

**International Conference
on
ELECTRICAL, ELECTRONICS AND COMMUNICATION
ENGINEERING (ICEECE- 2018)**

April 27th & 28th, 2018



Giving Wings to Thoughts

Venue :

St. Peter's Engineering College

Affiliated to JNTUH, Approved by AICTE, Accredited by NBA & NAAC with "A" Grade

Maisammaguda, Opp.Forest Academy, Dhulapally (P.O), Medchal-Malkajgiri Dist,

Hyderabad-500 100, Telangana, India

Tel: 8019008578, www.stpetershyd.com

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PREFACE

St.Peter's Engineering College (sponsored by shantha Educational Society)

Affiliated to JNTUH, Approved by AICTE, Accredited by NBA & NAAC with "A" Grade

As the demand for Engineers and Managers continues to grow, St.Peter's Engineering College is focused on preparing students for the infinite number of opportunities available. Our vision would surely make us the preferred institution in the country and abroad. This makes St.Peter's Engineering College uniquely qualified to provide talented students, the type of broad technological and management education demanded in a rapidly changing world. Our programmes would satisfy the demands of employers that require a balance of rigorous fundamental engineering skills along with management talents in entrepreneurship, leadership, technical communication, team work and global awareness.

ABOUT THE INSTITUTE

The institute is promoted by the Shantha Educational Society- a premier non-profit educational organization affiliated to JNTU, Hyderabad and it is accredited by NBA and NAAC with "A" grade. St. Peter's Engineering College established in 2007 with a mission to offer quality education for the students with the objective of bringing Engineering education to the door steps of every individual, for the growth of the college is reflected in the improvement of student enrollment that figure about 2000+ at present. SPEC has spacious infrastructure with class rooms, laboratories, and library facilities. SPEC offers Programs/ Courses that have ample scope for research and development relevant to the general and specific needs of students. It has both UG and PG programs in EEE and ECE departments.

Proceedings of these conferences have been published by

- 1) International Journal of Electrical & Electronic and Computational Science
(IJEECS, ISSN 2348-117X, Impact Factor 2.52)
[www.academicscience.co.in] UGC approved
- 2) International Journal of Computer and Mathematical Science (IJCMS,
ISSN 2347-8527, Impact Factor- 2.58) [www.academicscience.co.in]
UGC approved

- 3) International Journal of Engineering Technology Science and Research
(IJETSR, ISSN-2394-3386, Impact Factor 2.120) [www.ijetsr.com] UGC approved
- 4) International Journal of Innovation and Advancement in Computer Science
(IJIACS, ISSN 2347-8616, Impact Factor- 2.65)
[www.academicscience.co.in] UGC approved

We are very pleased to introduce the proceedings of two day International Conference on ELECTRICAL, ELECTRONICS AND COMMUNICATION ENGINEERING (ICEECE-2018) on April 27 & 28, 2018. Proceeding of the conference has been published with

ISBN: 978-93-87433-22-9

Total 210 papers were received for the conference and 103 papers were shortlisted by the Committee. All the accepted and presented papers of the duly registered authors will be published in the Academic Science

Published by

Academic Science

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ISBN: 978-93-87433-22-9

ORGANIZING COMMITTEE

Chief Patron : **Mr. T. Bala Reddy,**
Chairman, St. Peter's Engineering College.

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Secretary & Correspondent, St. Peter's Engineering College

Chair : **Dr. M. Narendra Kumar,**
Principal, St. Peter's Engineering College

Convener : **Dr. Jayanna K, Professor, EEE Dept.**

Co-Convener : **Dr. R. Prakash Rao, Professor, ECE Dept.**



**Mr. T. Bala Reddy, Chairman,
St.Peter's Engineering College
Hyderabad, Telangana State, INDIA**

Chief Patron, ICEECE-2018

I am extremely delighted to know that the St. Peters Engineering College is Organizing International conference on Electrical, Electronics and communication engineering (ICEECE-2018) on 27th to 28th April 2018. I congratulate the Staff and Students of the college for undertaking such an onerous responsibility of organizing the conference. An educational institution has a profound role in building an individual, the nation and the society. It is a job of soaring responsibility when the recipient of that education is slated to perform roles of high responsibility. The conference provides a platform to Researchers, Teachers, Practitioners and Policy makers to interact and exchange their views and learn from each other. The theme of the conference encompasses all the vital components of Science, Engineering and Technology and provides scope for exhibiting state-of-art practices in Electrical Engineering, Electronics & Communication Engineering. I am sure the presence of eminent speakers, Researchers, Faculty members and students would add splendor to the deliberations during the conference. I wish the conference a grand Success.



