



MALLA REDDY ENGINEERING COLLEGE

(Autonomous) - Main Campus

Estd : 2002

(An UGC autonomous institution, Affiliated to JNTUH.
Re-accredited by NAAC with 'A' Grade (2nd Cycle))

Maisammaguda, Dhulapally, Secunderabad - 500 100, Ph: 040-64634234,
040-65864982, 040-3291485, Mob: 9348161125, 9052945735



INNOVATIONS HUB



MALLA REDDY ENGINEERING COLLEGE
(Autonomous)
A place to dream
An UGC Autonomous Institution, Affiliated to JNTUH, Re-Accredited by NAAC with 'A' Grade (II - Cycle)
Main Campus
Website: mrec.ac.in

Welcome to Delegates / Authors

6th INTERNATIONAL CONFERENCE ON TRANSFORMATIONS IN ENGINEERING EDUCATION (ICTIEE – 2019)

on January 7th & 8th, 2019

Sri. Ch. Mallu Reddy
Mallu R.R.C., Member Committee
Honourable Chairman – IIEC

Malla Reddy
Engineering College

IUCEE
India Universal Collaboration
for Engineering Education

Dr. S. Srinivasa Reddy
Principal



Chairman's Message



Sri Ch. Malla Reddy

Founder Chairman &
Honorable MP of Malkajgiri.

The pride of every student and staff would be in his/her college. A college may reach heights of glory but without materials like a college magazine, the outside world may not know of it. The essential purpose of a college magazine is to inform, engage, inspire and entertain a diverse readership - including alumni, parents, students, faculty, staff and other friends of the college - by telling powerful stories that present a compelling, timely and honest portrait of the college and its extended family. I am happy that there is a dedicated team of staff and students who have brought out the News Letter of our college. This magazine has been made an earnest attempt in this direction and brought out certain aspects of the college to the eyes of the public so that they may understand and know the college even better. They have presented the stupendous achievements of MRECIans in the fields of academics, research, sports and extra-curricular activities, in a fastidious way. Innovations Hub represents the collective work of the team.

MREC (A) has grown abundantly in the recent past. It continues to sustain its growth. People reading this magazine will realize the tremendous changes that are happening in the campus. The magazine is presenting a glimpse of the growth of the institution on many fronts. The college has been simply unstoppable in its progress as it has been actively involved in various activities that have brought to light the hidden talents of the college students and staff. The highly qualified and dedicated members of staff have always stood shoulder with the management and have carried out their duties with a level of commitment.

This magazine has recorded achievements such as conferences attended by staff members and students, competitions won by the hugely talented students, innovative projects carried out by students with the guidance of staff, among others. Let's give our best and make this institution a modern temple of learning through our diligence, devotion and dedication. I congratulate all the contributors and the editorial board for bringing out such a beautiful magazine.

Principal's Message



Editor's Desk



T. Jeevanandam

Assistant Professor of English.

It gives me great pleasure to bring you Volume-10, Issue-1 of the Innovations Hub. This issue offers a panoramic view of the academic, professional and cultural activities of the college. The name and fame of an institute depends on the caliber and achievements of the students and teachers. I would like to place on record my gratitude and heartfelt thanks to all those who have contributed to make this effort a success. I profusely thank the management for giving support and encouragement and a free hand in this endeavor. The editorial team thanks all its patrons for their support of the newsletter. On that note, I wish you all 'Bonne lecture'. 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

6th INTERNATIONAL CONFERENCE

ON TRANSFORMATIONS IN ENGINEERING EDUCATION

Malla Reddy Engineering College (Autonomous) hosted a prestigious two day International Conference (International Conference on Transformations in Engineering Education - ICTIEE 2019) from Jan 7 - 8, 2019, in association with Indo Universal Collaboration for Engineering Education (IUCEE). The conference could attract nearly 40 internationally acclaimed experts from academia and industry and about 1200 delegates from different parts of the country.

