

First Programme of PFMB :

Topic : "2D/3D Industrial Radiological Imaging and it's Applications".

The first ever PFMB workshop after its formation was conducted successfully by ISNT Thiruvananthapuram Chapter on August 4th and 5th, 2023, on the theme, "2D/3D Industrial Radiological Imaging and it's Applications", at the beautiful campus of Liquid Propulsion Systems Centre (LPSC), Valiamala. This program received an overwhelming response with a total of 119 Participants attending the Workshop. Dr. Narayanan V, Director, LPSC inaugurated the program and welcomed all participants to LPSC. He mentioned the important role played by NDE in aerospace sector and its relevance. Shri M.S. Suresh, Associate Director/LPSC, Dr. Arumugam. M, Dy. Director/LPSC and the Program Coordinator, Shri V. Manoharan, Chairman, PFMB, Dr. Mohan Kumar. L, Chairman, ISNT Thiruvananthapuram Chapter, and Shri Roykuttan K.K, Organising Committee Chairman addressed the gathering. The concise Workshop Course Note was also released during the inaugural function.

The workshop started off with a lecture on 2D digital imaging by Shri V. Manoharan, Visiconsult, Bangalore. This was followed by a session by Shri. Samaresh Changdar, Baker Hughes. Both stalwarts in the field of Radiography gave an overview of the principles of 2D/3D digital Radiography. Dr. Deepesh Vimalan, BHEL elaborated the applications of 2D radiography for manufacturing and Service Sectors and gave a detailed account of the requirements of RT in various Codes and standards.

After the morning sessions, participants were treated with a grand lunch at LPSC campus. The highlights of the post lunch sessions include the extensive presentation on 2D Xray Imaging of Solid Rocket Motors and Space Ordnance systems by Dr. Girish N Namboodiri, VSSC, followed by the presentations by Shri Roykuttan which covered the applications of CR/DR in the aerospace applications, and the presentation by Shri P. Vijayaraghavan, Ex-HAL on the applications and case studies on 2D X-Ray imaging applications in aerospace sector.

Delegates were offered a technical demo session and grand gala dinner at a palatial venue in the city. Shri. Krishna Bhuta, Topaz NDT delivered a brief presentation on the CR systems and it's applications, followed by the demonstration of the flat Bed Type CR Scanner (Model HPX 1 PLUS) by Carestream team.

On day 2, Dr. Esha Sen Guptha in her lecture spoke about CT and it's applications, and the role of GE in introducing the Artifact corrections which had improved CT imaging to a great extent. Dr. Arumugam, LPSC presented various case studies on 3D CT using Computed Metro Tomography system at LPSC. Dr. TVL Narasimha Rao, Sundaram Clayton gave a scrupulous account of the applications of CT&DR in the automotive sector. In his second lecture Dr. Arumugam M, shared some significant case studies on the applications of CT for Additive Manufacturing components. After a sumptuous lunch, participants were provided an exhaustive practical session at the 3D Computed Metro Tomography facility, CR, DR facilities of LPSC, Valiamala.

The session concluded up after the practical. The hospitality and explanations given by the Organisers of workshop was well commented by the participants. Participants expressed their tremendous appreciations regarding various facets of the workshop including the transportation to the venue, Guest house accommodation arrangements, Coordination of the event, delicious food, Workshop kit and course Notes etc.

