.2020.
- Dr. Mohamed Bak K participated in the Online Quiz Competition “ Test your knowledge in ISO” conducted by the Department of Computer Science and Engineering, BSAR Crescent Institute of Science And Technology, Chennai on 29.5.2020.
- Dr. Mohamed Bak K participated in the Online Webinar on “ On Working Remote and Getting Started with ZOHO one” organized by CIIC, BSAR Crescent Institute of Science And Technology, Chennai on 01.06.2020.
- Dr. S. Mohamed Ilyas attended the online FDP – “Biofuels and its Application in IC Engines” organized by MEA Engineering College, Perinthalmanna, Kerala during the period of 1.06.2020 to 5.06.2020.
- Dr.M.Thirumurugan attended the FDP on “Multidisciplinary Approach towards Emerging trends in Science and Humanities” Organized by Ramachandra College of Engineering, Eluru, Andra Pradesh during the period of 1.6.2020 to 5.6.2020.
- Dr.M.A. Sai Balaji, Dr.S . Ravikumar, Mr. B. Surya Rajan, Mr. MD. Javeed participated in the webinar on “Modification of oxidation properties of sulfide mix towards frictional stability in NAO brake pad” organized by the Department of Mechanical Engineering, BSAR Crescent Institute of Science And Technology, Chennai with collaboration with Rimsa Metal Technology, Barcelona, Spain on 04.06.2020.
- Dr. Mohamed Bak K participated in the Online Webinar on “ Cyber forensics and the current challenges”, organized by the Department of IT, BSAR Crescent Institute of Science And Technology, Chennai on 13.6.2020.
- Mr. Syed Shaul Hameed attended the Workshop on “Artificial Intelligence, Automated Driving and Model-Based Design Using MATLAB and Simulink” organized by Mathworks, Chennai on 15.06.2020.
- Dr.ArockiaJulias A, Dr. P D Jeyakumar attended the Online FDP on “Application of Moodle LMS” organized by Patil College of Engg, India and BSAR Crescent Institute of Science and Technology during the period of 11.06.20 to 25.06.20.
- Dr.M.Thirumurugan attended the FDP on “Advanced Machining Techniques” Organized by Sathyabama Institute of Science and Technology, Chennai during the period of 22.6.2020 to 27.6.2020.

## STUDENT NEWS

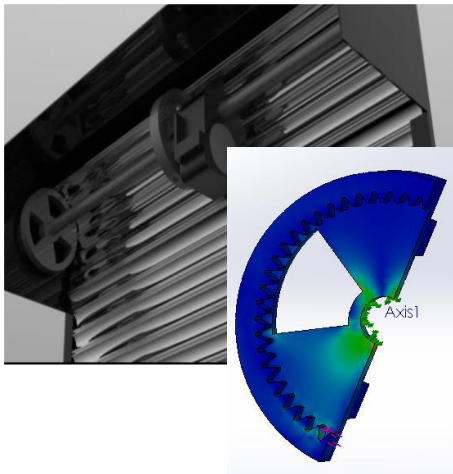
### Selective Projects



Mir Raheem Mohideen (160021601080), L. Musthfa Ali Khan (160021601121), R. Irshaad Ahamed (160021601061) completed the B.Tech. project titled Effect of different solid lubricants towards friction stabilization and wear in a Nao disc brake pad



Muhammed Ibraaheem Noufal (160021601118), Raghavan Kannan (160021601139), Ranjit Roshan V S (160021601142) completed the B.Tech. project titled "Development of drone collision avoidance system". This project involves the design, analysis, simulation, and fabrication of one such drone system using LIDAR systems for environment feedback. It also consists of proofing the inabilities of ultrasonic sensing using the test rig and aims to study, experiment and simulate the present condition of drones and rectify the problems proposing innovative new methods



AadhisheshaPandi S (16002160100) completed the B.Tech. project titled "Design of an automatic roller shutter door operator". In this work, CAD models are developed for all parts of the Roller shutter door in Solidworks. The simulation is also carried out in SimuliaWorks for understanding the various loads acting on the components. A control system with IoT based application is developed for operating the Roller Shutter door operator and improve surveillance and security for the user.