At the inaugural session on 7th January 2019, Dr.S. Sudhakara Reddy welcomed all the dignitaries and delegates to the 6th International Conference on Transformations in Engineering Education. He wished that the participants would get appreciably benefitted, by attending various sessions conducted by the internationally acclaimed experts both from academia and industry. Prof. Krishna Vedula,



Executive Director, IUCEE gave a brief report on the activities of IUCEE and elucidated how these activities shall transform an engineering graduate into a socially responsible engineer that works towards making the world a better place to live in.



He also explained the schedules for the two day conference. 'The international expert delegation comprises of about 35 stalwarts like Prof Hans J Hoyer, Secretary, GEDC, Prof Michael Milligan, CEO, ABET, Stephanie Farrell, President, ASEE etc.' he added. Founder Chairman and MLA, Medchal constituency, Mr. Ch. Malla Reddy presented transformation of his life from a farmer to an eminent educationist and political leader. He remarked that hard work is the only secret for whatsoever success he claimed all through his life.

Guest of honour Prof. T. Papi Reddy, Chairman, TSCHE (Telangana State Council of Higher Education) elaborated on the measures taken by the higher education council in improving the standards of engineering education in Telangana state. Another Guest of honour Prof. A. Venugopal Reddy, Vice Chancellor, JNTUH apprised the participants that the various measures adopted by the University involving Information Technology started yielding encouraging results. Ch. Mahender Reddy, Secretary, MRGI, Praveen Reddy, Director, MRIET, Principals of Malla Reddy Group of Institutions, CMR and MLR Group of institutions were among the others who were presented on the occasion. Prof. Hans J Hoyer, Secretary GEDC applauded the hospitality and the personal touch shown by the organising college in taking good care of the delegates of the conference. He urged that nations like India should be a part of global community. Dr. Michael Milligan, CEO, ABET explored the scope for excellence in engineering education in India.

Guest of honour Mr. Sujiv Nair, CEO TASK explained the strategies adopted by TASK in making a student, employable. He remarked that the 60% of the trained students are getting placed in various organisations. Mr. B V R Mohan Reddy, Chairman Cyient Ltd, was the chief guest of the occasion. He said that the industry is



looking for highly talented and skilled students. He explained how the modern technology can be used in empowering the conventional system like agriculture by using Drone technologies. Founder chairman and MLA Medchal constituency Mr. Ch. Malla Reddy thanked all the delegates for having come all the way to make the conference a grand success. The ceremony concluded with all the delegates' singing the national anthem.



GANESH CHATURTHI CELEBRATIONS @ MREC(A)

Ganesh Chaturthi is one of the most celebrated festivals in India. People wait for this festival eagerly. It is one of the most important festivals of Hindus which devotees celebrate every year with great preparations and enthusiasm. According to the Hindu Mythology, Ganesh Chaturthi is celebrated annually on the birthday of the Lord Ganesha. Lord Ganesha is known as VighnaHarta means remover of all obstacles for devotees and Vighna Karta means creator of problems for devil. Ganesh Chaturthi is a 11 days long Hindu festival which starts on the Chaturthi with statue installation in the home or public places, and ends on Anant Chaturdashi with GaneshaVisarjan. Devotees of Lord Ganesha offer prayer, offerings, sing devotional songs, recite mantra, doaarti and seek his blessings for wisdom and prosperity.

It was a great celebration and it brought the students together to celebrate the festival together. At MREC, Ganesh idol is installed every year and perform pujas for three days. This has been a tradition here for many years.

Massive Bucket Immersion Campaign was organized NSS (National Service Scheme) Unit-I &II. The idols were immersed in buckets, on September 15th 2018, with immense festive spirit among the student community. The principal **Dr.S.Sudhakara Reddy** said that "The Ganesh Chaturthi celebration in MREC has been going on for years with the support of the esteemed management and the enthusiastic faculty members, and non-teaching staff backed by a strong student council every



Prof. WILLIAM OAKES AND Mrs. HEATHER FABRIES TO MREC (A)

Prof. William Oakes Director of EPICS, Purdue University and Mrs. Heather Fabries, University Coordinator, EPICS, Purdue University, USA visited MREC (A) on 26 Nov 2018 to review the progress of EPICS projects. At the outset, the team visited a decently arranged EPICS Project expo flanked by the Principal **Dr. S. Sudhakara Reddy** and EPICS team members. There were about 14 projects displayed. The enthusiastic students explained the objective of the projects, the way they were designed and finally the potential applications of the projects.

