



Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University Estd. u/s 3 of UGC Act, 1956)

INTERNATIONAL CONFERENCE ON

**DESIGN, MATERIALS,
CRYOGENICS AND
CONSTRUCTIONS**

28th & 29th MARCH 2019



KNOWLEDGE PARTNERS



**ORGANIZED BY
SCHOOL OF MECHANICAL AND
CONSTRUCTION**

**icdmc2019@veltech.edu.in
www.veltech.edu.in/icdmc2019**

PREAMBLE

The Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Avadi, Chennai -600 062, India is poised to organize the International Conference on Design, Materials, Cryogenics and Constructions (ICDMC'19) 2019 in during 28 & 29, March 2019 in its campus.

ABOUT VEL TECH

The Trust founded by the Educational-Philanthropic Personalities- Dr. R. Rangarajan and Dr. Sagunthala Rangarajan, the Founder President and the Chancellor respectively, promoted the erstwhile Vel Tech Engineering College established in 1997 as Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology in 2008 with the approval of UGC u/s 3 of UGC Act 1956.

The Institution is accredited with A Grade by the National Assessment and Accreditation Council (NAAC). The Institution offers Undergraduate, Post-graduate and Doctoral Programs in Engineering and Technology, Science, Media Technology and Communication and Management Studies. The 210 Memorandum of Understandings (MoUs) signed by the Institution with Government Institutions, Universities, Industrial undertakings, MNCs and R&D organization are fostering to enhance the standards in teaching, research and consultancy activities. In Times Higher Education World University Rankings 2017, the Institution was ranked 43rd among top 50 Universities in Asia and 74th among top 100 among young Universities in the world. The Ministry of Human Resources Department (MHRD), Government of India under National Institutional Ranking Framework (NIRF) for 2018, 77th rank among Engineering Institutions in India. It is the first member of Conceive Design Implement Operate (CDIO) initiative from India. For more details visit www.veltech.edu.in

About SoMC

The School of Mechanical and Construction comprises the Department of Mechanical Engineering (ME), Aeronautical Engineering (AE), Automobile Engineering (Auto) and Civil Engineering (CE). It offers UG, PG and Ph.D Programs in all departments. This school concentrates on educating all aspects of mechanical and construction engineering including Machinery, automation, manufacturing, building construction services, computer-aided design, etc required for understanding the fundamentals of Mechanical and construction engineering. The programs prepare the candidates to be solution seekers and contribute to the varied range of industries and market. The Department started in the year 2001, and produces graduates, who can meet the rapidly changing needs of the mechanical core industry which demands the new skills. It is the South India's first deemed to be University to get accredited by NBA Tier-1 accreditation for B.Tech Mechanical Engineering Program. It has an ambience and specialized laboratories like Automotive Engine Test Facility supported by ARAI, Pune, High Speed Gas turbine bearing test facility Supported by DRDO, Advanced Materials lab supported by Rane Valves, E-waste management facility by DST, Govt of India and Composite Research lab for New material research supported by DST.



PRECEDED CONFERENCES

The Department of Mechanical Engineering has been organizing National Conference on Design, Materials and Constructions in every year and conducted three International Conference on Design and Analysis of Aerospace and Automobile Engineering.

CONFERENCE SCOPE

Ever growing diverse needs of people necessitate innovative thinking for engineering intelligent things and applications. It is essential to possess interdisciplinary knowledge for engineering intelligent things and applications. The ICDMC'19 would provide scope for sharing advanced knowledge in Design, Materials, Low Temperature Materials & Applications and Constructions encompassing interdisciplinary areas from Mechanical, Automobile, Aeronautical, Cryogenics and Civil Engineering. Further, it would foster networking of researchers across the globe for initiating collaborative research and its continuance.

CONFERENCE OBJECTIVES

- Provide a platform for international researchers to share their new findings / innovative applications in Design, Materials, Cryogenics, Low Temperature Materials & Applications and Constructions with peers.
- Facilitate networking among leading academicians, scientists, researchers, engineers and industry professionals for fostering collaborative research.

CONFERENCE OUTCOMES

- Enhanced understanding of scope for researching in the areas of one's interest
- Revelation of contemporary thinking on future research
- Constructive suggestions for overcoming snags in research ideas
- Nomination of the papers presented in the conference for inclusion in SCI and Scopus Indexed Journals

TOPICS OF CONFERENCE

Additive Manufacturing

Alternate Fuels

Automation in Agriculture

CFD and FEA

Combustion and Emission control

Cryogenic systems,

Facilities and Testing

Design for X

Digital Avionics

Electric/Hybrid Propulsion

Energy/Green/Smart Materials

Fuel cells

Geotechnical – Earthquake Engineering

Green Energy and power

Industrial Robotics and Automation

Low temperature Materials

Materials for sustainability

Optimization for X

Satellite Structure

Smart Cities

Smart Satellites

Space cryogenics

Supply chain mgt. and Logistics

Sustainable Construction and Digital Tech.