### Conference Presentation

1. **Mohamed Thalib**, A. Muthu Manokar\*, N.Vasimalai, Fadi A Essa, Ravishankar Sathyamurthy "Comparative Study of Tubular Solar Stills with Different Phase Change Materials" International Conference on Innovations in Thermo-Fluid Engineering and Sciences [ICITFES - 2020], National Institute of Technology, Rourkela, 769008, India, from 10-12th February 2020
2. **Mohamed Thalib M**, Paramasivam A, Karthick, Ravishankar Sathyamurthy, Muthu Manokar A\*, "Performance analyses of 250 kWp grid-connected monocrystalline photovoltaic system using simulation tool" International Conference on Innovations in Thermo-Fluid Engineering and Sciences [ICITFES - 2020], National Institute of Technology, Rourkela, 769008, India, from 10-12th February 2020

## Campus Recruitment

SI	RRN	Name	Organization
1.	160021601174	SURYA KUMAR J	Byju's
2.	160021601117	MUHAMMAD AFNAAN ABDULLAH	Byju's
3.	160021601139	RAGHAVAN KANNAN	Byju's
4.	160021602018	SUYASH RAY	Byju's
5.	160021601188	NAVIS JEANLYN	Accenture
6.	160021601202	SYED ARSHAD	Accenture
7.	160021601154	SASIDHARAN SRINIVASAN	Accenture
8.	160021601115	MOHAN BADHRINARAYANAN	Accenture
9.	160021601063	JAGANNATHAN T T	Accenture
10.	160021601011	ABRAR KHAN A	Accenture
11.	160021601032	ARUL ABRAGHAM J E	Fronius India
12.	160021601180	Tariq Ahamed	CastwelAutoparts Ltd
13.	160021601061	Irshaad Ahamed	CastwelAutoparts Ltd
14.	160021601117	MUHAMMAD AFNAAN ABDULLAH	CastwelAutoparts Ltd
15.	160021601108	MOHAMMED FARZAN S	CastwelAutoparts Ltd
16.	160021601159	SHAIK MOHAMMAD FUZAIL AHAMED	CastwelAutoparts Ltd
17.	160021601064	JAYAKARAN M	CastwelAutoparts Ltd
18.	160021601154	SASIDHARAN S	CastwelAutoparts Ltd
19.	160021601023	AKHIL REHUMAN R	CastwelAutoparts Ltd
20.	160021601009	ABDUL MALIK A	CastwelAutoparts Ltd
21.	160021601183	THARIQ NIHALLE ABDUL THAHEEDOU	CastwelAutoparts Ltd
22.	160021601038	BARATHSRE R	CastwelAutoparts Ltd
23.	160021601092	MOHAMED JASSIM K	CastwelAutoparts Ltd
24.	160021601031	ARSHATH AHAMED	CastwelAutoparts Ltd
25.	160021601203	MOHAMED RIFAATH M T	CastwelAutoparts Ltd
26.	160021601192	NAVEEDUR RAHMAN	CastwelAutoparts Ltd
27.	160021601164	SHARAFATH ABDUL KADER N	CastwelAutoparts Ltd
28.	160021601171	SUDHARSAN M	CastwelAutoparts Ltd
29.	160021601122	MUZAMMIL RIFAIZ T A	CastwelAutoparts Ltd
30.	160021601084	MOHAMED AFRIDI I	CastwelAutoparts Ltd
31.	160021601130	PARVEEZ BASHA J	CastwelAutoparts Ltd
32.	160021601123	NAFEES AHAMED V	CastwelAutoparts Ltd