Both **Prof. Oakes and Mrs. Heather Fabries** keenly observed the exhibits and gave valuable advices to the students. Finally both of them applauded the efforts put in by the students and particularly the project 'Solar power based fertilizer sprayer' received all praises for its conformation to EPICS philosophy. Students expressed their happiness for the kind of attention paid by the visitors. A vibrant interactive session followed this Project Exhibition. The venue was the Digital Library. **Dr. S.Sudhakara Reddy**, Principal gave the welcome address. He extended his warm welcome to Prof. William Oakes and Mrs. Heather Fabries. He urged the students and faculty members to utilize the expertise of the visitors, in understanding the whole concept of EPICS. He advised the students to identify their responsibility towards the society at large. **Dr. Kannan Shanmugam**, EPICS Coordinator, MREC (A) gave a presentation on the Progress of EPICS activities in the campus and put forth the following points before **Prof. William Oakes** for his guidance.

MALLA REDDY ENGINEERING COLLEGE
(Autonomous)
(An UGC Autonomous Institution, Affiliated to JNTUH, Re-Accredited by NBA & NAAC with 'A' Grade (II - Cycle))
Main Campus
Website: mrec.ac.in

Welcome to

Prof. William Oakes
Director, EPICS,
Purdue University, USA.

Mrs. Heather Fabries
University Coordinator, EPICS
Purdue University, USA.

**for one day visit to
MREC(A)**

on 26th November 2018

Sri. Ch. Malla Reddy
Elected Member of Parliament, Mahabubnagar Constituency
Founder Chairman - MREC

Dr. S. Sudhakara Reddy
Principal



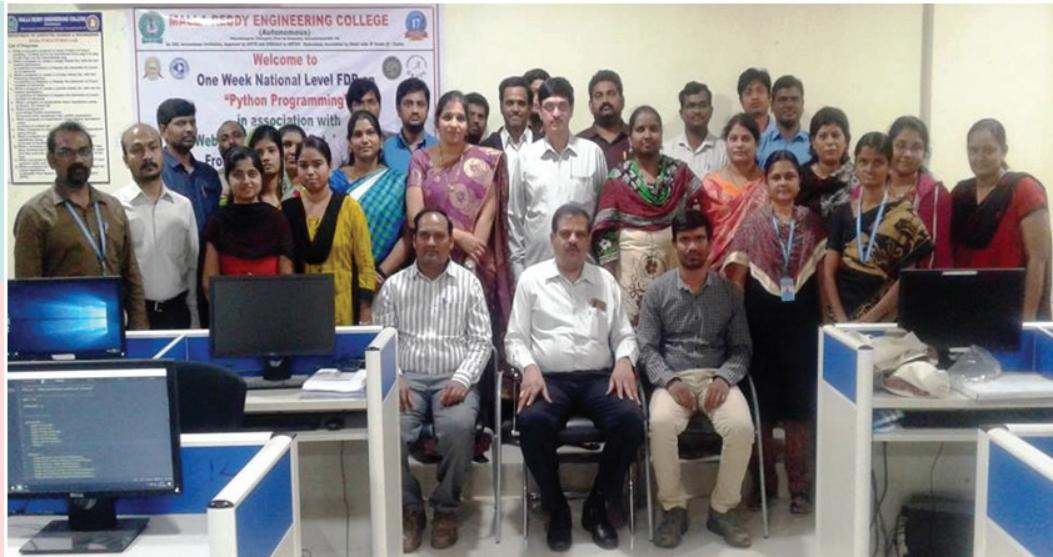
Python is widely used high-level, general-purpose, interpreted, dynamic programming language. It has simple easy-to-use syntax, making it the perfect language for someone trying to learn computer programming for the first time. Scikit-learn is an open source machine learning library for the Python programming language. OpenCV is a library of cross platform programming functions aimed at real time Computer Vision. The growing demand of integrating OpenCV with python promises clear cut solutions to image processing and video processing problems. The above mentioned open source tools are used in wide spread applications.

