



The Mechanical News

MECHANICAL ENGINEERING DEPTT.

JECRC, JAIPUR

VISSION AND MISSION OF COLLEGE

VISSION OF COLLEGE

□ TO BECOME A RENOWNED CENTRE OF OUTCOME BASED LEARNING AND WORK TOWARDS, ACADEMIC, PROFESSIONAL AND SOCIAL ENRICHMENT OF THE LIVES OF INDIVIDUALS AND COMMUNITIES.

MISSION OF COLLEGE

- FOCUS ON EVALUATION OF LEARNING OUTCOMES & MOTIVATE STUDENTS TO INCULCATE RESEARCH APTITUDE BY PROJECT BASED LEARNING.
- IDENTIFY, BASED ON INFORMED PERCEPTION OF INDIAN, REGIONAL & GLOBAL NEEDS, THE AREAS OF FOCUS & PROVIDE PLATFORM TO GAIN KNOWLEDGE & SOLUTIONS.
- OFFER OPPORTUNITIES FOR INTERACTION BETWEEN ACADEMIA AND INDUSTRY.
- DEVELOP HUMAN POTENTIAL TO ITS FULLEST EXTENT SO THAT INTELLECTUALLY CAPABLE & IMAGINATIVELY GIFTED LEADERS MAY EMERGE.

VISSION AND MISSION OF MECHANICAL DEPTT.

VISSION OF DEPARTMENT

□ THE MECHANICAL ENGINEERING DEPARTMENT STRIVES TO BE RECOGNIZED GLOBALLY FOR EXCELLENT TECHNICAL KNOWLEDGE AND TO PRODUCE QUALITY HUMAN RESOURCE, WHO CAN MANAGE THE ADVANCE TECHNOLOGIES AND CONTRIBUTE TO SOCIETY THROUGH ENTREPRENEURSHIP AND LEADERSHIP.

MISSION OF DEPARTMENT

- TO IMPART HIGHEST QUALITY TECHNICAL KNOWLEDGE TO THE LEARNERS TO MAKE THEM GLOBALLY COMPETITIVE MECHANICAL ENGINEERS.
- TO PROVIDE THE LEARNERS ETHICAL GUIDELINES ALONG WITH EXCELLENT ACADEMIC ENVIRONMENT FOR A LONG PRODUCTIVE CAREER.
- TO PROMOTE INDUSTRY-INSTITUTE LINKAGE.

PROGRAM OUTCOMES

- Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- Problem analysis:** Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

RITDME 2018

International conferences have been organized on April 6-7, 2018 at Jaipur Engineering College and Research Center, Jaipur. The idea was to provide a common platform for researchers to learn and explore different dimensions with the motive to find solutions for the common good of the society. India is a country of traditions. Following the culture and rituals, the conference was inaugurated with the lightening of the lamp to seek blessings from goddess Saraswati.

The event was graced by the presence of Prof. (Dr.) Noe. G. Alba-Baena from University of Texas; Shri GunjanSaxena, General Manager in BSNL, Jaipur; Prof. (Dr.) Deepak Garg from Bennett University; Prof. (Dr.)

Without change there is no innovation, creativity, or incentive for improvement. Those who initiate change will have a better opportunity to manage the change that is inevitable.

William Pollard



Rajesh Kumar Tiwari from RVS College of Engg and Technology, Jamshedpur; Prof. (Dr.) Peeyush Chandra Retd. Professor of Mathematics from IIT Kanpur.



Prof. (Dr.) MeghanshuVashista from Department of Mechanical Engg, IIT BHU; Prof. (Dr.) PurshotamChaturani, Retd. Professor of Mathematics from IIT Bombay, along with Mr.Amit and Arpit Agrawal Director JECRC foundation and Prof V.K.Chandna,Principal JECRC,Jaipur. A video talk was also delivered by Prof. (Dr.) Paulo Haufs.

Prof. Noe G Alba Baena from UACJ Mexico, implanted the idea of changing the mindset of the youth from why to how. He emphasized on the fact that one should think overall changes that happen around him and should find reason on "how" it happens. He admired India a lot and told that we are fortunate to be in this country at this very crucial point of time as all advancement



and technological development in each and every field are taking place in our nation. India is today the fastest developing nation with a huge number of young minds that can think beyond and bring change in the world. He praised the cultural diversity that our nation has and was moved by the hospitality that is embedded in our culture which he had found common all throughout the country. The two day conference was divided into six technical sessions.

Each session was chaired by experts from different institutions like IITs, NITs, IFO, etc. The papers presented covered various topics like.....

Session- I and II

Keynote Speech

RITDME started with the keynote speeches by Prof. Noé G. Alba Beana (UACJ, Mexico) and Dr. MeghanshuVashista(IIT BHU, India).

Prof. Noé G Alba Baena has a Ph.D. from the University of Texas in Material Science and Engineering. He holds specialization in aluminum alloys, nanocomposites, Ultrasonic Treatment,

Product design and Manufacturing Process. He delivered a keynote speech on the topic Advancement in Metal Matrix Nano Composite Processing. He told the session about the manufacturing, uses, and application on Nano composites. He focused on the future of Nano particles and what development can be done using this technology. This topic is a hot potato in today's world as each and every object is to be made as small as possible. This is a field that will have great applications in the near future. He persuaded the students to think over

this topic and work in the field of Nano technology to bring innovative ideas and discover new dimensions.