## Placement Drives

Sl.	Name of company	Date	Venue	Annual Pay (in Lakhs)
1.	KREA E Knowledge P.Ltd.	23.1.20	At their Office	3.00
2.	Fronius India Pvt. Ltd	7.1.20	BSACU	3.00
3.	My Gate	20.1.20	Saveetha	3.50
4.	HCL Talent Care	10.2.20	BSACU	2.58
5.	Avaali Solution	13.2.20	Bangalore	2.80 - 4.00
6.	Maestro Steel Detailing Pvt Ltd	27.2.20	BSACU	1.80 - 2.40
7.	CastwelAutoparts Pvt Ltd.	3.3.20	At their Office	2.20
8.	Smart Training Resource India Pvt Ltd	3.3.20	BSAU	2.50
9.	eNoahiSolutions Pvt Ltd	9.3.20	BSAU	3.00
10.	Nexware Technologies Pvt Ltd		off Campus	3.25
11.	Ninja Cart	12.3.20	off Campus	3.00
12.	Bankbazaar	9.5.20	Virtual Drive	2.10
13.	Extramarks Education Pvt Ltd.	9.5.20	Virtual Drive	3.00
14.	Byju's		Virtual Drive	10.00
15.	TVS Delphi	29.5.20	Virtual Drive	2.00
16.	Extramarks Education Pvt Ltd.	10.6.20	Virtual Drive	3.00
17.	Whitehat Jr	29.6.20	Virtual Drive	4.20

## Internships

### Name of the Organization

HUYNDAI MOTOR LIMITED

ASHOK LEYLAND

RENAULT NISSAN AUTOMOTIVE INDIA PVT LTD,  
LOGICIZE RESEARCH

ICF

HMA INDUSTRIES PVT LTD, CHENNAI.

AMCERE PVT LTD, COIMBATORE.

### Students List

FAIZAL K

BARATHSRE R

M.SAKTHIGOWTHAM

ABRAR KHAN A

SAKTHIGOWTHAM,

RAGHAVAN KANNAN

R . SURYA RAGAVENDHER

FAROOQ AFZAL KHAN

MOHAMMED FAZIL.A

V. SUDHARSHAN BALAJI ,

A. SUHAIL AHMED,

S. SWAAMINATH

KAARTHIKHEYEN V

AADHISHESHA PANDI S

ASHWANTH KUMAR J

MUHAMMAD AFNAAN ABDULLAH

G.SAFFWAN SYED ASAN,

CELKO FOUNDATION, JP NAGAR, BANGALORE.  
TATA TOYO RADIATORS LTD.

RANE NSK  
STEADFAST FRICTION AND CARBON PRODUCTS,

CASTWELL AUTO PARTS PVT LTD.

LOGICIZE RESEARCH  
ACCURATE CORPORATION PVT LTD  
MILWRIGHTS CAD/CAM SOLUTION PROVIDERS  
GODREJ CONSUMER PRODUCTS PVT LTD  
TRAVENCORE TITANIUM PRODUCTS  
NEXWARE TECHNOLOGIES PVT LTD  
COCHIN SHIPYARD  
TRACTORS & FARM EQUIPMENT (TAFE),  
BPCL (BHARAT PETROLEUM CORPORATION LIMITED),  
TOSHIBA JSW POWER SYSTEMS PVT. LTD,  
SHARP DESIGN SERVICES,  
ALKRAFT THERMOTECHNOLOGIES PVT LTD,

MITSUBISHI HEAVY INDUSTRIES INDIA PRECISION TOOLS  
LTD.,  
AMCERE PVT LTD, COIMBATORE.

