



MALLA REDDY ENGINEERING COLLEGE

(AUTONOMOUS)

Estd: 2002

(An UGC Autonomous Institute, Approved by AICTE and Affiliated to JNTUH Hyderabad, Accredited by NBA & NAAC with 'A' Grade and Recipient of World Bank Assistance Under TEQIP Phase - II, S.C 1.1) Maisammaguda, Dhulapally, Secunderabad, Telangana, India - 500 100 Website: www.mrec.ac.in



INNOVATIONS HUB





It is firmly believed that the quality of teachers in educational institutions determines the eventual quality of education. The role of colleges of education in preparing high quality teachers i.e., therefore, imperative. The teacher for the 21st century should have the ability to ensure cognitive and affective development of the students and create in them a value system which is a mixture of time tested values, nationalistic and secular traditions and scientific temper. It is an arduous task and cannot be completed without high quality teacher educators is therefore the need of the hour. With inclusive education in mind, the preparing of teachers for treating children with special needs has become a well regulated programme in the college. Side by side, emphasis teaching effectiveness is going hand in hand. I have not the slightest doubt that the college will continue to play its leading role. I extend my warm wishes to the Principal, Staff and Students of MREC (A) to continue this journey on the road of excellence.

Sri Ch. Malla Reddy, Founder Chairman & Honorable MP of Malkajgiri.



Dear All, Technical Education is the backbone of every nation and is the stepping stone for a country to move into the niche of a developed nation. It gives me immense pleasure to welcome you to the creative world of MREC (A) which has very eco-friendly campus and is equipped with state-of-art infrastructure. We have well equipped labs, workshops and libraries to help students in attaining highest standards in academics, research and professional skills. Creating better human beings' is our motto and we can do that when we are able to mould our students to be good human beings with values which are embedded for life. We aim to provide an overall development that nurtures them towards becoming strong and focused human beings. The main focus of the Institution is to empower students with sound knowledge, wisdom, experience and training both at the academic level of Engineering and in the highly competitive global industrial market. We must believe that success is inevitable where these exist- Foresightedness, Firm Determination, Hard work and Discipline. You are assured that you will be proud

of yourself as a confident and successful technocrat after Four years at MREC (A).

Dr.S.Sudhakara Reddy, M.Tech. MBA., P.h.d.,LIMISTE,FIE,MISME; Principal



It gives me a great pleasure to bring you Volume-9, Issue-1 of the Innovation Hub. A thought that has been enduring in mind when it becomes real; is truly an interesting and exciting experience. This news letter is one such cherished work that has its roots in the persuasion. It would be a snapshot of the various activities and advancements for all associated with MREC (A). Proper communication plays a vital role in institution's development. This news letter will serve to reinforce and allow increased awareness, improved interaction and integration among all of us. I profusely thank the Principal and the management for giving support and encouragement in this endeavor. I welcome suggestions from all our readers who wish to see their ideas incorporated in the subsequent issues. Please feel free to provide your feedback and send pertinent information with photos for inclusion in our forthcoming issues to

newsletter@mrec.ac.in

T.JEEVANANDAM, M.A English., PGDTE, Asst.Prof., Dept. of English

Transformation Leadership Award



Our beloved principal, **Dr.S.Sudhakara Reddy** has been honoured with “**Transformation Leadership Award**” in the presence of elite fraternity of engineering education. **Bennett University**, Greater Noida hosted a three day international conference on trends in engineering education, in association with the world renowned organization, **Indo Universal Collaboration for Engineering Education (IUCEE)** during 4th -6th Jan 2018. MREC (A) is one among the few selected colleges across India which implemented best practices in transforming engineering education. 'As the leader of this autonomous institution, **Dr. Sudhakara Reddy** said that 'It's indeed an honour to receive the award from **Prof. Krishna Vedula** of IUCEE, in the presence of august community of about 50 delegates from different parts of the world', he added. He mentioned that the college has got a crucial role to play in designing solutions for the problems faced by the surrounding villages and in the process the college is actively involved in the **Engineering Projects in Community Services (EPICS)** programme by the IUCEE.

