

2nd International Conference on *Paradigms in Engineering & Technology*

SOUVENIR



refine your research
SCOPUS™

GREENZE Scientific Society

i-manager®
Publications



METHODIST COLLEGE OF ENGINEERING & TECHNOLOGY
(Affiliated to Osmania University)
Hyderabad, Telangana
www.methodist.edu.in

The main aim of this conference is to bring scholars, researchers, educators, students, professionals and other groups interested in research to present their works on the developments in various technological advancements. **2nd International Conference on Paradigms in Engineering & Technology (ICEPT)** provides an interdisciplinary platform for academicians and professionals from various Technical fields to share their knowledge, research findings and practices with an academic community and This conference also serves to further the advancement and innovation in learning and teaching.

The papers received are from various departments, *viz.*

- Civil Engineering
- Computer Science and Engineering
- Electronics and Communication Engineering
- Electrical and Electronics Engineering
- Mechanical Engineering
- Master of Business Administration
- Master of Computer Applications

All the accepted papers will be published in Grenze and Imanager Publications

2nd International Conference on Paradigms in Engineering & Technology

ICPET 2018

Souvenir of the International Conference

28-29 December 2018

Organized by

Methodist College of Engineering and Technology

(Affiliated to Osmania University)

Jointly with



Special Thanks for giving the opportunity to:

Sri K. Krishna Rao

Correspondent, MCET

Editors-In-Chief:

Dr. Raghu Chandra Garimella, Associate Professor, EEE

Dr. R.Ch.A. Naidu, Professor, CSE

Smt. Y. Mastanamma, Associate Professor, EEE

Editors:

Sri R. Sandeep, Assistant Professor, CSE

Smt. B. Sowjanya, Assistant Professor, CSE

Co-Editors:

Smt. K. Unnati Mohan, Assistant Professor, CSE

Smt. Ch. Sravanthi Reddy, Assistant Professor, CSE

ICPET-2018 Committee

Chief Patron

Sri K. Krishna Rao, Correspondent, MCET

Patron

Dr. M. Lakshmi pathi Rao, Director, MCET

Dr. Ravinder G. Reddy, Principal, MCET

Advisory Committee

Prof. S. Ramchandram, Vice-Chancellor, OU

Prof. Sriram Venkatesh, Director, UFRO, OU

Prof. K. Narasimha Reddy, Former VC, MGU

Prof. Pappu Ravi, Queensland University

Dr. Amiya Bhaumik, VC, Lincoln University

Prof. V.R. Sastry, NIT Karnataka, Surathkal

Dr. D. Kishan, Maulana Azad NIT, Bhopal

Dr. H.S. Venkatesh, Director, NIRM

Prof. K. Ramchandrarao, Research Director

Sri P. Krishna Mohan, Sr. GM, Haier India

Dr. R. Sripad Naik, Scientist (Head), NIRM

Dr. S. Mohan Krishna, Alliance University

Dr. M. Chakkarapani, NIT Tiruchirappalli

Dr. Gnane Swarnadh Satapathi, NIE, Mysore

Sri Ramalingeswarudu, GM (HRD), SCCL

Organizing Chairs

Dr. S. Venkateshwar, Dean, MCET

Dr. P. Rajendraprasad Reddy, Vice Principal, MCET

Organizing Committee

Dr. N.H. Shoba Reddy, Head-ECE, MCET

Dr. A. Rajashekar, Head-ME, MCET

Dr. Akshay K. Naidu, Head-Civil, MCET

Smt. P. Lavanya, Head-CSE, MCET

Smt. Y. Mastanamma, Head-EEE, MCET

Dr. K. Anuradha Reddy, Head-H&S, MCET

Smt. Rani Rajan, Head-MBA, MCET

Convener

Dr. G. Raghu Chandra, Assoc. Professor-EEE

Co-Conveners

Dr. R.Ch.A. Naidu, Professor (CSE), MCET

Smt. Y. Mastanamma, Head-EEE, MCET

Hospitality Chairs

Sri A. Sachendra Nath, A.O., MCET

Sri R. Srikanth, Asst. Professor-CE, MCET

Publication Chair

Prof. M. Sudheer, Chief Admin, The IDES

Prof. Renisha Winston, Editorial Director, imanager Publications

Preface

On behalf of the Organizing Committee we extend a hearty welcome to all the dignitaries, distinguished delegates and participants to the “2nd International Conference on Paradigms in Engineering and Technology – ICPET 2018”, organized during 28-29th December, 2018. We are happy to announce that the 1st International Conference on Paradigms in Engineering and Technology (ICPET-2016) organized at Methodist College of Engineering and Technology, Hyderabad, India from 02-03 March 2016 was a grand success.

Moving ahead with lots of positive energy, we feel honored to organize the 2nd International Conference on Paradigms in Engineering and Technology (ICPET-2018) as a sequel to ICPET - 2016. The focus of the conference is on the frontier areas in Engineering, Science, Technology and Management. The idea behind this conference is to help and motivate researchers to carry forward their work to the next level in interdisciplinary areas. This conference provides a vibrant platform to researchers both from India and abroad to showcase their research work and exchange ideas between various cross sections of researchers.

