**INTERNATIONAL CONFERENCE ON ADVANCES IN SUSTAINABILITY OF MATERIALS AND ENVIRONMENT**

**(ICASME’23)**

**REPORT**

It gives me great pleasure and honour to present the report of the 4th International Conference on Advances in Sustainability of Materials and Environment (ICASME'23), which was held on May 25 and 26, 2023, in Nagercoil, Tamil Nadu, India. The conference was organized by the departments of civil engineering and chemistry at St. Xavier's Catholic College of Engineering.

ICASME'23 was created to give academic, research, scientific, and business specialists a forum for exchanging and disseminating ideas regarding the most recent developments in science and technology. The conference's main emphasis was on the interactions between theory, implementation, research applications, etc. in the relevant field, which produced collaborative R&D projects and new project proposals that ultimately led to knowledge exchange among researchers and faculty members. Let me acknowledge that the conference was an effective endeavor to spread information within its community.

The International conference is technically Co-Sponsored by IET, Reach and SHAX.

In order to reach a global audience, a website, <https://www.sxcce.edu.in/iwcasme23/> was hosted in the month of December 2022, and a brochure was released on 9th february, with the blessings of our Correspondent Rev. Dr. M. Maria William and the support of our Principal Dr. J. Maheswaran.

The keynote addresses given by specialists in Civil Engineering, Chemistry, Material Science, and Intellectual Property Right are what will make the conference come alive. Dr. S.T. Ramesh, Head of the Department of Civil Engineering at the National Institute of Technology in Trichy, gave a keynote address on "Advances in the Sustainability of Materials and the Environment" on May 25, 2023 Forenoon. Dr. Mohamed Abdul Mannan, a Malaysian professor at Universiti Malaysia Sarawak, spoke about "Agriculture and Industrial Wastes as Renewable Resources for Medium Strength Self-Compacting Concrete" that same day in the afternoon. The first plenary speech was given on "Intellectual Property Rights and its role in technology developments" on May 26 at noon by Dr. P. Arumugam, founder and CEO of Mark IPServices, an Indian patent agent in Chennai, India. A second Keynote address on "Circular Economy and Sustainability of Metallic Materials" was also given in the afternoon by Dr. T.P. D. Rajan, Senior Principal Scientist, CSIR NIIST, Thiruvananthapuram.

In the fields of Civil Engineering, Chemistry, Renewable energy sources, Soft computing methods, Material Science, and Environmental Studies, ICASME'23 has covered a variety of topics. Each topic was broken down into one of six categories: Civil and Building Science, Chemistry and Physical Science, Energy Efficient Technologies, Mathematical Modelling and Soft Computing Techniques, Material Science, and Environmental Science. The research articles were subsequently categorized. 86 research papers in total were registered, and they were all presented in four sessions across four locations.

In addition to participants from Tamilnadu, delegates from Oman and Tanzania as well as different regions of the country, particularly Rajasthan, Odissa, Delhi, Uttar Pradesh, West Bengal, Karnataka, Telungana, Kerala, Andra Pradesh, Punjab, etc., benefited from the conference. This was followed by effective publicity and ongoing mobilization.

ICASME'23 covered a wide range of topics including civil engineering, chemistry, renewable energy sources, soft computing techniques, material science, and environmental studies. All of the topics were grouped under six themes including civil and building science, chemistry and physical science, energy efficient technologies, and mathematical modelling. All of the accepted research papers were published in Conference proceedings ICASME'23 with ISBN no. 978-93-5811-584-0.

The members of the various committees, such as the Advisory committee, Programme committee, and Organising committee, consistently provided support and guidance that contributed to the conference's success. A significant part of the success story was also the caliber of the research publications. All approved papers will undergo peer review by a team of reviewers before being published in journals with a Scopus index. Civil engineering, chemistry, alternative energy sources, soft computing methods, material science, and environmental studies were only a few of the topics presented at ICASME'23. Six categories, including civil and building science, chemistry and physical science, energy-efficient technologies, and mathematical modelling, were used to organize all of the topics.

I would like to take this opportunity to express my gratitude to the Patrons, organizing chair, conveners, and members of the many committees for their tireless efforts and commitment to helping the conference reach new heights of success.

Thank you

Dr.A.SUHASINI

Organizing Secretary