

Message from Jagadguru Sri Shivarathri Deshikendra Mahaswamiji



We are happy that the JSS Academy of Technical Education is organizing a two-day International Conference on "Signal, Image Processing, Communication & Automation (ICSIPCA-2017)" in July 2017.

The two Departments have jointly organized this prestigious academic event wherein number of delegates of high caliber and achievements will be participating.

Academic meets like this create a friendly ambience to exchange new ideas and emerging trends in various vistas of engineering disciplines. They will also help people of common interest to meet at a place and focus their attention in the future pursuit of knowledge and research.

The organizers of the conference have rightly decided to publish the Proceedings of the meet. This would help showcase the deliberations, in their exactitude, for the benefit of students, teachers and research scholars, as a permanent source of useful information.

We wish the Organizers all success in this academic endeavour.

Jagadguru Sri Shivarathri Deshikendra Mahaswamiji
Jagadguru Sri Veerasimhasana Math, Suttur Srikshethra

Message from Dr. C G Betsurmath



I am pleased to know that the Department of Electronics & Communication Engineering and Department of Electronics & Instrumentation Engineering is jointly organizing a conference in the field of Signal Processing, Communication and Automation. In today's world of fast pace technological change, we know that our country can only make progress if the researchers and Technocrats can utilize their knowledge for exploring newer fields of research and development. Also there is a growing need for more industry-institute interaction and linkage. The faculty members at JSSATE have rightly sensed this need and have provided a good platform for the researchers all around the globe to bring forward their thoughts and help society at large.

I congratulate the Principal and Organizing Committee members for materializing such an event of International stature. JSSMVP, Mysuru has always been at the forefront for organizing such events and we are happy to support in organizing this International Conference at JSSATE, Bengaluru.

Once again I convey my blessings and good wishes to all the members of ICSIPCA-2017, who are dedicatedly involved in this event.

Dr. C.G.Betsurmath.,
Executive Secretary

Message from M H Dhananjaya



It is a great pleasure to know that the Department of Electronics & Communication and Electronics & Instrumentation, JSSATE, Bengaluru are jointly organizing a two day International Conference on “Signal, Image Processing, Communication and Automation (ICSIPCA-2017) on 6th and 7th July 2017. The purpose of any conference is to provide a platform to meet and exchange information by bringing together students, researchers, experts from industry, academia and other interested organizations across the world to meet and exchange ideas. The conference should provide ample opportunities to researchers to network and share ideas and information

I hope this conference will be enjoyable, memorable and productive for participants.

Best wishes for the successful conducting of this conference.

M H Dhananjaya
Advisor, TED

Message from C Ranganathaiah



I am very glad that the Department of Electronics & Communication and Electronics & Instrumentation Engineering of JSSATE, Bengaluru is jointly organizing a two day International Conference on Signal, Image Processing, Communication & Automation (ICSIPCA-2017) on 6th and 7th July, 2017 at the college.

The ICSIPCA-2017 provides a forum for the discussion of advances in recent research in the field and aims in providing outstanding opportunity for both academic and industrial communities to exchange and update their experiences with each in the areas of SIGNAL, IMAGE PROCESSING, COMMUNICATION and AUTOMATION.

As rightly said by an unknown, “Gaining Knowledge is the first step to WISDOM, Sharing it is the first step to HUMANITY”, this International Conference is mainly focused on GIVING and GAINING KNOWLEDGE in the relevant topics. It provides possibilities for students and young engineers to meet the leading specialist in the field. The leading specialists have the possibilities to give their knowledge and experience to young beginning generation of future specialists.

There is hope that the Conference Proceedings will serve as a comprehensive reference material of the present knowledge and experience and will be used by the Students, Engineers, Faculty Members Researchers and other Industrialists who are concerned with the subjects presented at this industrial conference.

On behalf of the Executive Committee, I wish to thank the management of JSSMVP, Mysuru, all the authors, invited lecturers, and others who helped to shape the content of this conference.

With best wishes for grand success of the conference.

C. Ranganathaiah
Director (A & A)

Message from Dr. B G Sangameshwara



It is indeed commendable to know that the Department of Electronics & Communication Engineering, and the Department of Electronics & Instrumentation Engineering is jointly organizing the International Conference on Signal, Image Processing, Communication and Automation. In this era of highly competitive globalization, the technical education has assumed newer dimensions. Due to the competition and global interdependence, we must offer quality education and training to our youngsters to cope with the competitive world. Keeping this in mind JSSATE, Bengaluru has the conviction of offering the finest possible learning environment. The path towards excellence is never ending, hence our collective efforts is directed towards the overall development of JSSATEB in all frontiers of modern technical education. We should also focus on benefiting the people and society through technological advancements and research outputs.