**Mr. T. V. Reddy, Secretary & Correspondent,
St.Peter's Engineering College
Hyderabad, Telangana State, INDIA**

Patron, ICEECE-2018

Engineering is the discipline, art and profession of acquiring and applying technical, scientific and mathematical knowledge to design and implement materials, structures, machines, devices, systems, and processes that safely realize a desired objective or invention.

St.Peter's Engineering College established in 2007 and affiliated to JNTU Hyderabad, is emerging as quality education institute in the state of Telangana.

We at St.Peter's Engineering College constantly strive for quality and perfection. We take ample care to produce industry ready engineers. For that we are in constant touch with industry through MOU's, Industrial training for staff and students, Industrial visit, Sponsored project, etc. Our efforts were recently appreciated by NAAC Committee and awarded our Institution with NAAC 'A' grade. We continuously strive to provide the finest environment for learning, research, innovation and character building. We are trying to make our institute a global centre of excellence.

I congratulate the faculty of St.Peter's Engineering College for organizing International conference on Electrical, Electronics and communication engineering (ICEECE-2018) on 27th to 28th with Academic Science . The Conference is a great opportunity for the confluence of knowledge emanating from Academia, Industry, Research Scholars and Practitioners to present and discuss the most recent innovations, trends as well as practical challenges encountered and solutions adopted in the field of Science, Engineering and Technology. I wish all the best and congratulate the organizers of the Conference.



Mr. UPPALA RAJESHWAR
Director,
St.Peter's Engineering College
Hyderabad, Telangana State, INDIA

St.Peter's Engineering College established in 2007 and affiliated to JNTU Hyderabad, is emerging as quality education institute in the state of Telangana. We at St.Peter's Engineering College constantly strive for quality and perfection. We take ample care to produce industry ready engineers. I congratulate the faculty of St.Peter's Engineering College for organizing International conference on Electrical, Electronics and communication engineering (ICEECE-2018) on 27th to 28th with Academic Science . It is truly a remarkable achievement for St.Peter's Engineering College in organizing this International Conference on Electrical, Electronics and Communication Engineering (ICEECE-2018).

The Conference is a great opportunity for the confluence of knowledge emanating from Academia, Industry, Research Scholars and Practitioners to present and discuss the most recent innovations, trends as well as practical challenges encountered and solutions adopted in the field of Science, Engineering and Technology. I wish all the best and congratulate the organizers of the Conference.



Dr.M.Narendra Kumar

Principal, St. Peters Engineering College,

Hyderabad, Telangana State, INDIA

Chair-ICEECE-2018.

It gives me an immense pleasure in penning down his foreword from the proceedings of international conference on Electrical, Electronics and communication engineering (ICEECE-2018). This conference is one such event which aims to bring researcher, technocrats and scholars with innovative ideas and concepts to present their study and share their innovative views under one roof in the field of Electrical, Electronics and communication engineering.

Further, the incredible response from various researchers and academicians from India and abroad in terms of the quality of the research paper shows that innovation is here to stay and will be de facto standard for industries and educational institutions.

I am buoyant that delegates and participants will relish moments of finery of novel concepts presented in this conference to strength their research work towards next best level.

I wish all the delegates fruitful deliberations and hope this conference will be a milestone in research and novel thoughts.



Dr. Jayanna Kanchikere

Professor, Electrical & Electronics Engineering Department

St. Peters Engineering College,

Hyderabad, Telangana State, INDIA

Convener -ICEECE-2018.