Papers were accepted based on their quality and relevance through **plagiarism check followed by a blind peer review process**, which means the identity of the authors is anonymous to the reviewers. All papers submitted to ICPET-2018 were checked for plagiarism using **Turnitin**. Various subject experts drawn from Reputed Foreign Universities, IITs, NITs, other Institutes of National Importance and Senior Faculty from MCET, have extended their assistance in assessing the quality of the papers as reviewers. Only the papers with the permissible limits of plagiarism were reviewed by two eminent experts in each subject area. *Based on the consolidated results from the reviewers, papers were accepted.*

In total, ICPET-2018 received **120 papers** and after sophisticated plagiarism checks followed by a peer review process, **80 papers** were accepted for presentation at the conference. All accepted papers were considered for publication in various International Journals and will be available online with open access.

The success of the ICPET-2018 is solely due to the dedicated efforts of all the faculty and staff from the Methodist College of Engineering and Technology. We also place on record the constant guidance and support extended by the correspondent of the college, Mr. K. Krishna Rao, which made this conference a reality.

Finally, the organizing committee wishes that the deliberations during the two day conference will immensely enrich the delegates in furtherance of their research.

Dr. GARIMELLA RAGHU CHANDRA
Convener, ICPET-2018

Smt. Y. MASTANAMMA & Dr. R.CH.A. NAIDU
Co-Conveners, ICPET-2018

About the Institution

Methodist College of Engineering & Technology (MCET) is a Non-Minority Educational institution, established in the year 2008, over 6.53 acre sprawling campus, situated at Abids, in the heart of City of Pearls, Hyderabad (Capital city of Telangana state). The college is well connected by public transport from every corner of the city. This college is imparting Technical education in the fields of Electrical & Electronics Engineering, Electronics & Communication Engineering, Computer Science Engineering, Mechanical Engineering, and Civil Engineering at UG level. In addition, Master of Business Administration courses and ME in Computer Aided Design and Manufacturing (CAD/CAM) are also offered. The Department of Mechanical Engineering of MCET is recognized as Research Centre by OU for carrying out research leading to the award of PhD degree. MCET, having a total student strength of about 2000, is approved by AICTE and is affiliated to the hundred years old Osmania University.

MCET strives towards excellence by imparting essential technical skills as well as a holistic approach towards grooming the students into responsible, worthy citizens of the future. Life in Methodist is not just limited to the classroom teaching, but spins beyond the textbooks to develop character and thus mould the personality of the students to carve a niche for themselves in the society. Ultimate goal of Methodist College of Engineering and Technology is to educate and graduate individuals who possess the technical and social competence and confidence to succeed in professional practice and advanced education, to be lifelong learners, and to exercise responsible citizenship.

The main strength of the college is its best and experienced teaching fraternity totaling to about 130, having interest in both teaching and research work, in their fields of specialization.

However, the college is only 10 years old, is progressing fast and with its excellent infrastructure and state of the art laboratory facilities, is competing with the established engineering colleges having a long standing. MCET students so far secured Three University First ranks and bagged gold medals in the departments of EEE and Mechanical Engineering. This is an ample testimony for the academic progress and the quality of education offered at the college. The college has MOUs with 15 Industries and Institutes that help the students to get internships and carry out project works. All the departments have chapters of Professional bodies like IEEE, IETE, CSI, SAE, ISTE, IGBC etc. Every year it is a regular practice for the college to organize seminars, workshops, symposia and conferences both National and International. As part of the decennial celebrations, the present International Conference is being organized.

MESSAGE FROM CORRESPONDENT



It gives me immense pleasure to know that Methodist College of Engineering and Technology is organizing 2nd International Conference on *Paradigms in Engineering and Technology* during 28-29, December, 2018 and releasing conference proceedings on this occasion. The target group being Engineering Faculty, Scientists and Young Researchers from various Engineering Colleges, industries and research laboratories all over the world, I am confident that this conference will provide a platform for a large cross section to interact with each other and share their academic expertise. I am also happy to note that all the accepted papers are published in *Grenze International Journals* and UGC approved Journals. I am sure that this two-day conference would be a memorable one and I compliment the Director, Principal, HODs, Faculty and Students of our organization for organizing such an event as a part of Decennial Celebrations of the College. I wish them all success.

Sri K. Krishna Rao

Correspondent

Methodist College of Engineering & Technology

MESSAGE FROM THE DIRECTOR



It is a momentous event for Methodist College of Engineering & Technology (MCET) to organise the 2nd International Conference on Paradigms in Engineering & Technology (ICPET-2018) during 28-29, 2018. MCET, a Non-Minority Educational institution, established in the year 2008 is situated in the heart of the city of Pearls, Hyderabad, Telangana and is affiliated to 100 years old Osmania University, Hyderabad. I deem it as a privilege to place on record that the students from MCET so far have secured Three University First Ranks and Gold Medals. This is an ample testimony for the academic progress and the quality of education offered at the college.

