

Proceedings of the Congress

Abstracts of accepted papers will be included in the proceedings volume. Soft copy of the proceedings volume will be released and distributed at the Science Congress venue. Proceedings of abstracts can also be downloaded from the Science Congress website once they are published.

Language

Official language of the Kerala Science Congress is English. All paper submissions should be in English. However, contributors are free to present their paper in English or Malayalam in the subject area.

The Venue

The 29th Kerala Science Congress will be held during 28-30 January 2017 at Mar Thoma College, Thiruvalla, Pathanamthitta. The college is close to M C Road (2.5 km) and Thiruvalla Railway station (1 km).



Pathanamthitta

Pathanamthitta is a biodiversity rich District within and on the foot-hills of Western Ghats and is a repository of valuable plant wealth. Aranmula, a small town in the District is also world famous for the Aranmula mirror which is a handmade metal alloy, front surface reflection mirror which eliminates secondary reflections and aberrations of silvered glass mirrors. Now geographically indicated, it projects Kerala's rich metallurgical tradition and a unique contribution to the world as well. The process related to the making of this is still undisclosed and is the intellectual know-how of a group of Artisans native to Aranmula. Sabarimala, a pilgrimage abode and Maramon Convention, an yearly gathering of christian devotees are also highlights of Pathanamthitta.



Registration

Only online registration is available and applicants are requested to register by logging on to www.ksc.kerala.gov.in. Registration fee for delegates is ₹ 1500/-. Certified student delegates need to pay ₹ 750/- only. Delegates requiring accommodation shall pay an additional amount of ₹ 300/- and Bonafide Students ₹ 100/-.

Dates to Remember

Registration and submission of Abstracts and full paper for contributors
11th November 2016

Receipt of applications for participation in the Post-Graduate Students Interaction Session
15th November 2016

Last date for registration for other participants
15th November 2016

Last date for communication of acceptance of papers
20th December 2016

Last date for sending intimation to participants
1st January 2017

President, 29th Kerala Science Congress

Dr. Suresh Das

Executive Vice President
KSCSTE, Sasthra Bhavan, Thiruvananthapuram

Chairman, 29th Kerala Science Congress

Prof. K. P. Gopinathan

INSA Senior Professor, IISc., Bangalore

Chairman, Organizing Committee

Dr. S. Pradeep Kumar

Member Secretary, KSCSTE
Director (i/c), KFRI, Peechi, Thrissur

Co-Chairman, Organizing Committee

Dr. K. Jacob

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29th Kerala Science Congress

28-30 JANUARY 2017

Organized by KSCSTE & KFRI
Mar Thoma College, Thiruvalla



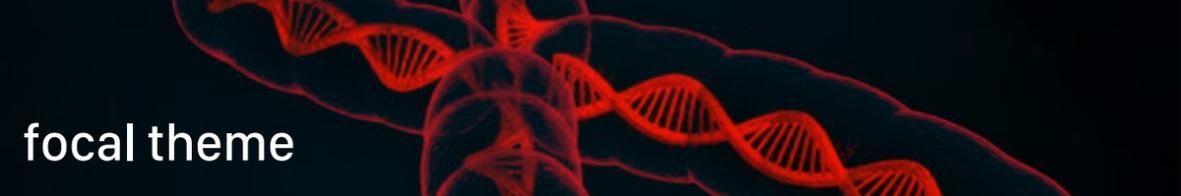


29th Kerala Science Congress

The Kerala Science Congress is an annual event organized by the Kerala State Council for Science, Technology & Environment brings together young researchers, academicians, technologists and all interested in science from the State and elsewhere to exchange knowledge and share advances in their research and development of technologies of relevance to the State. The event will consist of technical sessions involving lectures by eminent scientists, research presentation by young researchers, memorial lectures, special sessions, post-graduate student interaction session and the Children's science congress. Talented young researchers are honored with the 'Kerala State Young Scientist Award' during this event. 'Best Paper Awards' and 'Poster Awards' will be awarded to selected papers presented under the different subject areas. A national exhibition on S&T with participation of major R&D institutions will also form part of the Science Congress event. The 29th edition of the Kerala Science Congress will be jointly organised by the KSCSTE and Kerala Forest Research Institute at Mar Thoma College, Thiruvalla, Pathanamthitta.

Venue & Date

The 29th Kerala Science Congress will be held during **28-30 January 2017 at Mar Thoma College, Thiruvalla**. The college is close to the M.C. Road (2.5 km) and Thiruvalla Railway station (1 km).



focal theme

Focal theme of the 29th KSC will be **Genomics in Health and Disease**. The Genome comprises of the entire set of genes present in an organism that is needed to encode all possible information to sustain its life. The human genome contains about 3.2 billion base pairs of DNA distributed into 23 pairs of separate chromosomes. Only about 2-3% of this entire genome is necessary and sufficient to specify about 25000 protein-coding genes that are present, and perhaps an equal number encodes for most of the regulatory functions such as micro RNAs, small and large repetitive RNAs. The deciphering of the complete human genome sequence more than a decade ago has made it possible to address some of the most pertinent questions in health science. We are now able to address health and diseases at the molecular level.

