

Newsletter





July-Dec. 2019

DEPARTMENT OF MECHANICAL ENGINEERING

Editorial Message

"We crank up the lives; we shift up the gears, Beware of us, because we are the Mechanical Engineers"

Heartily welcome to the 3rd Edition of our Departmental Newsletter.

We are indeed very happy and proud in bringing this newsletter about the latest developments and programs under the banner of SMEA.

It is indeed a great pleasure to note that our Department is publishing the newsletter on half yearly basis on every aspect of activities and events held during the semester. The newsletter aims to bring into view various proceedings, functions, events, news, accomplishments and happenings in the Department.

News letter acts as a communication channel among the alumni, faculty, students and experts in Mechanical Engineering.

We are very much grateful to the Management, Rector and Principal for their continuous encouragement, inspiration and support extended for the release of this "NEWS LETTER"

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Vision, Mission & PEOs of Mechanical Engineering Department

Vision:

To build competent human resources towards self employability and lifelong learning in the field of Mechanical Engineering to overcome challenges.

Mission:

- 1. To provide students with comprehensive knowledge of Mechanical Engineering with a multi-disciplinary approach along with an intellectually stimulating environment for creativity, research, scholarship, innovation and professional activity.
- 2. To establish Industry-Institute interaction in order to contribute towards serving mankind.
- 3. To build career oriented graduates with multi-disciplinary fields.

PEOs:

- **PEO-01**: Engage successfully in Mechanical Engineering practice in industry, government, private, post-graduate courses or alternative career pathways.
- **PEO-02**: Able to apply the knowledge of mathematics, basic science, mechanical engineering and other allied branches to solve engineering challenges and engage themselves in dynamic engineering teams.
- **PEO-03**: Inculcate life-long learning and service for the betterment of society and the environment.

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DEPARTMENTAL ACTIVITIES

10-day Automobile Training Program

ME Dept. SISTec GN hosted 10-day Automobile Training Program on "Strategy Based Diagnosis & Repair of Automotive Mechatronics and Mechanics" under the banner of SAE Collegiate Club SISTec for SSB Officers. Shri. D N Bhombe, Commandant SSB Academy Bhopal was the Chief Guest for this Ceremony.

The main objective of the training program was to train the Officers of Sashastra Seema Bal (SSB) in the area of Automobile Engineering. The key person Prof. Sanjay Chhalotre, an Automobile expert from the SISTec Gandhi Nagar delivered 10-day expert lecture and Hand-On sessions and enlightened the officers about various concepts and advanced techniques of Automobile Engineering.











10-Days Training on

Strategy Based Diagnosis & Repair of Automotive Mechatronics & Mechanics

4th to 14th November 2019 -

Organized by

ME Dept SISTec GN,

Under the Banner of SAE Collegiate Club SISTec

Training Service for Motor Transport Officers (SSB) SSB - Sashastra Seema Bal



Trainer's Profile

Prof. Sanjay Chhalotre
Expert in Automobile Engineering

5-Days STTP on Imperative Techniques of Heat Transfer Enhancements & Their Engineering Applications

The department of Mechanical Engineering of SISTec Gandhi Nagar, Bhopal organized 5-Days STTP on Imperative Techniques of Heat Transfer Enhancements & their Engineering Applications. The main objective of the training was to update the skill of faculties and researchers in the advanced domain of Heat Transfer Enhancements. In the changing world scenario with regards to industry and the job market, there is now an overpowering need for such researches and knowledge. It opens an ocean of opportunities for technology providers, vendors, engineers.

Various Scientists & Experts from the IITs, NITs BARC etc delivered their expert talks and enlightened various advanced techniques and concepts of Heat Transfer.









