

## **First International Conference on Structural Integrity (ICONS-2014)**

The First International Conference on Structural Integrity (ICONS-2014) was conducted in Convention Center, Kalpakkam during February 4-7, 2014. ICONS-2014 was jointly organized by the Society for Failure Analysis (SFA), the Indian Institute of Metals Kalpakkam Chapter, the Indian Institute of Welding and the Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam). The main objective of ICONS-2014 was to provide a forum for engineers, scientists, academicians, industry experts, plant managers and regulatory personnel to discuss the recent advances and future directions in structural integrity encompassing design, material selection, stress analysis, manufacturing, materials evaluation, welding, quality assurance, microstructure characterization, corrosion, non-destructive evaluation, damage mechanics, failure analysis, life extension and other aspects that ensure safe and reliable operation of components in nuclear, defense, aircraft and other industries.

During the inaugural function held on 4<sup>th</sup> February, Dr. P.R. Vasudeva Rao, Distinguished Scientist & Director, IGCAR extended a warm welcome to all the speakers from abroad and India. He highlighted the need to have a conference series like this to bring researchers together to discuss the advances in structural integrity of engineering components and structures. Dr. T. Jayakumar, Chairman, ICONS-2014 and President, SFA, explained technical details about the conference. He stated that 272 research papers were being presented in 54 technical sessions and there were 62 plenary (invited) talks by eminent international experts from 13 countries including UK, USA, South Korea, Germany, Czech Republic, Hungary, Japan, Portugal, Italy, Austria and Australia. He pointed out that ICONS-2014 had attracted delegates from R&D, academics as well as industry.

Shri S.S. Bajaj, Chairman, Atomic Energy Regulatory Board (AERB) inaugurated the conference. During the inaugural address, he highlighted the main role of structural integrity in ensuring safe and reliable operation of PHWRs as well as Kudankulam nuclear power plant and the important role played by the regulatory systems. He released the Souvenir of ICONS-2014 and gave the first copy to Dr. K. Tamilmani, Chief Executive, Center for Military Airworthiness & Certification (CEMILAC), Defence R&D Organisation (DRDO) and past President, SFA. Dr. Tamilmani delivered the presidential address and emphasized the importance of material selection and imparting stringent quality assurance during manufacturing and assembly stages, especially in airborne military platforms. He released the CD proceedings of ICONS-2014 consisting of 185 full text of papers.

ICONS-2014 was attended by 350 delegates. Four parallel sessions were conducted during February 4-7, 2014 with plenary invited talks by eminent speakers on specific topics followed by contributory papers covering design, modelling, fatigue, fracture, creep, welding, NDE, corrosion, in-service inspection, condition monitoring, structural health monitoring, life extension, safety and reliability. All sessions were well attended and there were very good interactions among the participants. ICONS-2014 provided the participants a unique opportunity to present ideas and R&D works and to exchange technical knowledge in the area of structural integrity. It has provided opportunities to forge international collaborations and research networks. This

enabled the participants, especially 50 research scholars, to interact with eminent experts from India and abroad.

ICONS-2014 closing session was chaired by Dr. T. Jayakumar on February 7, 2014. Dr. David Smith, UK, Dr. Ward Rummel, USA, Dr. Raman Singh, Australia, Dr. G. Raghava, SERC, Chennai and Cmde Mohamed Salih, Indian Navy, New Delhi spoke and gave feedback. They appreciated the arrangements and congratulated the organisers for successfully conducting the conference and expressed their desire to take part in future conferences. It was decided that the 2<sup>nd</sup> International Conference on Structural Integrity would be conducted during February 2017.