Therefore the initiative taken to organize this Conference to achieve technological brainstorming is commendable.

I convey my cordial wishes to all the members of ICSIPCA-2017 and congratulate them on their initiative and efforts.

Dr. B G Sangameshwara
Vice-Chancellor
JSS & T U, Mysuru
ICSIPCA-2017

Message from Dr. Mrityunjaya V Latte



The 21st century will visualize a knowledge driven society and education institutions will experience a quantum leap in terms of contribution by developing quality human resources focus on innovation and research. There is a rapidly growing demand for higher education as they are key players providing knowledge individuals who will provide services to society. Globalization has made the job market highly competitive and individuals must demonstrate their potential competitiveness with job requirements. Apart from this, the human resources need to focus on acquiring competitive skills along with knowledge in a present market driven economy.

Government of India has a policy and has initiated ‘Make in India’, ‘Manufacture in India’. ‘Skill India’ and has ensured to increase the focus on manufacturing technology from 15% to 25%, so that Indian economy will be stable. Electronics & Communication has received significant focus for research and Product development which is critical component in defense. Space, atomic energy and other areas. The Department of Electronics & Communication Engineering and Department of Electronics & Instrumentation Engineering at JSSATE, jointly organizing an International conference on “Signal, Image processing, Communication & Automation (ICSIPCA-2017) on 6th & 7th July 2017. This is a major initiative from the Department with a focus on “Lab to Market”. I congratulate both the Departments in this endeavor in organizing this event. This has been possible due to incredible support of JSS Mahavidyapeetha, Mysuru and the vision of our President His Holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamiji, whose continuous support will take the institution forward. I whole heartedly thank all contributors, reviewers and experts for the support in organizing this conference.

Dr.Mrityunjaya V. Latte

Principal, JSSATEB, Editor in chief, ICSIPCA-2017

Message from Dr. Aravind H S



On behalf of the **ICSIPCA-2017**, I am very much honored and delighted to welcome you to the two days **International Conference on Signal, Image Processing, Communication and Automation (ICSIPCA-2017)**.

This Conference focuses on understanding the recent advancements, illustrating research results, surveying project works in the areas of Signal, Image Processing, Communication and Automation. The Conference will provide a wonderful forum for you to refresh your knowledge base and explore the innovations in Signal, Image Processing, Communication and Automation. The Conference will strive to offer plenty of networking opportunities, providing you with an opportunity to meet and interact with the leading researchers, friends and colleagues.

As a General Chair of ICSIPCA-2017, I know that the success of the conference depends ultimately on the many people who have worked with us in planning and organizing both the technical program and supporting social arrangements. In particular, I thank the Finance and Publication Chairs for their wise advice and brilliant suggestion on organizing the program, the Steering and Advisory Committees for their thorough and timely reviewing of the papers, and also our Sponsors. Recognition should go to the Local Organizing Committee members who have all worked extremely hard for the details of important aspects of the conference programs and social activities.

Dr. Aravind H S
General Chair
ICSIPCA-2017

Message from Dr. D Mahesh Kumar



On behalf of the **ICSIPCA-2017**, I am honored and delighted to welcome you to the two days **International Conference on Signal, Image Processing, Communication and Automation.**

The Conference is jointly organized by the Department of Electronics & Communication Engineering and the Department of Electronics & Instrumentation Engineering, JSSATE, Bengaluru. This Conference focuses on understanding the recent advancements, illustrating research results, surveying project works in the areas of Signal, Image Processing, Communication and Automation. The Conference will provide a magnificent forum for you to refresh your knowledge base and explore the innovations in Signal Processing, Image Processing, Communication and Automation. The Conference will strive to offer plenty of networking opportunities, providing you with an occasion to meet and interact with the leading researchers, friends and colleagues.

As a Technical Chair of ICSIPCA-2017, I thank the Finance and Publication Chairs for their wise advice and brilliant suggestion on organizing the program, the Steering and Advisory Committees for their thorough and timely reviewing of the papers, and our Sponsors. I thank all the organizing committee members for their constant support which has made this conference a success.

I would extend my special thanks to JSSMVP and management for the continued support for the grand success of the ICSIPCA-2017.

Dr. D Mahesh Kumar
Technical Program Chair
ICSIPCA-2017