Five Days Short Term Training Programme on

Imperative Techniques of Heat Transfer Enhancements & their Engineering Applications

Sponsored by RGPV Under TEQIP-III

10th Sept - 14th Sept 2019

SAGAR INSTITUTE OF SCIENCE & TECHNOLOGY

Department of Mechanical Engineering

: EMINENT SPEAKERS :

- Dr. Mani. A., IIT Madras
- Dr. Pranav K. Mondal, IIT Guwahati
- Dr. Ritunesh Kumar, IIT Indore
- Dr. Santosh Kumar Sahu, IIT Indore
- Dr. Balkrishna Mehta, IIT Bhilai

- Dr. Vijay S. Duryodhan, IIT Bhilai
- Dr. S.P.S. Rajput, MANIT Bhopal

CO-ORDINATORS:

Dr. Rashmi Dwivedi-9907764967

Prof. Sanjay Kumar Singh-9827744865

Sagar Institute of Science & Technology, (SISTec-Gandhinagar), Bhopal

Industrial Visit to Garima Industries

Students visited two industries. At first they visited 'Garima Industries' where they saw the construction of bulker trailer made up of Mild Steel sheets of 4 mm thickness which was rolled in the roller machine and then welded with the help of MIG welding. 7 sheets are welded to fabricate 1 tank, which is further used to transport cement and petroleum products etc upto capacity of 5 ton.



Industrial Visit to Bend Joint Pvt. Ltd

Students had an industrial visit at Bend Joint Pvt. Ltd. There they all learnt about the process of Fabrication. They came to know about different fabrication units. How Raw material is bevel, bend, fit, welding, etc. They got to know how the product materials are tested (Radiology Testing). The industry is fabricating the Reheating tubes used in boilers.



Industrial Visit to Dainik Bhaskar Printing Press

Students from SISTec Department of Mechanical Engineering visited Dainik Bhaskar Printing Press located at Govindpura Bhopal. A short over view of the whole process was introduced to the group of students by one of the trainers from the Bhaskar team. They saw the working of large scale printing machines which were producing 35000 to 50000 copies per hour.



<u>Industrial Visit to Advanced Materials and Process Research</u> <u>Institute (AMPRI)</u>

Students from SISTec Dept of Mechanical Engineering visited Advanced Materials and Process Research Institute (AMPRI), The Council of Scientific & Industrial Research (CSIR), Bhopal.



STUDENTS ACTIVITY

Swachh Bharat Abhiyan

ME Dept SISTec GN organized Swachh Bharat Abhiyan in the memory of Mahatma Gandhi & involved Mechanical Branch students at its Campus. Campaign was inspired by the patriotism. Mechanical Dept organized this event to spread awareness towards cleanliness and hygiene and to make its students feel responsible for their country and themselves too. Its responsibility of the each and every Indian citizen to keep our country clean.

After the event Quizzes and tasks assigned to the students:-

- 1. Essay Writing Competition for 7th semester students.
- 2. Poster making competition for 5th semester students.
- 3. Inventory Management Competition for 3rd semester students.

Prof. Sanjay Chhalotre and Prof. Sanjay Singh were the judge for the whole event.





10-Days workshop on All Terrain Vehicle

10-Days workshop was conducted on All Terrain Vehicle under SAE Collegiate Club of ME Dept.



SAE BAJA-2020

Team RAPTOR SAE Collegiate Club of Sagar Group of Institution SISTec Gandhinagar qualified for SAE BAJA-2020 final Dynamic Round.

SISTec ATV 'Raptor' selected in Baja SAE India 2020 Dynamic Round

Chronicle Reporter, Bhopal

Sagar Institute of Science and Technology (SISTec) Gandhi Nagar All Terrain Vehicle (ATV) 'RAPTOR' has been selected in national inter college BAJA SAE India 2020 competition. The competition is run by Society of Automotive Engineers (SAE) for designing and building an offroad vehicle called All-Terrain Vehicle (ATV).

cle (ATV).

'RAPTOR' was designed and made by Mechanical Engineering Branch Students of SISTec in a 21 day training workshop held at its campus. Team RAPTOR participated in the virtual round against 281 teams of colleges across India at Chitkara University, Chandigarh in which over 1900 technocrats participated to deliver their presentations on design basis - mathematical modelling, virtual analysis on the



software - ANSYS and SOLID-WORKS, marketing analysis and project planning. 'RAPTOR' got selected in first round itself by securing 130 marks. The final dynamic round will be held in Pithampur Indore on lanuary 2020, It is noteworthy to mention that, 'RAPTOR' scored over ATV's designs of IIT Patna, BITS Pilani Hyderabad Campus etc and is the only team from Bhopal to qualify for the final round.