At the outset I congratulate St.Peter's Engineering College for organizing International Conference on Electrical, Electronics and Communication Engineering (ICEECE-2018) in collaboration with Academic Science from 27th to 28th April 2018. Our Institute has completed eleven eventful years in its journey in imparting quality education to thousands of students. The field of Science, Engineering and Technology is undergoing rapid changes and the academicians are struggling hard to keep pace with the changes. The areas of Science, Engineering and Technology which are witnessing fast changes include Renewable energy, High voltage Engineering, Power systems, internet of things, Image Processing etc. to name a few. I wish the Conference will throw light on the changing dimensions of these perspectives to help the academicians and Corporates to update their knowledge and researchers to get new ideas for research. It is truly a remarkable achievement for St.Peter's Engineering College in organizing this International Conference on Electrical, Electronics and Communication Engineering (ICEECE-2018).



Dr. R.Prakash Rao

Professor, Electronics & Communications Engineering Department

St. Peters Engineering College,

Hyderabad, Telangana State, INDIA

Co-convener-ICEECE-2018

International Conference on Electrical, Electronics and Communication Engineering (ICEECE-2018) has received a fantastic response. I am happy to learn that the delegates are participating in the conference from across many states and countries. I am also glad to note that the participants are presenting their articles on wider areas like Renewable energy, Power systems, internet of things, Image Processing, Artificial intelligence and so on.

The initiative taken by the organizers and especially dynamic team of faculties in organizing the International Conference on Electrical, Electronics and Communication Engineering (ICEECE-2018) involving hundreds of educators would go a long way in fulfilling the desire for adding new knowledge in the field of Science, Engineering and Technology both in academics and research.



Mr. MLN Acharyulu

Professor & Head, Electronics & Communications Engineering Department

St. Peters Engineering College,

Hyderabad, Telangana State, INDIA

On behalf of the Dept. of ECE, I welcome you to the international Conference on Electrical, Electronics and communication engineers-2018(ICEEC-2018) on Frontiers of department of ECE The Academic year 2017-18 marked a big change in the engineering education of the country, owing to global factors' .I thank the support and cooperation extended by all concerned and as a result we, as an department of ECE, are steady as ever. The department of Electrical, electronics and communication to be leading in the advancement of research and training, equipping the engineering professional's to be successful scientists, entrepreneurs and builders of the nation in the 21st century.

I congratulate to coordinators of this event, looking back, we have signed a good number of MOUs with various academic, industrial, quasi-academic and societal cultural organizations. I can assure you that together we will move the organizations to the next level of excellence. On this front, I have specific strategies towards the realization of this bold vision of the department, incorporating technology into SPEC operations and delivery employing if necessary online training and escalating research domain to integrate challenging issues significant to economic development. We are in the process of making dept of ECE SPEC as a hub for emergent VLSI and Embedded Systems research. I sincerely feel that the deliberations of this Conference will immensely benefit Faculty members, Research Scholars and PG students in updating their knowledge. I feel delighted to say that our department is growing in various academic activities such as teaching and research in a progressive manner.



Mrs. K.Sreelatha

Professor & Head, Electrical & Electronics Engineering Department

St. Peters Engineering College,

Hyderabad, Telangana State, INDIA

It gives me an immense pleasure and privilege to welcome you to the International Conference on “Electrical, Electronics and Communication Engineering (ICEECE-2018) “ being hosted by Electrical and Electronics Departments of SPEC. I am sure that this International Conference is likely to be one of the most referred conferences. The main objective of the conference is to provide common platform to researchers and scholars to share with delegates and exchange their views, knowledge and their achievements in the field of Electrical, Electronics and communication Engineering. It will be helpful for identification and promotion of R & D activities at the individuals as well as at the institutional level. I hope this conference will unfold new panorama in the sphere of new Technologies.

Once again, I welcome all the participants to the conference. I hope that you find these two days technically stimulating and professionally rewarding.

I wish all the success for the event.

Organizing Committee



**Mr. T. Bala Reddy,
Chairman, SPEC**



**Mr. T. V. Reddy,
Secretary & Correspondent, SPEC**



**Mr. Uppala Rajeshwar
Director, SPEC**



**Dr. M. Narendra Kumar
Principal, SPEC**



**Dr. Jayanna Kanchikere
Professor, EEE, SPEC**



**Dr. R. Prakash Rao
Professor, ECE, SPEC**