Founder chairman and Member of Parliament **Mr.Ch.Malla Reddy** also visited the Bennett University and discussed the measures to be taken for further improvement of quality in education, with **Prof V. S. Chauhan**, the recent Chairman of UGC. **Dr. Rajeswaran, Dr. Dhanunjay, Dr. Kannan and Mr.K.Vamsi Krishna.**, were the faculty members who attended the conference and presented research papers on various aspects of engineering education transformations





GEDC 2017



Innovating to meet global grand challenges

GLOBAL ENGINEERING DEANS
COUNCIL CONFERENCE

OCT 10 - 12

NIAGARA FALLS + CANADA

Principal's Canada visit



The principal of MREC (A) Dr.S.Sudhakara Reddy has participated in a prestigious “**Global Engineering Dean Council – 2017**’ conference organized during 10th to 13th October 2017 at Toronto, Canada. The conference could attract around 150 educationists, scientists and industrial experts from different corners of the world. The conference also focused on the changes to be adopted in higher education, besides discussing extensively, the 21st century challenges like food security, climate changes etc.

Dr.S.Sudhakara Reddy said that he got an opportunity to visit the McMaster University which happened to be the host of the four day conference. He informed that the teaching and

learning methodologies adopted in the 130 year old McMaster University can be emulated in MREC for improving the quality of education. He stated that he got a rare opportunity of visiting the robotics and automation industry giant – Quanser and studied the modern manufacturing procedures.

Founder chairman Mr. Ch. Malla Reddy has congratulated the Principal on his successful ten day trip to Canada and extended his wholehearted welcome to India. Staff and students of the college expressed their happiness and welcomed the Principal, Dr. S. Sudhakara Reddy.



KARTHEEKA SAMARADHANA

Kartheeka Samaradhana is considered to be a spiritual and one more opportunity to meet and great and have endless banter over food. Kartheeka Samaradhana is an event conducted by Malla Reddy



Engineering College (Autonomous) and received overwhelmed joyous response from both the management and the staff. The gathering was enthralled with delicious community lunch provided by the management.



The Principal, Dr.S.Sudhakara Reddy spoke on the occasion that the celebrations of “karthheka vana samaradhana” will lead to create a lot of awareness among the young minds regarding the importance of human relations. The founder chairman, Ch.MallaReddy with his family attended the event and performed ‘pooja’ to Tulasi tree and other Amla trees. All the Hod’s and staff participated and made it grand success.

PARENT-TEACHER MEETING

A parent-teacher conference is a meeting between parents and child's teacher to discuss your child's progress. This meeting may take place as part of the regularly-scheduled conferences held by the college each year. The teacher, on the other hand, has been trained professionally in the best methods of teaching, meeting individual student's needs, how to control classroom behavior, and how to help your child succeed in college and career. Working together you will be able to find ways that each of the parents can provide the appropriate and necessary support for the growth of the child.



On this occasion, Principal Dr.S.Sudhakara Reddy extend a warm welcome to the esteemed parents and staff of MREC (A) and explained the achievements of academics in the college. He also said that students need to achieve high academic excellence calls for recruitment of competent, proactive and qualified teachers that can face the educational challenges of the 21st century learners, this we have done diligently said principal. Founder chairman Ch.MallaReddy has attended the programme and given his inspiring message to the students.

IIEECP CERTIFICATION WORKSHOP

A three day workshop on IIEECP (International Engineering Educator Certification Program) has been organized from 3rd to 6th February 2018 as a part of IUCEE (Indo Universal Collaboration for Engineering Education). The principal **Dr.S.Sudhakara Reddy** said that the workshop aims at introducing the faculty, the novel strategies of engaging the millennial students. Also the faculty shall be trained in harnessing the technology for effective teaching. Millennial students need to be taught in a creative manner, we look forward to implement the effective teaching strategies, improving rapport with students and manage student motivation and attention span, thereby impacting personal teaching style and professional confidence remarked **Dr.S.Sudhakara Reddy**, Prinipal of MREC (A).



Dr. Veena Kumar, Online Professor, University of Maryland, USA has graced the event as resource person for the 3 day workshop. Dr.Veena Kumar informed the participants that they shall be getting eligibility for attending an international certification program, after successfully completing the phase - I workshop. She mentioned that the strategies discussed during the workshop help the faculty to conduct a class effectively and to create the interest in the student in the subject being taught. Coordinators of this programme are Dr Rajeswaran and K.Vamsi Krishna.