**MALLA REDDY ENGINEERING COLLEGE
(Autonomous)**
Mannepeta, Dist: Warangal, Pin: 506 010
An USC Autonomous Institution, Approved by AICTE and Affiliated to JNTUH - Hyderabad, Accredited by NAAC with 'B' Grade (B - Cycle)
Welcome to
One Week National Level FDP on
"Python Programming"
in association with
Webcognize Softech Pvt. Ltd., Hyd
From 10.12.2018 to 15.12.2018
Organized by
**Department of Computer Science
and Engineering**
VENUE: IBM CENTER OF EXCELLENCE LAB







This programme also provides information about few open source tools such as Odoo, OSTicket and Moodle. Principal, Dr. S.Sudhakara Reddy advised the participants to enhance their technical skills as well as work on the latest teaching methodologies using various IT tools and teaching aids. The FDP provided an insight into the concepts of Python which is a widely used general-purpose and high level programming language. It is mainly developed for emphasis on code readability, and its syntax allows programmers to express concepts in fewer lines of code. 'Python Data Types', 'Operators', 'Input and Output', 'Flow Control', 'Functions and File Handling' were few topics dealt during the programme. The development programme benefited the participants to apply python programming in Machine Learning, Big Data Analytics and many more. Almost 35 external faculty members who participated in this event were provided with e-certificates from ICT Academy.

ONE WEEK NATIONAL LEVEL FDP ON PYTHON PROGRAMMING



INTERNATIONAL WOMEN'S DAY

International Women's Day
2018

International Women's Day (IWD) is celebrated on March 8 every year. It is a focal point in the movement for women's rights. Over the decades, the objective of Women' 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.

It is in this generation's reach to transform gender relations, to empower women and girls, and humanity as a whole." Along with millions of people around the globe MREC (A) also celebrated International Women's Day on March 8, a day that honors the achievements and calls attention to the rights of women.

CELEBRATIONS



The world has witnessed a significant change and attitudinal shift in both women's and society's thoughts about women's equality and emancipation.

Principal Dr. S Sudhakara Reddy said that there are 35% women in non-teaching faculty working in college as well as at least 33% of the girls in college who are admitted to our college.

The guest of honour Ms. Deepika Chalasani, co-founder of Fate for Life Foundation, said, "It is a pleasure to come to the gender-free college campus (MREC). Women should also identify their strengths and abilities, and move towards a world of empowerment. On the event of Women's Day, let us all promise to create a better world to live in."

ECE DEPARTMENT

Workshop/Conference/FDPs conducted

- ❖ A Workshop entitled "**IOT Application using ARDUINO**" was conducted on 05/10/2018 to 06/10/2018; the resource person was Mr.Vivek from Gachibowli.
 - ❖ A Workshop entitled "**HP lab Training Program (DEVOPS)**" was conducted on 22nd of October 2018; the resource person was Mr.Aamir from Microsoft.
 - ❖ A Workshop entitled "**FIVE DAY TRAINING PROGRAM ON LAB VIEW**" was conducted on 24/12/2018 to 02/1/2019; the resource person was Mr.Rohith, Hyderabad.
 - ❖ A Workshop entitled "**Wireless and Mobile Communication**" was conducted on 03/12/2018 to 07/12/2018; the resource person was Dr.V.Mani, NIT Warangal.
 - ❖ A Workshop entitled "**Six day training program on Lab view**" was conducted on 21/12/2018 to 25/01/2019; the resource person was Mr.Vijay Kumar, NI,Gachibowli.
 - ❖ A Workshop entitled "**Grand Challenges Scholar Program**" and "**Machine learning**" and "**Research Methodologies**" was conducted on 05/01/2019 to 06/01/2019; the resource person was Mr.Krishna Vedula, USA.
 - ❖ A Workshop entitled "**A Practical Implementation of IOT using Python and Raspberry pi**" was conducted 09/02/2019.
 - ❖ A workshop titled, "**Matlab & Simulink Boot Camp on Signal Processing was conducted**" on 5/12/2018. The faculty members, 5/12/2018, S.MADHU
- BABU, J.SUNIL KUMAR were participated.
- ❖ A workshop titled, "**Wireless and Mobile Communication**" was conducted from 3/12/2018 to 7/12/2018. The faculty member, C.SILPA was participated.
 - ❖ A workshop titled "**EXAMINATION REFORMS**" was conducted on 14/12/2018. The faculty member, G.PRASANNA KUMAR was participated.
 - ❖ A Seminar titled, "**International conference on Signal processing communication Embedded and VLSI Technologies**" was conducted on 12/04/2018. The resource person was Dr.Bhaskar,Hyderabad.
 - ❖ International Conference on Transformation in
 - ❖ A Seminar titled, "**Engineering Education (ICTEE AP)**" was conducted from 15/07/2018 to 17/07/2018.
 - ❖ A Seminar titled, "**INTERNATIONAL CONFERENCE ON INTERNET OF THINGS (IOT)**" was conducted from 9/11/18 to 10/11/18. The resource person was GOWRI SHANKAR SHARMA.
 - ❖ Refresher Courses like NPTEL COURSE ON "**ANALOG COMMUNICATION**",