ITI LTD, BANGALORE  
ROOTS INDUSTRY PVT LTD,

MAHLE ENGINE COMPONENTS

CHENNAI METRO RAIL LIMITED (CMRL)

P.RITHVIK  
MOHAN B  
B. THASLIM RAJA, A.  
AFSHAN  
SUYASH RAY  
RSHAAD AHAMED R,  
MIR RAHEEM MOHIDEEN,  
MUSTHAFA ALI KHAN L  
ARSHAD SHEIK  
HANEEF MOHAMED  
AADHISHESHA PANDI S  
BALACHANDAR  
HARI HARAN P  
ARUL ABRAHAM JE  
ARSHAD SHEIK  
ASHIK ALI A  
ARON MIJI  
MOHAMED BASITH S  
MOHAMED FARAN M  
MOHAMED NAVEEN SHAMSUD  
MOHAMMAD FAROOQUE I  
MOHAMMED ARSHAD N  
MOHAMED AINUL RAHMAN BI  
MOHAMMED FARZAN S  
  
G.SAFFWAN SYED ASAN,  
P.RITHVIK  
NAVNEET KRISHNAN  
SEKAR. I,  
PARVEEZ BASHA J,  
NAFEES AHAMED V  
SARAVANAN AN,  
SASIDHARAN S  
S.V. YUVAN KAARGIL RAJ -

## Sports Achievements

Siva Sankaran B won the Madras Premier League, Manaquest 2020 sports event organized by ITM Business School held on 5.02.2020



## Outreach activities



Final year Mechanical Department students MUGESH.P -170021601096, MURALIKRISHNAN.D - 170021601097 and NATHERATHAM. A - 170021601097 participated in the 7 Days special camp (28/01/2020 to 03/02/2020) organized by The National Service Scheme (NSS) of our institution for the welfare of the Government High School situated in Thundalkazhani, Karasangal village.

## ALUMNI CORNER

**36 YEARS OF ACADEMIC EXCELLENCE**

**Crescent**  
Office of Alumni Relations

**Office of Alumni Relations**  
Department of Mechanical Engineering

**Alumni Webinar Series # 5**

### Introduction to Data Science with MATLAB

**Syed Shaul Hameed**  
(B.E. Mech, 2011 Batch)  
Assistant Professor  
Department of Mechanical Engineering  
B.S. Abdur Rahman Crescent Institute of Science & Technology

Time & Date: **WEDNESDAY, 20 MAY 2020**  
**03.00 pm to 04.00 pm**

**Register Today!**

E-Certificates will be provided to the participants

Our Alumnus Mr. Syed Shaul Hameed delivered a lecture titled “Introduction to Data Science with MATLAB”, in the webinar organized by the Office of Alumni Relations in association with the Department of Mechanical Engineering for the benefit of students on 20.5.2020.

**36 YEARS OF ACADEMIC EXCELLENCE**

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**Office of Alumni Relations**  
in association with  
**Department of Mechanical Engineering**

Join our Upcoming  
**WEBINAR #8**  
ON

### Acoustic Emission Characterization of Failure Modes on Lap Joints

**SPEAKER**

**Dr. Mohamed Bak K.**  
(M.E. CAD, 2008 Batch)  
Assistant Professor  
Department of Mechanical Engineering  
B.S. Abdur Rahman Crescent Institute of Science and Technology, Chennai

**CONVENER**

**Dr. K. Ganesh**  
Director, Office of Alumni Relations  
BSA Crescent Institute of Science and Technology  
Chennai

**COORDINATORS**

**Mr. John Mathew**  
Alumni Coordinator  
Office of Alumni Relations

**Mr. Abdur Rahman**  
Alumni Faculty Coordinator  
Department of Mechanical Engineering

**TUE 16<sup>th</sup> JUNE 2020**

**3:00 PM (IST) to 4:00 PM**

Scan to Register Today!

Our Alumnus Dr. K. Mohamed Bak delivered a lecture titled “Acoustic Emission Characterization of Failure modes in lap joints”, in the webinar organized by the Office of Alumni Relations in association with the Department of Mechanical Engineering for the benefit of students on 16.6.2020.

## EDITORIAL TEAM



Dr. A. Arockia Julias  
Coordinator



Dr. V. Muralidharan  
Member



Dr. K. Mohamed Bak  
Member



Dr. B. Surya Rajan  
Member



Mr. G. Rajesh  
Member