The department of NSS of the college has conducted a special camp in the village Dhulapally from 18th March 2018 to 24th March 2018. The principal, Dr.S.SudhakaraReddy has also been attended the programme in the Dhulapally village.



INTERNARIONAL WOMEN'S DAY

International Women's day celebrations were organized by MREC (A) on March 8th 2018. Principal Dr.S.Sudhakara Reddy spoke on the challenges faced by the women in the present world. It is really nice to have a special day for women where they are glorified to a point of being honored, awarded, and appreciated. A woman in herself is a full circle and complete within herself she has inside her the potency to fight for whatever is right! Her strength, I would like to illustrate her statement with an anecdote.



MALLA REDDY ENGINEERING COLLEGE
(Autonomous)
Maisammaguda, Dhulapally (Post via Kompally), Secunderabad-500 100

INTERNATIONAL WOMEN'S DAY
A CELEBRATION OF WOMEN'S VOICES !!
FIND YOUR VOICE AND DISCOVER YOUR CHOICE !!!

Date:08-03- 2018 @ Venue:Major Auditorium

"SPREAD LOVE EVERYWHERE
YOU GO LET NO ONE EVER COME TO
YOU WITHOUT LEAVING HAPPIER"
MOTHER TERESA

Sri. Ch.Malla Reddy
Head of Institution
Principal

Dr. S.Sudhakara Reddy
Principal

IN ASSOCIATION WITH:
IEEE MREC SB

16
ANNIVERSARY
1952-2018

NBA
NATIONAL BOARD
ACCREDITATION

16
ANNIVERSARY
1952-2018

16
ANNIVERSARY
1952-2018

International Women's Day is celebrated on March 8th worldwide, commemorating the political, social and economic achievements of women. Over the decades, the objective of Women's Day celebration has evolved and embraced culture and ethnicity to emerge as a celebration of appreciation, respect and love towards women. Women's Day is also celebrated in schools nowadays and also forms an integral part of the curriculum to spread the awareness of women empowerment, their roles and achievements. Dr. S.Sudhakara Reddy said that there is much need of women entrepreneurs for the society. All the Hods, staff conveyed their best wishes for all the women staff.



Department of Mechanical

ACHIEVEMENTS OF FACULTY:

1. **Dr.A.Raveendra**, Professor, has been completed his Doctor of Philosophy (P.hd) on 21st November'2017 from JNTU Hyderabad.
2. **Dr.G.Bhiksham**, Associate Professor, has been completed his Doctor of Philosophy (P.hd) on 25th January' 2018 from JNTU Hyderabad.
3. **Dr.R.Dharmalingam** Assoc. Professor, has been awarded his Doctor of Philosophy on 13th February' 2018 from Anna University, Chennai.

Guest Lectures:

1. A guest lecture on “**HVAC Design**” has been conducted for III B. Tech. Students **On 30-01-2018** and the resource person Mr. **Chakradhar** Majety founder and CEO Dhanush Engineering Services Pvt.Ltd. Hyderabad. In this, 200 students participated.
2. A guest lecture conducted on **Finite Element Methods** for III B. Tech. II Semester students on 07th Feb 2018. **Dr.A.V.S.S.K.Gupta**, Professor from JNTUH delivered the lecture. Almost about 80 students have attended the lecturer.
3. A guest lecture has been conducted on “**Thermal Engineering**” for II and III B. Tech. II Semester students on 10th Feb 2018. The resource person **Dr.A.V.S.S.K.Gupta**, Professor from JNTUH delivered the lecture. Almost about 80 students have attended the lecturer
4. A guest lecture has been conducted on “**3D- Printing**” for II B. Tech. II Semester students on 07th Feb 2018. **Dr.B.L.Jaiswal** Professor MREC (A) delivered the lecture. About 70 students attended.
5. A guest lecture has been conducted on “**GATE**” for II B. Tech. II Semester students on 09th Feb 2018. **Mr. P. N. Kiran Kumar** Asst. Professor MREC (A) delivered the lecture. About 60 students attended.
6. A guest lecture has been conducted on “**Dynamics of Machinery**” for II B. Tech. II Semester students on 07th Feb 2018. **Dr. Anjaneyulu**, Professor from VNR VJIET (A) delivered the lecture. About 100 students attended.