MCET during its rich journey of ten years into academic excellence organized many National Conferences / Seminars /workshops successfully and in addition hosted the 1st International Conference ICPET- 2016. As a sequel to ICPET- 2016, the present Second International conference, ICPET – 2018 is being organized. It is a significant milestone in the history of the college, as this conference is hosted as a part of its Decennial Celebrations. The aim of the conference is to provide a vibrant International forum for the researchers to present, discuss and exchange their significant contributions in all major fields of Engineering, Science and Technology.

Coming to the venue of the conference, the Pearl City of Hyderabad, which was earlier, ruled by Qutub Shahis, Mughuls and Nizams, has a rich history, heritage and culture. Hyderabad is a hub for many National level Educational Institutions of repute, Defence and other National Research laboratories and Public Sector Undertakings. It is also a global home to US giants such as Microsoft, Amazon, Google, Apple etc.

I am confident that the proceedings and deliberations in the conference would be eventful and fruitful. On behalf of MCET, it is my pleasant duty to extend a hearty and warm welcome to all the Dignitaries, Guest Speakers, Delegates and other participants.

I would like to place on record the constant encouragement and support extended by the Management in organizing this Conference.

Sd/-

Dr. M. Lakshmi Pathi Rao

Director, Methodist College of Engineering & Technology

MESSAGE FROM DEAN (ACADEMICS)



I am extremely happy that Methodist College of Engineering and Technology, is organizing a 2nd International Conference on “PARADIGMS IN ENGINEERING & TECHNOLOGY” during **December 28-29, 2018** on eve of DECINAL CELEBRATIONS of the COLLEGE. Theme of the Conference comprises recent updating of various disciplines such as Civil Engineering, Computer Science Engineering, Electronics and Communication Engineering, Electrical and Electronics Engineering, Mechanical Engineering, Business Administration and Applied Sciences. I am sure that this International Conference will address the needs of the Engineering Industry, Research & Development.

More, so it is the forum to share knowledge, experiences and exchange of ideas amongst academicians, researchers, professionals and managers of industry from different parts of the world in particular our country.

I hope that our College will take up more of such events to disseminate information on recent technological developments in various Engineering Disciplines and applied Sciences and act as nuclei in the field as a part of DECINAL CELEBRATIONS of the COLLEGE

I wish the organizers a grand success in this endeavor.

Prof S. Venkateshwar
Dean, Methodist College of Engineering & Technology

Department of Civil Engineering



The department of civil engineering was established in 2013 with an intake of 60 students. Since 2014, the intake was increased to 120 students. The department has well qualified faculty which includes three doctorates and five senior faculty members whose teaching/industrial experience exceeds 35 years. Many of the teaching faculty are members of professional bodies of national repute such as IEI, ISTE, IWRS, ICI, ISNT, ISSS, IAStructE, IGBC, etc. The department is equipped with excellent laboratory facilities and is dedicated to offering hands-on practical orientation to the students.

In addition to quality teaching and curricular input, the department is active in co-curricular and extra-curricular activities for the benefit of the students. The department has initiated student chapters of Institution of Engineers India (IEI), Indian Green Building Council (IGBC) and Indian Association of Structural Engineers (IAStructE). The student chapters actively support the department in organizing technical events, industrial visits, workshops and conferences for academic growth. The notable events are Two day National Conference on “Recent Trends in Structural Engineering (RTSE-2017)” and two day Industrial Workshop on “Civil Engineering Technologies – Industrial Practices (CETIP-2018)”. The department has MoUs with NGOs and industries for training and professional enrichment of the students.

Dr. Akshay S.K. Naidu
Head (Civil Engineering), MCET

Department of Computer Science and Engineering



The Department of Computer Science and Engineering was established in the year 2008 with an intake of 60 and subsequently enhanced to 120 in 2010. The department offers a 4 year degree programme in CSE. The department constitutes a group of energetic, experienced and well qualified faculty from industry and academia. The department houses state-of-the laboratories providing hands-on training and thus encouraging them to build major and minor projects. The alumni of the department are well placed in core companies and MNCs.

The department instills quality education with holistic development. The students are encouraged to train and update their technical skills through various in-house trainings, knowledge transfer workshops, value added courses and project exhibitions. The department emphasizes a student - centric and friendly learning environment by systematically balancing academics and activities. The staff and students always work in tandem in organizing the various college level activities and technical fests. The relentless efforts of staff have helped the department in earning a good name & fame in a short span of time.

Vision: The Vision of the department is to provide leading programs in computer science whose graduates are recognized as innovative and well-prepared computing professionals.

The mission of the department is to strive for excellency by devising technical rich programs, which are ought to improve the caliber of our students To bridge the gap between industry and academia, the department has MOUs with various organizations like Oracle Corporation, Vee Eee Technologies Solution Pvt Ltd and SM MICRRO SYSTEM, Chennai.