The Science Congress will discuss the cardinal prospects & challenges in this field and its relevance to the State of Kerala with the help of various research and development institutions working in this sector.



special theme

The **special theme** of the 29th Kerala Science Congress will be Ecology and Environment. Locked between the sea and the Western Ghats, the monsoon dictated ecology of Kerala has given rise to immense goodness and challenges. Every bit of the state is habitable, fertile and green. In view of the high population density, expansions of human settlements into natural systems and fragmentation of ecosystems, Kerala needs to evolve a totally new ecological perspective ahead. The vagaries of the monsoon have set in new challenges to life in Kerala. Isolated regions with absolute absence of drinking water during summer have emerged. Water has become a priced commodity. Places which had year round water are facing water crisis during summer, whereas during monsoon, the state gets water logged. There has been a serious fracture in ecosystem functions across the highland, midland and the coastal zones. The Science Congress will address these issue with inputs from leading experts.



technical session

The 29th Kerala Science Congress invites Contest Papers, General Papers and Posters in the following 12 subject areas:

- Agriculture & Food Sciences
- Biotechnology
- Chemical Sciences
- Earth and Planetary Sciences
- Engineering & Technology
- Environmental Sciences, Forestry & Wildlife
- Fisheries & Veterinary Sciences
- Health Sciences
- Life Sciences
- Mathematical & Statistical Sciences
- Physical Sciences
- Science Education, Communication & Society



Memorial lectures

Memorial lectures by stalwarts in the field will be held to commemorate the following S&T visionaries: Dr. P. K. Iyengar, Dr. G. N. Ramachandran, Dr. E. K. Janaki Ammal, and Dr. P. R. Pisharoty.



PG Interaction

Doing a Master's degree is the gate to science. We have a dedicated session in the Kerala Science Congress wherein post graduate students get an opportunity to interact with eminent scientists in the field. Participation will be based on nomination from academic institutions in the State.



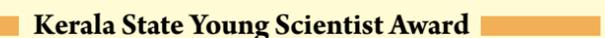
Children's Science Congress

Kids ask the weirdest questions which fuel scientific explorations. We have a set of students from Kerala who have reached the national level by participating in the National Children's Science Congress. All of them will come over to present their work at the 29th Kerala Science Congress. Students from schools of Pathanamthitta District studying in class 7 to 12 are invited to participate the Children's Science Congress session.



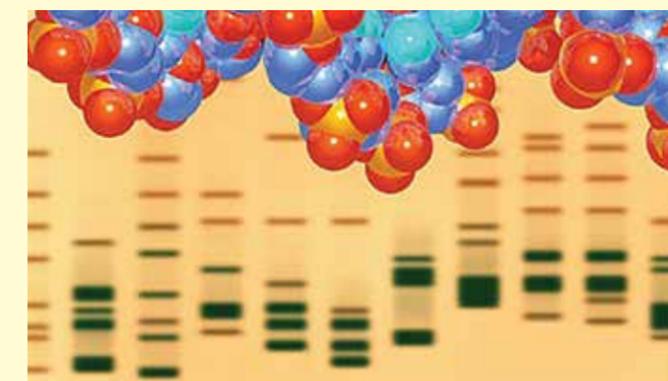
Science Exhibition

On the playfield of Mar Thoma College, the major scientific institutions in India will converge to present their achievements. Happening for the first time in Pathanamthitta District, the exhibition will present the latest developments in the field of Science & Technology. While the major R&D organizations, S&T institutions and industry will be showcasing their products, technologies, research work and vision for the future, it is an opportunity to know the state-of-art. The exhibition will run through 26-30 January 2017, as part of the 29th Kerala Science Congress at Thiruvalla.



Kerala State Young Scientist Award

The Kerala State Young Scientist Award instituted by KSCSTE is intended to honour and encourage young



scientists working in Kerala in recognition of their outstanding contribution in science and technology. Young Scientist Awardees will be presenting their research work during 29th Kerala Science Congress.



Dr. S. Vasudev Award

The technical reports submitted on completion of KSCSTE funded projects under the Science Research Scheme will be evaluated and the best one will be given the excellence award instituted in the name of Dr. S. Vasudev, former Chairman, STEC.



Best Paper Award

The best young talents in science will contest for the Best Paper Award during the Science Congress. The award carries a Certificate of Merit and cash prize of ₹ 10,000/-. Awardees will be eligible for a contingency grant of rupees One lakh for two years for pursuing further research based on a proposal to be subsequently submitted to the KSCSTE. Look up the subject area codes 01-12 and fill up the specified format to contest. Refer the Science Congress website (www.ksc.kerala.gov.in) for details.



Best Poster Award

If your scientific work can speak for itself, go for the poster competition. Prepare poster in size of 90cm (width) x 120cm (vertical). In each of the subject areas, a certificate of merit will be awarded to the best poster.