 **MALLA REDDY ENGINEERING COLLEGE**
 (Autonomous) - Main Campus
 Maisammaguda, Dhulapally (Post via Komppally), Secunderabad-500 100


Welcome to
Three Days FDP on
"ANALOG IC DESIGN USING CADENCE TOOL"
From 12.12.2018 to 14.12.2018
RESOURCE PERSON: Mr SHARATH
 SENIOR APPLICATION ENGG ENTUPLE TECHNOLOGY
Organised by:
DEPARTMENT OF
ELECTRONICS AND COMMUNICATION ENGINEERING

"PRINCIPLES OF COMMUNICATION", "DIGITAL DESIGN USING VERILOG", and "MICROWAVE THEORY AND TECHNIQUES" were conducted by various resource persons.

- ❖ A Faculty Development Program titled, **"Adoption of FOSS for Effective Teaching and learning in Engineering"** was conducted from 18/06/2018 to 23/06/2018. The resource person was Dr.L.Pratap Reddy.
- ❖ Faculty Development Program titled, **"Analog IC design using CADENCE Tool"** was conducted from 12/12/2018 to 14/12/2018. Mr.Sharath Kanth Entuple ,Hyderabad
- ❖ Faculty Development Program titled, **"Real Time Embedded System on IOT its applications"** was conducted from 17/12/2018 to 22/12/2018.
- ❖ A Faculty Development Program titled **"Real Time Embedded Systems and IOT, Its Applications (RESIOT)"** from 17/12/2018 to 22/12/2018. The faculty members, G.JYOTHI and N.RAJU were participated.
- ❖ A paper entitled, "Joint Noise Suppression and Dereverberation of separating speech signals by using prediction and separation matrix" was published by **C.ANNA PLAGAN** in the journal, ICCES (International Conference on Communication and Electronics Systems, **ISBN: 978-1-5386-4765-3**.

EEE DEPARTMENT

- ❖ A Two Week Workshop titled, **"LABVIEW Core-I and II with clad II"** was conducted from 12-11-2018 to 24-11-2018. The faculty member Ch.Narendra Kumar was participated.
- ❖ A One Week Workshop titled, **"LABVIEW Core-I and II with clad II"** was conducted from 19-11-2018 to 24-11-2018. The faculty member P. Ganesh was participated.
- ❖ International Conference on **Emerging Trends on Engineering Science, Technology and Management (ICETESTM-18)** was conducted from 29th - 30th November 2018 at AITAM. Our faculty members, V.Sumadeepthi, M. Maheswari, K. Anitha Reddy, and K. Chetaswi were participated.
- ❖ A paper entitled, **"Penalty Quoted Cost Approach for Loss Allocation in a Transmission line by Considering the Mutual Inductance"** has been published by our faculty members, V.Sumadeepthi, M. Maheswari, M. Vibhavari, K. Prasanth Kumar in the journal **International Journal of Recent Technology and Engineering (IJRTE) (SCOPUS JOURNAL)**, Volume-7 Issue-4, November 2018, ISSN: 2277-3878.
- ❖ A paper entitled, **"Harmonic Emission of Grid Connected Back To Back Arrangement of Rectifiers in Distribution Networks"** has been published by our faculty members, S. Phani Venkata Ramana, K. Anitha Reddy, K. Deepthi, K. Chetaswi in the journal **International Journal of Recent Technology and Engineering (IJRTE)**