Mrs. Lavanya Pamulaparty is working as Head of Department from December 2009. She is currently pursuing Ph.D. in Computer Science & Engineering from Dept. of CSE, College of Engineering, JNTU Hyderabad. She has 15 years of teaching experience in various reputed engineering colleges in Hyderabad. She has published more than 11 research papers in national and international conferences and journals..She has conducted various workshops, faculty development programmes, seminars and conferences.

Mrs. P. Lavanya
Head (CSE), MCET

Department of Electrical and Electronics Engineering



The Department of Electrical and Electronics Engineering has been established in the year 2008, with an intake of 60 students for the undergraduate B.E course, with an objective of imparting quality education in the Electrical and Electronics Engineering field.

The Department has 11 regular faculty members who are highly experienced and actively involved in research. The Department is equipped with state-of-art equipment and qualified technical staff. Apart from regular academic activities, the department faculty is involved in various professional activities like publishing their research findings in prestigious conferences and journals.

The department encourages the students in conceptualizing, implementing and participating in the various student Workshops, Guest Lectures and Industrial Internships to hone their technical skills. The department regularly organizes Industrial Visits to Electric Loco Shed South Central Railways, Central Power Training Institute, various Substations, HINT Transformer Manufacturing Company and many organizations related to the Electrical Engineering.

The department organizes events like various events like Paper Presentations, Poster presentations, Technical Quiz and Project Exhibitions to motivate the students to improve their technical and communication skills. The students of 2016 batch have undertaken a solar project to power our Power Electronics Lab thereby saving energy and is successfully powering our lab since then. The Department has MoU with ISIE (Imperial Society of Innovative Engineers) for undertaking innovative projects in equipment development which could lead to final year academic projects.

The department is proud of having achieved the first university gold medal for our college by Mr. Sachin Dharmini of 2013 batch who is presently working in Indian Railways after securing 8 th rank in IES. The alumni of the department are placed in core companies and MNCs.

The department is a student friendly department providing ample opportunity for student-teacher interaction through mentoring.

Mrs. Y. Mastanamma ME(IDC),MTECH(CS), (Ph.D).
Head (EEE), MCET

Department of Electronics and Communication Engineering



Electronics and Communication Engineering was established in the year 2008 with an intake of 60 and subsequently enhanced to 120 in 2010. The present student strength is 300 and faculty strength is 25. The department constitutes a group of energetic, experienced and well qualified faculty from industry and academia.

Electronics and Communication Engineering being one of the fastest growing disciplines among all Engineering domains, it deals with core courses in Electronic devices and circuits, Electromagnetics, Digital Electronics, Signals and systems, Communication Engineering, Microprocessors and microcontrollers, Automatic control systems, and Digital signal processing etc. The department houses state-of-the-art laboratories providing hands-on training and thus encouraging them to build major and minor projects. The alumni of the department are well placed in core companies and MNCs.

The department instills quality education with holistic development. The students are encouraged to evolve with the latest technological advancements through various in-house trainings, knowledge transfer workshops, value added courses, expert lectures and project exhibitions. They are motivated to improve their communication & written skills through special trainings, also to participate in extra-curricular activities, sports etc. The students organize various activities under IETE, IEEE AND TECHSPACE clubs. The department publishes monthly magazine named PEACE- Power of Electronics & Communication Engineering covering both technical and non-technical domains.

The department emphasizes a student-centric and friendly atmosphere by systematically balancing academics and activities. The staff and students always work in tandem in organizing the various college level activities and technical fests. The relentless efforts of staff have helped the department in earning a good name & fame in a short span of time.

Dr. N.H. Shobha Reddy
Head (ECE), MCET

Department of Business Management



Greetings from the Department of Business Management !

The MBA course at MCET was started from the A.Y:2009-10. Our department has emerged as one of the vibrant segments of our burgeoning MCET located in the very heart of the city of Hyderabad. Right from its inception the department has been playing a key role in imparting quality education to the student community. Our college is approved by AICTE and we are affiliated to Osmania University. Hence the curricula and syllabi of the two year fulltime MBA course offered with an intake of 60 students, is as per the CBCS of Osmania University norms. The specializations offered in Finance, HR and Marketing enables students in acquiring cross- functional knowledge. We provide case-based learning methods and impart pedagogy on par with premier institutions of the nation. The students have the delight of an environment friendly sprawling Wi-Fi campus, with state of the art infrastructural facilities, which include well-equipped computer labs, spacious library with access to online, and off-line national & international journals, centrally air-conditioned Seminar Hall with the latest facilities, well-structured playground and the list goes on.