Publications:

- 1 **Mr. G. Bhiksha**, Associate Professor published a paper in a International Journal of Engineering Research in Mechanical and Civil Engineering (IJERMCE) titled “**Taguchi Optimization Process Parameters in Friction Stir Welding of Aluminium 6351 and Pure Copper (Dissimilar Metals)**.”
- 2 **Mr. E. Rajesh**, Asst. Professor participated in an International Conference on “**Composite Materials and Structures (ICCMS - 2017)**” held at IIT, Hyderabad during 27 – 29 December'2017 and presented a paper titled “**Flexural Properties of Potassium Permanganate Treated Unidirectional Ricinus Communis L (Castor oil) Fibre Reinforced Epoxy Composites**”.
- 3 **Mr. B. G. S. Veerendra**, PG Scholar and **Mr. U. Anil Kumar**, Assistant Professor Published a paper in an International Journal of Research (IJR) titled “**Evaluation of Mechanical Properties of Groundnut Shell & Date Palm Powder Reinforced Polymer Composite.**”
- 4 **Ms. CH. Ramya Krishna**, PG Scholar and **Ms. M. V. Varalakshmi** Associate Professor Published a paper in a International Journal of Research (IJR) titled “**Mechanical Properties of Basalt and Hibiscus Leaf Powder Hybrid Polyester Composite**”
- 5 **Mr.M. Uma Mahesh** , PG Scholar and **Mr. G. Bhiksham**, Associate Professor published a paper in a International Journal of Engineering Research in Mechanical and Civil Engineering (IJERMCE) titled “**Taguchi Optimization Process Parameters in Friction Stir Welding of Aluminium 6351 and Pure Copper (Dissimilar Metals)**.”