MECHANICAL DEPARTMENT



- ❖ A Conference titled, "**Sustainable education development in engineering institutions**" was conducted on Nov 14, 2018 at WEEF-GEDC 2018 New Mexico, USA. Our beloved Professor and principal **Dr .S. Sudhakara Reddy** has participated.
- ❖ A Conference titled, "**Strategic to Promote Engineering Projects on Community Service in Engineering Institutions**" was conducted on Nov 15, 2018 at WEEF-GEDC 2018 New Mexico, USA. Our beloved Professor and principal **Dr .S. Sudhakara Reddy** has participated.
- ❖ One Day Workshop titled, "**National Instruments Academic & Research Day at Hotel Trident**" was conducted on 04 December 2018. Our beloved Professor and principal **Dr .S. Sudhakara Reddy** has participated.
- ❖ One Day Workshop titled, "**Examination**

Reforms" organized by All India Council for Technical Education, South Central Region at JNTU, Kukatpally, Hyderabad was conducted 14-12-2018. Our HOD, Dr. Yogesh Madaria, Assistant Professor, and **Dr. R. Dharmalingam** Assistant Professor were participated.

- ❖ Two Week GIAN course on "**Urban Disaster Risk Reduction Using Geospatial Technologies**" was conducted at JNTUH College of Engineering, Hyderabad during 12Th-21st December' 2018. Our faculty **Dr. M. Vijay Kumar**, Assistant Professor has participated.
- ❖ A Faculty Development Program, entitled, "**Experimental Learning on Digital Learning**" was conducted at Birla Institute of Technology & Science, Hyderabad on 18-12-2018. Our faculty **Mrs. I. Sri Deepthi**, Assistant Professor has participated.

- ❖ A Two day FDP titled, "**Building Effective Teaching**" organized by TASK,Begumpet, Hyderabad on 20th – 21st December' 2018. Our faculty Ms **M. V. Varalakshmi**, Assistant Professor has participated.
- ❖ 7th International and 45th National Fluid Mechanics and Fluid Power Conference titled, "**Flow Visualization in Simulated Sub Channels of a Natural Circulation Pressure Tube Type BWR Rod in Bundle and Mixing Quantification Using CFD**" organized by Department of Mechanical Engineering FMFP-2018 at IIT, Bombay, Mumbai, from 10th – 12th December 2018. Our faculty **Dr. Shashi Kant Verma** has participated.
- ❖ A paper entitled, "**Micro-Hardness and Mechanical Properties of 5052 Aluminium Alloy Weldments Using Pulsed and Non-Pulsed Current Gas Tungsten**



ARC Welding" has been published by our faculty members **Dr. A. Raveendra, Dr. B. V. R. Ravi Kumar and Dr. S. Sudhakara Reddy** in the journal, IJMPERD, Page Numbers: 691-698 December'2018. ISSN No. (P): 2249-6890; ISSN No. (E): 2249-8001, Vol No. 08, Issue No. 06.