Sustainable Design / Energy

UAV and SLV

Vehicle Aerodynamics

Waste Management

PUBLICATIONS IN ESCI/ SCOPUS INDEXED JOURNALS

All accepted manuscripts will be published in the following ESCI/ Scopus Indexed Journals.

- Springer Lectures Notes in Mechanical Engineering - ISSN 2195-4356
- Journal of Applied Science and Engineering - ISSN 1560-6686

GUIDELINES FOR AUTHORS

All submissions will be peer reviewed by experts in the field based on originality, significance, quality and clarity. All contributions must be original, should not have been published elsewhere and should not be intended to be published elsewhere during the review period.

At least one author must register and present his/her accepted manuscript in the conference. Author should choose the journal of publication during the submission of manuscript. Registration fee includes proceedings, conference kit, lunch, tea & certificate. Conference kit will be provided to registered authors & participants only. Manuscript format can be downloaded from conference website.

POLICY ON PLAGIARISM

Authors are requested to kindly refrain from plagiarism in any form. Authors should submit their original and unpublished research work not under consideration for publication elsewhere. Manuscript found to be plagiarized during any stage of review shall be rejected. As per copyright transfer agreement, authors as deemed to be individually and collectively responsible for the content of manuscripts published by them. Hence, it is the responsibility of each author to strive for the highest ethical standards with respect to plagiarism.

ABOUT CHENNAI

Chennai also known by its former name Madras is the capital of the Indian state of Tamil Nadu. Located on the Coromandel Coast off the Bay of Bengal, it is one of the biggest cultural, economic and educational centers of India. According to the Indian census, it is the sixth-largest city and fourth-most populous urban agglomeration in India. The city together with the adjoining regions constitute the Chennai Metropolitan Area, which is the 36th-largest urban area by population in the world.



CONFERENCE REGISTRATION FEE

| Category | Registration Fee (Early Bird) | Registration Fee |
|---|-------------------------------|------------------|
| Foreign Delegates | USD100 | USD125 |
| Industry, R&D and Academicians | INR2500 | INR3000 |
| Research Scholars/PG Students/UG Students | INR2000 | INR2500 |
| Co Author/Participants | INR1500 | INR2000 |

All the accepted manuscripts have an opportunity to be published in SCI / Scopus Indexed Journal. For more information, log on to the Online Registration link: <https://www.veltech.edu.in/icdmc2019/reg/>.

ADVISORY COMMITTEE

Dr. AdamKhan. M, KLU, Krishnancoil
Prof. Dr. Amala Justus Selvam, Vel Tech University, Chennai
Prof. Dr. Amit Singh, MNIT Jaipur
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Dr. Rajan. T. P. D., Principal Scientist, CSIR, Trivandrum
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Dr. Udayaprakash. J, Vel Tech University, Chennai
Prof. Dr. Vipul. L. Tanna, IPR, Gujarat
Prof. Dr. Yuh-Chung Hu, National Ilan University, Taiwan

IMPORTANT DATES

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| Date for submission of abstract (Max. of 150 Words) | : 17.12.2018 |
| Date of notifying abstract acceptance | : 24.12.2018 |
| Date for submission of full-length paper not more than 6 pages | : 25.01.2019 |
| Date of notifying paper acceptance | : 12.02.2019 |
| Date of submission of camera ready paper | : 19.02.2019 |
| Date for payment of registration fee (Early Bird) | : 26.02.2019 |
| Last date for registration fee | : 06.03.2019 |
| Conference dates | : 28 & 29, March 2019 |

CHIEF PATRONS

Col. Prof. Vel. Dr. R. Rangarajan
Founder Chancellor & President
Dr. Sagunthala Rangarajan
Foundress President

PATRONS

Prof. Dr. Beela Satyanarayana
Chancellor
Dr. V. Ramachandran
Vice Chancellor

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Prof. Dr. S. Sivaperumal
Director International Relations

CONFERENCE CHAIR

Prof. Dr. A. T. Ravichandran
Professor & Dean, SoMC

CONFERENCE CO-CHAIR

Dr. A. Manimaran
Professor, Dept. of Mechanical Engg.

KEYNOTE SPEAKERS



Prof. Dr.-Ing. Karl Herbert Klug
Professor - Energy Institute
Westfälische Hochschule
University of Applied
Sciences, Germany

Mr. P. Kaniappan
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WABCO INDIA Ltd.
Chennai, India



Dr. R. Mahadevan,
Group Technology Director,
India Pistons Ltd,
Chennai, India

Mr. P. Nageshwar Rao
Chief Technology Officer
& Program Manager,
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Dr. Rama Bhat,
Professor, & Chair
of Mechanical Engineering,
Concave - Concordia
University, CANADA

Prof. Dr.-Ing. Andreas Gebhardt,
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Dr. Elena Lopez,
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Prof. Nicolas Gascoin,
INSA Centre Val de Loire,
France.



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FOR FURTHER INFORMATION CONTACT

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