The department has the strength of well-qualified, experienced and diligent faculty members who are committed in providing highest standards of education and excellence to the students. This is the reason we are able to produce 100% results in academics consistently. As we believe in continuous learning and growth, our dynamic DBM team strives towards excellence by organizing various programs for students and faculty. Particularly for the students, regular industrial visits are scheduled as part of the institute-industry interface. We have to our credit for the conduct of national level students' activities like Annual Fests, Budding Manager of Telangana, Meth-Honcho 2012, Seminars, Workshops and FDPs for faculty of MCET and of sister concerns.

Our MBA students have brought laurels to our college by winning the Badminton inter-college tournament conducted by OU and also cricket matches, Tennis tournaments at national levels. This is a testimony that for the overall development of the students, we encourage our students to participate in inter-college competitions at both the state and national levels. The department has the honor and pride in incubating the idea, taking initiative and bagging the '**Dewang Mehta National Education Award 2017**' for the college. This is a testimony and just tip of the iceberg in our pursuit of imparting quality education for our students. Spectacular achievements have been made by working with our core value of '**Unity in Diversity**' and with the contribution at the optimal potential by all our stakeholders, sky is our limit!

Mrs. Rani Rajan
Head (DBM), MCET

Department of Mechanical Engineering



The Mechanical Engineering Department was established in the academic year 2009-2010. Currently the department offers one under graduate program, B.E in Mechanical Engineering, with an intake of 120 and one Post Graduate Program, M.E with specialization in CAD/CAM with an intake of 18 seats.

The department is headed by Dr. A. Rajasekhar and has a team of 23 highly qualified, motivated and experienced faculty with 4 doctorates (Ph.D.) and rest are with M.E./M.Tech qualification in various areas of specializations. Majority of the faculty are having varied experience of industrial, teaching and research, which help to serve the students in exposing them to industrial and research environment.

The department is associated with professional bodies such as Society of automotive Engineers (SAE), Indian Society for Technical Education (ISTE) under which various activities are being taking place. The Department has MOU's with many organizations like ISIE (Imperial Society of Innovative Engineers), RAMTECH manufacturing industries and Sri Venkateswara Industries, Balanagar, Hyderabad etc.

The department organizes various student level technical events regularly, which include workshops, guest lectures, industrial visits and technical seminars to expose the student's inherent talent and skills. The department also organizes events like Faculty Development Programs (FDP), conferences and workshops to expose the faculty to latest technologies.

The department also conducts various certification courses in advanced technologies such as CAD / CAM in association with reputed professional training institutes.

The Department is recognized as "RESEARCH CENTRE" by the Osmania University in the month of March 2018.

Dr. A. Rajasekhar
Head (Mechanical Engineering), MCET

CONTENTS

Civil Engineering

Geospatial Technology for Micro Level Planning of Villages: A Case Study of Hasanparthy Mandal, Warangal Urban, District, Telangana, India	1
<i>Renikunta Srikanth, K. Santosh Kumar, Sk. Md. Imran, Mary Soujanya</i>	
Environmental Planning for Disaster Management by Using GIS-An Overview	1
<i>Sk. Md. Imran, Renikunta Srikanth, K. Santosh Kumar</i>	
Numerical Computations for F.M, W&WWT Technology and Surveying using Open Source Platform	2
<i>Shivarajappa</i>	
Effect of Geometric Parameters on Seismic Performance of RC Chimneys	2
<i>S. Isha Patel, B.D.V. Chandra Mohan Rao</i>	
A Review on Evaluation Effect of Aggregate Gradation and Binder Parameters on Bituminous Mix Rutting	3
<i>D. Bharath Naik, B. Bhavani Shankar, B. Lavanya</i>	
Influence of Patch Location on Damage Detection of Smart Bar using EMI Technique	3
<i>Jakkula Sowjanya, Mallika Alapati</i>	
Analysis of Toll Plaza Using Queuing Theory	4
<i>R. Srinivasa Kumar, K. Smitha Suguna Leela, K. Vasudha</i>	
Modal Analysis of Hyperboloidal Shell Structures	4
<i>A. Kavya Reddy, B.D.V. Chandra Mohan Rao</i>	
Response Spectrum Analysis of RC Buildings with Irregularities in Plan	5
<i>A.P. Rajkumar, B.D.V. Chandra Mohan Rao</i>	
Comparative Analysis of Responses of a Plane Building, With Outriggers and Water tank As Tuned Liquid Damper	5
<i>Shaista Begum, Abrar Ahmed</i>	
Mechanical properties of M30 grade concrete using blast furnace Aggregate – An Experimental Study	6
<i>Shaista Begum, Mohd. Shahed Ali</i>	
Analysis of Telecom Towers with Symmetrical Accessories	6
<i>Srinivas Tanuku, Prof. K. Rama Mohana Rao</i>	
Repair and Rehabilitation of Flexure-Failed RC Beam	7
<i>Soheb M. Salim, Nasser Alnuaimi, Mohammad R. Irshidat</i>	