Shri Siddharth Sudhir Agrawal, Managing Director, Sagar Group has congratulated Team SISTec for awe-inspiring performance to highlight state at national forum and conveyed best wishes for final round. Dr Keshvendra Chaudhary, Principal SISTec, Dr Swati Saxena, Vice Principal SISTec, Prof. Ravishanker V Choudri - HOD Mechanical Department, Ms Prachi Shrivastava – Manager CRM congratulated the students and mentors Prof. Yasir Baig & Prof. Sanjay Chhalotre for their achievement and extended best wishes for final round.

Our ATV- All Terrain Vehicle went to Pithampur Indore



Poster Making Competition

Poster Making Competition on "World Energy Conservation Day" 2019 at SISTec GN

SISTec Department of Mechanical Engineering organized a Poster painting Competition on the occasion of World Energy Conservation Day, to spread awareness among students. World Energy Conservation Day is celebrated on 14th December globally to highlight it's importance and need in our daily life.



ACHIEVEMENT & AWARDS

Award by World Auto Forum (WAF)

A final year Mechanical Engineering student from SISTec Gandhinagar, Mr. Faiz Khan Awarded consecutively second time by World Auto Forum (WAF). He received this award by Ms. Tanuja Vasishtha, World Geospatial Industry Council and Mr. Anil Shrivastava, Principal Advisor NITI Aayog.



AICTE Chhatra Vishwakarma Award

Mechanical Engineering students presented their working model "Hot Air Generator", under the mentor ship of Head of Mechanical Dept. Prof. Ravishankar V Choudri, on the occasion of Regional Convention organized by AICTE for Chhatra Vishwakarma Award.

Project Name: Hot Air Generator

Working: It works on the basis of solar thermal technology in which solar energy is trapped by absorbing medium and used in the heating of the air which can be consumed for different purposes like cooking, drying of crop, industrial use etc.



सिस्टेक का हॉट एयर जेनरेटर विश्वकर्मा पुरस्कार के लिए सिलेक्ट

गांधी नगर कैंपस के स्टूडेंट्स ने किया तैयार



का समाधान पेश किया है। इस मॉडल सागर इंस्टीट्यूट ऑफ साइंस एंड से किसान अपनी गीली फसलों को सुखा टेक्नोलॉजी सिस्टेक गांधी नगर के छात्रों सकते है। प्रोजेक्ट का चयन एक समिति द्वारा सौर तापीय प्रौद्योगिकी से बनाया गया द्वारा किया गया था, जिसमें कुलपति हॉट एयर जेनरेटर मॉडल, एआईसीटीई आरजीपीबी भोपाल डॉ. सुनील कुमार छात्र विश्वकर्मा पुरस्कार-2019 के गुप्ता भी शामिल थे। सागर ग्रुप के प्रबंध राष्ट्रीय सम्मेलन के लिए चुना गया। निदेशक सिद्धार्थं सुधीर अग्रवाल और डॉ. भोपाल में आयोजित क्षेत्रीय सम्मेलन में केरवेंद्र चौधरी, प्रिंसिपल सिस्टेक गांधी इसका चयन किया गया। सिस्टेक गांधी नगर, विभागाध्यक्ष प्रो. रविशंकर चौधरी नगर के मैकेनिकल इंजीनियरिंग विभाग ने छात्रों को वधाई दी और सागर ग्रुप के के छात्र अंशुल, कुंदन, सुर्यादित्य व मिशन राष्ट्र निर्माण के तहत ग्रामीण भारत अभिनव ने ग्रामीण किसानों की मदद के भें समाधान पेशकश के लिए सराहना की।

Prof. Prem Kumar Chaurasiya is Awarded Ph.D

Congratulations to Prof. Prem Kumar Chaurasiya for Awarding Ph.D (Doctorate) in the field of Wind Energy from MANIT, Bhopal on Nov-2019. His topic of research was "Application of Different Remote Sensing Technique in Wind Energy Assessment"





THANK YOU

next edition will come soon....