6. **Mr. M. Saikrishna**, PG Scholar and **Mr. V. Srinivas**, Associate Professor Published a paper in an International Journal of Research (IJR) titled **“Fabrication and Analysis of Coconut Coir Fiber Reinforced Epoxy Composite with Cement as Filler.”**
7. **Mr. P. Sudhir Kumar**, PG Scholar and **Mr. T. Naresh Kumar**, Assistant Professor Published a paper in an International Journal of Research (IJR) titled **“Fabrication and Testing of Composite Powder Materials from Tamarind Seeds and Date Seeds.”**
8. **Ms. V. Alekhya**, PG Scholar and **Ms. S. C. Sireesha**, Assistant Professor Published a paper in a International Journal of Research (IJR) titled **“Effect of Mechanical Properties of Composites Of Teak Wood and Tamarind Kernel As Reinforced Particulates With Polyester Resin.”**
9. **Dr. R. Dharmalingam** Asst. Professor Published a paper in an International Journal of Current ENGINEERING AND SCIENTIFIC RESEARCH (IJCESR) titled **“Experimental Analysis of Heat Transfer Characteristics of Solar Flat Plate Collector Using H₂O and Al₂O₃-H₂O Nanofluid.”**
10. **Dr. S. Sudhakara Reddy**, Professor and Principal and **Dr. T. Ramachandran**, Professor participated in a 1st International Conference on **“Innovations in Mechanical Engineering (ICIME - 2018 “ and presented a paper titled “Design Optimization and Minimization of Raw Material for Burr less Forging in Collarless Bolt Manufacturing”** held at **Guru Nanak Institute of Technology** Ibrahimpatnam during 5th -6th January’ 2018.
11. **Mr. B. Sampath**, PG Scholar (T) and **Dr. A. Raveendra** Associate Professor, Published a paper in an International Journal of Merging Technology and Advanced Research in Computing (IJMARC) titled **“CFD Analysis of Steam Ejector with Different Nozzle Diameter.”**
12. **Ms. Jadi Sumalatha**, PG Scholar (T) and **Mr. V. Srinivas**, Associate Professor Published a paper in an International Journal of Dynamics of Fluids (IJDF) titled **“Design and Thermal Analysis of Transition Duct in Industrial Gas Turbine.”**
13. **Mr. Mandal Vaman Reddy** (T), PG Scholar and **Mr. C. Chandra Sekhara**, Assistant Professor published a paper in a International Journal of Innovative Research in Science Engineering And Technology (IJIRSET) titled
14. **Mr. Mukkara Hemanth** (T), PG Scholar and **Mr. M. Sandeep**, Assistant Professor Published a paper in an International Journal of Emerging Technologies and Innovative Research (IJETIR) titled **“CFD Analysis of Shell and Tube Heat Exchanger With and Without Baffles by Using Nano Fluids.”** **Mr. Zahid Imam** (T), PG Scholar and **Mr. P. N. Kiran kumam**, Assistant Professor Published a paper in an International Journal of Merging Technology and Advanced Research in Computing Research (IJMARC) titled **“Design and CFD Analysis of Hair Pin Heat Exchanger at Different Fluids.”**
15. **Mr. Poralla Venkatakrishna** (T) PG Scholar and **Mr. D. Suresh Reddy and Prashanth**, A, Assistant Professor Published a paper in a International Journal of Scientific Research in Computer Science Engineering and Information Technology (IJSRCSEIT) Titled **“Experimental and Computational Analysis of Piston Coated with Aluminum Silicon Metal Matrix Composite Material.”**
16. **Mr. T. Ramakrishna** (T) PG Scholar and **Mr. A. Sarath Kumar** assistant Professor published a paper in an International Journal for Advanced Research in Applied Sciences (IAETSD) titled **“Experimental Investigation on Natural Fiber Bio - composites By Using Destructive Testing.”**
17. **Dr. S. Sudhakara Reddy**, Professor & Principal and **Dr. T. Ramachandran**, Professor participated in International Conference on **“ICETEST - 2018 “ and presented a paper titled “Vibration Characterization of Al 16061 Metal Matrix Composite Based Rubber Mount For IC Engine Chasis.”** held at **Maharishi Markandeshwar Engineering College**, Mullana, Ambala during 5th -6th February’ 2018.
18. **Mr. K. Srinivasa Rao** associate Professor, **Mr. E. Rajesh** and **Ms. S. C. Sireesha** Asst. Professors participated in a Three Days Workshop on IUCEE **“International Engineering Educator Pre-Certification Workshop** during 3rd to 6th Feb 2018 at MREC (A) Hyderabad.
19. **Engineering Educator Pre- Certification Workshop”** on 03rd -06th January’ 2018 at MREC, Conducted by **Dr. Veena Kumar**, Executive Director IUCEE **“International Engineering Educators Certification Program.**
20. **Mr. A. Rohith** PG Scholar (MD) and **Dr. A. Raveendra** Associate Professor Published a paper in an International Journal of Research (IJR) titled **“Stress Distribution around Polygonal Holes in Graphite/Epoxy Laminates under in Plane Loading.”**
21. **Mr. B. Kiran Kumar** (MD) PG Scholar and **Dr. S. Gunasekharan**, Associate Professor published a paper in an International Journal of Research (IJR) titled **“Fracture Analysis on Delaminated Aluminium Metal Matrix Beams.”**

22. Mr. A. S. R.Sasidhar (MD) PG Scholar and Mr. V. Narasimha Reddy, Associate Professor published a paper in an International Journal of Research (IJR) titled”**Modeling and Analysis of Camshaft.**”

❖ 2nd year students of Mechanical went for Industrial visit to **HMT Limited, Machine Tools Division, Hyderabad.** And 3rd year students of Mechanical went for Industrial visit to **NTPC, Ramagundam** on 10th Feb 2018.

❖ Students of MREC(A) representing ‘**Team Rudra**’ have attended the International Formula Kart Design Challenge which is conducted by FMAE(Fraternity of Mechanical and Automotive Engineers) from 16th to 19th March 2018. Almost a total of 53 teams were registered for the event, out of those 22 were qualified for the final event. Our Rudra team won the runner up in the over all championship and First prize in Cost Evaluation.the team was under the supervision of faculty coordination. The following are the members of Team Rudra...

D.V. Sai Pradhumna(Captain), S. Srikanth, D.Sai Nitish, S.V.Raman, K.Nagasai Rohit, Abdul Mehraj Baji, B. Sai Dileep, E. Pavan Kumar, V. Kireeti, KVR Sai Siddharth, Yashwanth, V. Pranay, D. Sai, Praksh, Samir, Akash, Thanmayee, Sudharshan, Md. Riyaz, K. Sai Maneesh Reddy and P. Akhil