Command Area Development Using Artificial Recharge System - A Practical Case Study	7
<i>V. Venkata Vijaya Kumar, H. Siddhartha, K. Uday Sree, K. Sumanthh</i>	
Study on Uplift Capacity of Belled Shaped Anchor Embedded in Soil Using “Abaqus”	8
<i>Y. Ram Kiran, Sk. Md. Imran, R. Srikanth, Keith Thomas, D. Bharath Naik</i>	
Possible Use of Bamboo as a Sustainable Building Material	8
<i>Mohammed Hidayatullah, Firdous Jehan, Mohammed Arbaaz, Akshay S.K. Naidu</i>	
Study and Behaviour of M40 Grade Concrete Using Steel Slag as Partial Replacement of Coarse Aggregate	9
<i>B. Udayasree, D. Akash, T. Raja Ramanna</i>	
Recent Developments in Fibrous Self-Compacting Concrete – A Review	9
<i>S. Vijaya Kumar, B.L.P. Swami, S. Suganya, C. Chandana Priya</i>	
Automatic Dust Control for Modern Coalmines	10
<i>Tejeswaran K.M.</i>	

Computer Science Engineering

Understanding the influence of Ransomware: An Investigation on its Development, Mitigation and Avoidance Techniques	11
<i>Lingala Thirupathi, P.V. Nageswara Rao</i>	
Internet of Everything (IoE): A New Technology Era will have Impact on Every Facet of our Life	11
<i>Sandeep Ravikanti</i>	
A New Paradigm on Reduction of Human Bias in Software Testing Life Cycle	12
<i>Raghav Sridhar, Vinod Vijayakumaran</i>	
An Algorithmic Approach for Deadlock Detection in Hypervisor	12
<i>Madham Naren, Sandeep Ravikanti</i>	
Optimization algorithms and the clustering problem	13
<i>Nadia Abd-Alsabour</i>	
Practical Authentication Mechanism Using PassText and OTP	13
<i>V. Srividya, P. Swarnalatha, L. Thirupathi</i>	
Improved Priority Scheduling Algorithm	14
<i>P.V. Ramanaiah, Chada Sravanthi</i>	



Abstractive Summarization using AMR and Random Walk Algorithm	14
<i>Payal Sancheti, Rajashree Shedge, Namita Pulgam</i>	
An Intelligent Way to Generate and Track Traffic Challans with the Power of ML and IoT	15
<i>Unnati Khanapurkar, B. Sowjanya, Sandeep Ravikanti</i>	
A Novel Approach for Data Security for Cloud Data Using Image Steganography and Genetic Algorithms	15
<i>M. Seshubhavani, S. Asha Varma, Davuluri Suneetha</i>	
Data Hiding Using Cascading Feed Forward Network Prime Number Edge Based Steganography	16
<i>D. Ratna Kishore, D. Suneetha</i>	
Edge Computing Enactments Cloudlet and Mobile Edge Computing	16
<i>Ayesha Nuzha, G. Saraswathi, Amtul Sana Amreen</i>	
Students' Performance Evaluation and Analysis	17
<i>Bhavani Rachakatla, B. Srinivasu, Ch. Prasanna Laxmi, Sana Thasleem</i>	
A Survey to Improve the Product Sales of Michigan Co. Using Machine Learning Algorithm	17
<i>Mehul Jiten Gosar, Sandeep Ravikanti</i>	
An IoT Based Smart Wheel Chair for Physically Challenged	18
<i>Akram Mirza, Sandeep Ravikanti</i>	
Electronics and Communication Engineering	
Design and Analysis of Hexagonal Fractal Antenna Array for GPS and WLAN Applications	19
<i>Mahesh S. Mathpati, Mohammed Bakhar, Sneha Kadam, Husain K. Bhaladar</i>	
Improved Dark Channel Prior for Fast Image Dehazing	19
<i>Y. Jalajakshi, K.E. Sreenivasa Murthy</i>	
Design and Development of Real Time Vehicular Crash Detection System	20
<i>Ambika R., Shashikala J., Nikhilanand Reddy, Milind P., Uthresh H., K.V. Suriya</i>	
Analytical Approach of Trivium FPGA Implementations against Information Security Vulnerability	20
<i>Ch. Suresh, M. Mahesh Babu</i>	
Recognition and Redecoration of Distorted Fingerprints	21
<i>D. Vara Prasada Rao, I. Poorna Chander, M. Satish Yadav</i>	
Quality Index Assessment for Toned Mapped Images Based on SSIM and NSS Approaches	21
<i>Sameed Shaik, G.M. Mujtaba, C. Balaranga Swamy</i>	



Implementation of Steganography on Images Using Lossless and Reversible Encryption Methodology	22
<i>Pravan Kumar Talusani, Srikanth Immareddy, Sharmina Bharwani</i>	
4-Bit Even Parity Generator on 45nm Technology	22
<i>Syed Zainuddin, Mohammed Shahbaaz</i>	
Localization in Wireless Sensor Networks using TLBO	23
<i>Gaurav Sharma, Rajesh A.</i>	
Brain Medical Imaging Registration with Different Modalities	23
<i>Omika Rani, T. Manasa, K. Sowmya</i>	
A Simplified Compressive Sampling Approach Based on Weights for Efficient Spectrum Usage In Wideband DSA Networks	24
<i>N. Raj Kumar, I. Poorna Chander</i>	