MINING DEPARTMENT

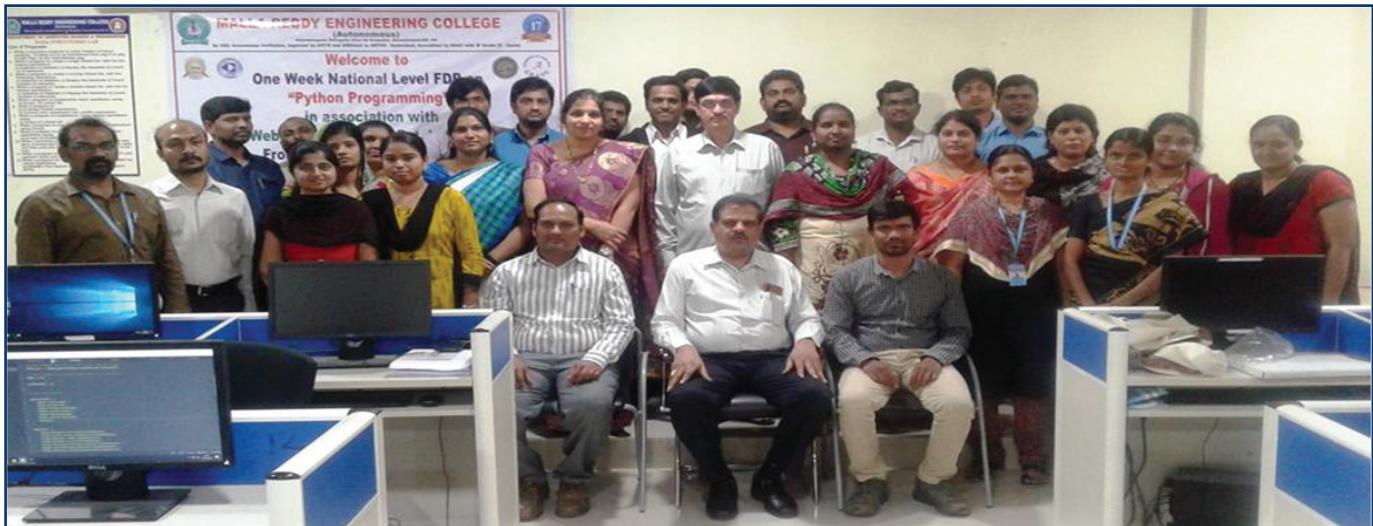
- ❖ A One day Workshop titled, "**Recent developments in Mine Safety Legislation**" was organized on 28/12/2018. Almost 150 members were participated in this workshop.
- ❖ A Faculty Development programme titled, "**Orientation programme Phase-I**" was organized from 20/08/2018-01/09/2018.



CSE

DEPARTMENT

- ❖ A Faculty Development Program, entitled, "**Python Programming**" was conducted from 10.12.2018 to 15.12.2018. Almost all the faculty members of CSE Department were participated.



H&S

DEPARTMENT

An INTERNATIONAL CONFERENCE ON NANO SCIENCE AND ENGINEERING APPLICATIONS (ICONSEA) was organized Oct 4-6, 2018, at JNTUH, Hyd. Dr.V.Divya, Assistant Professor from Chemistry Department has participated.

T Jeevanandam from English Department has participated in STEP (Standardized Test of English Proficiency) program organize by THE HINDU.

NATIONAL SERVICE SCHEME



- ❖ NSS programme officer Mr. Balanji Reddy Mora has been deputed as a contingent leader for National Adventure Camp held at Manali, Himachal Pradesh representing Telangana State.
- ❖ NSS volunteer Mr. Balakrishna got selected to attend National Adventure Camp held at Manali, Himachal Pradesh.
- ❖ The NSS units have conducted a household survey of around 800 houses as a part of Unnat Bharat Abhyans.
- ❖ NSS Volunteers have planted about 2000 plants as a part of Telanganaku Haritha Haaram in Dhulapally village which is adopted by NSS unit-2
- ❖ More than 100 students participated in University level programmes of NSS.
- ❖ About 30 NSS volunteers of our college participated in various state level NSS programmes
- ❖ More than 50 students participated in various intercollegiate NSS activities.
- ❖ NSS Unit -I has organized a special camp of one week in Nuthankal village of Medchal Malkajgiri district from 3-3-2019 to 9-3-2019.
- ❖ NSS Unit -II has organized a special camp of one week in Annaram village of Sangareddy District from 24-2-2019 to 2-3-2019

NSS DAY CELEBRATIONS



An Orientation Programme for NSS Volunteers has been organized on NSS Day, September 24, 2016. The volunteers were explained the values of NSS nurturing their minds with social thoughts. The rules to be followed were explained by NSS

Programme Officers.

The celebration began with NSS volunteers along with few teaching, non-teaching staff from all the departments have participated in cleaning, dusting and other mopping processes. In a very systematic manner, all the students got divided in different groups and allotted a separate area in college campus with sufficient number of brooms, dust pans, dust bins and garbage bags. A neat and clean atmosphere was created within two hours and every corner inside the campus has been observed as dust-garbage free.

PHOTO GALLERY