The Technical Sessions started on the first day of the conference. Two parallel sessions were organized.

The first session was chaired by Dr. J P Bhamu. He is an Associate Professor at Government Engineering College, Bikaner. He has a rich 17 years teaching experience and has published over forty research papers in national and international journals.

The second session had Dr. AnkurPareek as the Session Chair. He is currently working as the Intuitional Development and Academic Consultant for The Government of India on MHRD Project TEQIP-III which is sponsored by the World Bank.

The first two sessions had a total of eighteen papers registered out of which, twelve papers were presented.



Session Chair

Session –III

Keynote Speech

The third session started with the keynote speech by Dr. M L Meena. He is an Associate Professor. In Mechanical Engineering Department at Malviya National Institute of Technology, Jaipur. He delivered his speech on Ergonomics Strategies for Prevention of Musculoskeletal Disorders.



Session IV(Day two)

Keynote Speech

The day two of the international conference brought with it the Fourth technical session that was addressed by Dr. Ashok Kumar Sharma Head Department of Mechanical Engineering at Manipal University, Jaipur. He gave his keynote speech on Development of Performance Measurement Metric Framework to verify effectiveness of education and training pillar of Total Productive Maintenance. Session Chair

The session Chair for the fourth session was Dr. B K Sharma. He is currently the IFO Chairperson, Rajasthan Chapter. He had a rich experience of teaching and administration.



Session-V

Keynote

Dr. Varun Sharma from the National Institute of Technology, Jalandhar delivered the **keynote speech.....**

Session Chair

Dr. Vijay Sharma from Anand International College was the session Chair.

The session had a total of eight papers presented out of the eighteen papers that were registered. The session chair praised the efforts put in by the researchers and provided the valuable insights on how they can improve their research and proceed further with their work.



Session VI

Keynote

Dr. Jinesh Kumar Jain from Government Engineering College, Ajmer delivered the keynote speech on the topic Supply Chain Management.

Session Chair

Dr. Ravi Goyal from Bhartiya Skill Development University, Jaipur was the Session Chair for the sixth and the final session of RITDME.

Seven papers were presented out of the eighteen papers registered for the session.

The conference was a grand success and it was an abundance of knowledge and innovative idea.

ISRO @JECRC

"Knowledge teaches to walk but imagination gives you wings to fly."



ISRO Science Exhibition was organised in JECRC, university on 19 and 20 April 2018 in JECRC University, Jaipur for the second time in a row.

Students from more than 200 schools arrived at JECRC University for the two-day grand event i.e. ISRO National Science Exhibition. The enthusiastic students and visitors were very excited to see the amazing world of ISRO through the display of their scaled models. There was the National Science Quiz Competition organized by ISRO at JECRC University. The most interesting segment i.e. exhibition was going on at Auditorium with the dummy of three Launching Vehicles that is PSLV, GSLV, GSLV-3,

five Satellite are INSAT-3D, IRNSS, ASTROSAT, GSAT, RESOURCESAT, INSAT-3D

which are personally explained by Sh. BR Guruprakash to the student of CSE Department, Mars Orbital Mission and 29 Panel boards about the story of ISRO. There was a 'Popular Lecture' on ISRO went into the Seminar hall having hundreds of students. This segment was organized by JU volunteers under the supervision of Ms. Ritu Sisode, Prof. Sapna Sharma, and Dr. Seema Bhadoriya. The lecture was taken by the Dean of JU and ex-scientist of ISRO Prof. Ram Rattan, Dr. Guru Prasad (Scientist of ISRO) and HK Dawe. They all talked about the 'Mankind Contribution of ISRO'. Today's was also a session on 'Career Development and Internship opportunities in ISRO and Navigation Satellite' by Prof. Ram Rattan and Sh. Neelesh Desai (Deputy Director of Communication Area SAC, Ahmedabad).



FACULTY PUBLICATION

LOOK UP AT THE STARS AND NOT DOWN AT YOUR FEET. TRY TO MAKE SENSE OF WHAT YOU SEE, AND WONDER ABOUT WHAT MAKES THE UNIVERSE EXIST. BE CURIOUS.

STEPHEN HAWKING



Er. Nikhil Jain presented his paper in SRM university on 23 March 2018 on the topic "Effect of Al₂O₃ powder addition on material removal during EDM of AISI H11 die steel. Which got published in SCOPUS Journal.

The Elephant Rope

(An Inspiration)

As a man was passing the elephants, he suddenly stopped, confused by the fact that these huge creatures were being held by only a small rope tied to their front leg. No chains, no cages. It was obvious that the elephants could, at anytime, break away from their bonds but for some reason, they did not.

He saw a trainer nearby and asked why these animals just stood there and made no attempt to get away. "Well," trainer said, "when they are very young and much smaller we use the same size rope to tie them and, at that age, it's enough to hold them. As they grow up, they are conditioned to believe they cannot break away. They believe the rope can still hold them, so they never try to break free."

The man was amazed. These animals could at any time break free from their bonds but because they believed they couldn't, they were stuck right where they were.

Like the elephants, how many of us go through life hanging onto a belief that we cannot do something, simply because we failed at it once before?

Failure is part of learning; we should never give up the struggle in life.

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