Electrical and Electronics Engineering

Experimental Investigation on the Influence of Humidity on PV Panel Performance	25
<i>Abhishek Kumar Tripathi, Mangalpady Aruna, Ch.S.N. Murthy, Bodapati Prasad</i>	
Performance Analysis of Sliding Mode Controller Fed PMSG Based Wind Energy Conversion System	25
<i>Y. Mastanamma, D. Subbarayudu</i>	
Improvement of Power Quality in Grid Connected Non-Conventional Energy Sources at Distribution Loads	26
<i>Ramesh Jatoth, N. Nireekshana</i>	
Design and Implementation of Single Phase RV Topology Five Level Inverter	26
<i>Namburi Nireekshana</i>	
Control and Improvement of Reactive Power at DFIG wind turbines in Islanded Microgrid	27
<i>Jarapala Ramesh Babu, Bhumaiah Jula, Rajinikanth P.</i>	
Role of TeO₂ on conduction mechanism in AgI-Ag₂O-B₂O₃ glasses	27
<i>E. Ramesh Kumar, K. Veerabhadrao</i>	
A Novel Approach for Reactive Power Compensation in Wind Farms Using GSC & RSC Control Algorithms	28
<i>Raghu Chandra Garimella, Ch.S. Ganga Bhavani, Sitaram Appari</i>	
A Study on the Temperature Dependence of Electrical Resistivity and Crystallization in Amorphous Fe_{73.5}B₉Si_{13.5}Cu₁Nb₃ Alloy	28
<i>M.D.V. Srilalitha, B. Bhanu Prasad, A. Neelima</i>	



Reliability Assessment of Radial Distribution System with Different Automation Schemes of One and Half Breaker Substation 29*S. Deepti, E. Vidya Sagar***A Comparison of Optimal Control of AGC for Hydrothermal System Using Local Optimization** 29*M. Vijay, S. Vishnu Vardhan Reddy, P. Vasanthi***Analysis of Matrix Converter Using Direct Transfer Function Approach** 30*B. Pavankumar, Jarapala Ramesh Babu, V. Saketha***Implementation of GA in Multi Segment Sliding Mode Control for optimal operation of Induction Motor** 30*Chetan Chodavadiya, Vipul A. Shah***Review of Grounding Practices on Power System in Indian Underground Coal Mines with Futuristic Projections** 31*Abhishek Kumar Tripathi, Santanudasgupta, V.S. Ram***Improving the Voltage Profile at Load End Using DVR** 31*Rajinikanth P., Bhumaiah Jula, N. Nireekshan***Power Generation through Pedaling** 32*Md. Sajid, Amer Ali Khan, Shariq Ayjaz***Mechanical Engineering****Briquetting – A Waste Management Technology** 33*Nara Siva Balaji, P. Vijendran, K. Simonrupas, K.V. Nagesha***Post Processing of Parts Produced by Fused Deposition Modelling Process** 33*P Vijendran, Nara Sivabalaji***Economizing of Machining Process by Heating the Work Piece in the Furnace to Increase Tool Life, Surface Finish and to Reduce the Power Consumption** 34*Prabhakar K., P. Shailesh, A. Rajasekhar, Y. Madhu Maheswara Reddy, Anil Kumar K.***Design and Thermal Analysis of Tractor Boot** 34*P. Ravi Chander, Y. Madhu Maheswara Reddy, R. Manish, G. Sai Ram***Thermal Analysis of TBC Coated Super Alloy for Industrial Gas Turbines** 35*Mohammed Asadullah, Mohammed Yunus, Shobab A., Swetha Ramadugu***Design modelling and analysis of Light Weight Foldable cycle** 35*Prasad Matam, Y. Madhu M. Reddy***Design of Cultivator Using A Motor and the Analysis on Tiller Blade** 36*K. Srinivasa Raghavan, K. Ramani, J. Saikrishna*

Commercial Modular Kitchen Ventilation System Design	36
<i>Md. Fajhruddin H.N., Syed Azam Pasha Quadri, Sohaib Bin Suhail, Syed Absar Ahmed, Abdur Rahman Omes</i>	
Performance Evaluation of Single Cylinder Diesel Engine using Neem Caster Bio-diesel	37
<i>Md. Fakhruddin H.N., Umar UZ Zama, M. Yousuf Ali, M. Manzoor Hussain</i>	
Experimental Investigation of MIG Welding Parameters for Improving Strength of Welded Joints	37
<i>M. Jawahar, Ch. Jeevan Reddy, G. Venkanna</i>	
Ergonomic Risk Assessment of Working Postures in Small Scale Industries	38
<i>Jagadish R., Asif Ansari, Sameer Quraishi, Ayesha Sultana, Qutubuddin S.M.</i>	
A Multi Performance Characteristics Optimization of Robotic Arm Trajectory using Machine learning Technique	38
<i>Arunadevi M., C.P.S. Prakash</i>	
Thermal Analysis of Finned Cylinder Block of an Air Cooled I.C Engine	39
<i>Mohd. Abdul Samad, Syed Nawazish Mehdi, Syed Khader Basha</i>	

Information Technology

A Review on Impact of Deep Learning and Tensor Flow in Medical Image Processing	40
<i>Lakshmi J.V.N.</i>	

Master of Computer Applications

Parametric Approach for Effective Educational Management System through Data Analytics	40
<i>Bharati Kawade, Aruna Deoskar</i>	

Master of Business Administration

The Balanced Scorecard – An Enduring Management Key for Success!	41
<i>Rani Rajan</i>	
Technology Management	41
<i>Galipally Akshay Kumar</i>	





Methodist College of Engineering and Technology

(Affiliated to Osmania University)
Abids, Hyderabad, Telangana, India



refine your research
SCOPUS™

2nd International Conference on
Paradigms in Engineering and Technology

ICPET-2018

December 28-29, 2018



CONFERENCE SCHEDULE

DAY-1 (DECEMBER 28, 2018), Friday

Timings	Scheduled Program
8.30 AM to 9.30 AM	Registrations
9.30 AM to 11.00 AM	Inauguration
11.00 AM to 11.15 AM	High Tea
11.15 AM to 12.15 PM	Plenary Talk by Keynote Speaker-I
12.15 PM to 1.15 PM	Plenary Talk by Keynote Speaker-II
1.15 PM to 2.00 PM	Lunch
2.00 PM to 3.00 PM	Technical Lecture-I
3.00 PM to 4.00 PM	Paper Presentations
4.00 PM to 4.15 PM	Tea Break
4.15 PM to 5.00 PM	Paper Presentations

DAY-2 (DECEMBER 29, 2018), Saturday

Timings	Scheduled Program
9.30 AM to 10.30 AM	Plenary Talk by Keynote Speaker-III
10.30 AM to 11.30 AM	Plenary Talk by Keynote Speaker-IV
11.30 AM to 11.45 AM	Tea Break
11.45 AM to 12.30 PM	Technical Lecture-II
12.30 PM to 1.30 PM	Paper Presentations
1.30 PM to 2.15 PM	Lunch
2.15 PM to 3.00 PM	Technical Lecture-III
3.00 PM to 4.00 PM	Paper Presentations
4.00 PM to 4.15 PM	Tea Break
4.15 PM to 5.00 PM	Valedictory Function

PAPER ID: EEE201802

Experimental Investigation on the Influence of Humidity on PV Panel Performance

Abhishek Kumar Tripathi¹, Mangalpady Aruna², Ch.S.N. Murthy³ and Bodapati Prasad⁴
^{1,4} A.K.S. University, Satna, India

Email: abhinitrkl12@gmail.com, drbodapati@yahoo.com

^{2,3}National Institute of Technology Karnataka, Surathkal, India

Email: arunamangalpady@gmail.com, chsn58@gmail.com

Abstract: The performance of PV panel is directly influenced by the surrounding environment. Among various environmental parameters, humidity is one of the parameters that affect the performance of PV panel. Therefore, in this paper an attempt is made to study the effect of relative humidity on the performance of PV panel. This study demonstrated that the increase in humidity level has a negative relation with the performance of PV panel. There was a 35.82% reduction in the output power of the PV panel with the increase in humidity level from 65.40% to 98.20%.

Index Terms—Humidity, output power, PV panel and environment.

ISSN: 2395-5295 (Online), 2395-5287 (Print)

Journal: Grenze International Journal of Engineering and Technology (GIJET)

PAPER ID: EEE201805

Performance Analysis of Sliding Mode Controller Fed PMSG Based Wind Energy Conversion System

Y. Mastanamma¹, Dr. D. Subbarayudu²

¹ Research Scholar at Rayalaseema University, Kurnool, Andhra Pradesh and HOD-EEE/Associate Professor at Methodist College of Engineering and Technology, Abids, Hyderabad.

² Research Supervisor at Rayalaseema University, Kurnool, Andhra Pradesh, India.
Email Id: mastanammaeee@gmail.com

Abstract — This paper proposes a Sliding Mode Controller (SMC) for a variable speed, Wind Energy Conversion Systems (WECS) with Permanent Magnet Synchronous Generator connected to a local load. The proposed control strategy is employed to cut the chattering impact and to improve THD in comparison with typical systems. In this work a five level inverter is used. The performance of this control strategy is tested using MATLAB/Simulink for a 6 kW wind turbine.

Index Terms-WECS, PMSG, Five level inverter, Sliding Mode Controller (SMC)

ISSN: 2230-7184 (Online), 0973-2632 (Print)

Journal: i-manager's Journal on Future Engineering and Technology (JFET)