

## International Conference on Vibration Engineering, Science and Technology (INVEST 2022)

The first ever “*International Conference on Vibration Engineering, Science and Technology (INVEST 2022)*” was jointly organized by Council of Vibration Specialists (CVS), India and Fr. C. Rodrigues Institute of Technology (FCRIT), Navi Mumbai on 9<sup>th</sup> and 10<sup>th</sup> of December, 2022. Around 200 delegates from industry, academia, service providers, instrument OEMs, students participated in the event. INVEST is flagship congregation of vibration NVH community covering all sectors that either use or produce hardware & software or teach or research in this specialization. The most sought after diagnostic tools have found a place for dissemination.

The conference had the corporate associates UE Systems Inc., Baker Hughes, Forbes Marshall, AIMIL India, acoem India, NBES and Tribotech. The International Society of Automation (ISA) Maharashtra was the knowledge partner for the conference. The conference was hosted in hybrid mode in the campus of FCRIT located at Vashi, Navi Mumbai, Maharashtra, India.



### Glimpses of Inaugural Session

The conference started off by a spectacular inaugural session. The Guests of Honor Mr. Arnada Prasad Samal, Head, Nuclear Engineering Cell, NTPC; Mr. Partha Sarathi Ghose, Group Director – Projects, Kalyani Steels Ltd. Pune; Mr. Kartik Fojdar, Vice President and Head Center of Excellence, Engineering – Instrumentations, RIL graced the occasion with their presence. Along with the guests of honor the inaugural dais decorated by Rev. Fr. E. Fernandes, Fr. Superior ATEC; Dr. H S Gambhir, President CVS; Dr. Tarapada Pyne, Secretary and DG, CVS, Dr. S. M. Khot, Principal FCRIT and Treasurer CVS, Dr. Nitesh Yelve, Chair Conference, CVS. After the ceremonial lamp lightening and prayer, the felicitation of dignitaries were followed. Among the dignitaries, Dr B R Mehta, Ex-President RIL and President -IEC, Mr Upendra Joshi, Secretary ISA Maharashtra and CVS’s Governing Council Members. Dr. H S Gambhir delivered the welcome address. Conference Chair Dr. Nitesh Yelve briefed about INVEST 2022. The dignitaries on the dais then released the conference souvenir.





Dr. Tarapada Pyne gave an overview of CVS and the need of such conference in India, while Dr. S M Khot introduced FCRI's exemplary roles in nurturing budding talents of the nation. Rev. Fr. E. Fernandes, Fr. Superior, Agnel Technical Education Complex addressed the audience. Next was the addresses of guests of honor, who enlighten the audience with their words of wisdom and experiences.

The main attraction of inaugural session was felicitation of Dr. Amiya Ranjan Mohanty, Professor and past HOD, Mechanical Engineering, IIT Kharagpur. Dr. Mohanty was bestowed upon by "Eminent Vibration Expert" Honor. Dr. Mohanty was present online. Dr. Chinmaya Kar, one of his research scholars, accepted the award on behalf of Dr. Mohanty. This is the FIRST Honor from the exclusive vibration community, CVS. The inaugural session was concluded by vote of thanks from Dr. Aqleem Siddiqui, Associate Professor in Mechanical Engineering FCRI and Conference Chair INVEST 2022.

The exhibition center was inaugurated by dignitaries, where INVEST22 corporate associates showcased their latest innovations in vibration sciences, various monitoring systems and predictive analytics. The visitors took their own time during two days to know these products.





**Delegates at Booths**

Followed by inaugural session, first day of the conference had three technical sessions on the tracks: Vibration Monitoring and Diagnostics, Structural Health Monitoring and Control, Computational Methods and Probability Models in Vibration Analysis. Each session was headed by keynote address relating to the specific tracks followed by the presentations of invited authors, authors and corporate associates. Nine papers were presented and. Keynotes addressed by - Dr. V Ramakrishna, Scientist F, Asst. Project Director –Light Water Torpedo, Naval Science & Technological Laboratory (NSTL), DRDO, Vishakhapatnam, India; Mr. R. Ramakumar, Dy. GM -NVH (Noise, Vibration and Harshness) laboratory, The Automotive Research Association of India, Pune; Dr. Biswajit Basu, Professor, School of Engineering, Trinity College Dublin, Dublin 2, Ireland.



Second day of the conference was flagged off by the special address from Mr. Manoharan Rajbushan, Sr. Vice President – Projects (Solar & Automation), Reliance Corporate Park, RIL, Navi Mumbai. Day 2 had three technical sessions on the tracks: Seismic/Structures/High Rises/Aerospace/Rail/Road, Vibration/Noise Control and Isolation, Miscellaneous/ Inter-disciplinary areas. Ten papers were presented on this day. Keynotes were addressed by Dr. Naveen Garg, Sr. Scientist & Head, Acoustics and Vibration, National Physical Laboratory, New Delhi; Dr Edwin Vijay Kumar, HOD -Asset Management and PHM, GVP Engineering College, Visakhapatnam, AP; Dr. Diego Galar, Professor of Condition Monitoring Luleå University of Technology, Luleå, Sweden.



**Presentations on second day**



**Audience in various sessions**

Conference was concluded with a valedictory function in presence of Mr. Manoharan Rajbushan Sr. Vice President – Projects (Solar & Automation), Reliance Corporate Park, RIL, Navi Mumbai as a guest of honor, Dr. H. S. Gambhir, Dr. T. Pyne, Dr. S. M. Khot, Dr. Nilaj Deshmukh, Dr. Nitesh Yelve and Dr. Aqleem Siddiqui as dignitaries on the dais.

Dr. Sanjay Rukhande, Chair of Technical Presentation Committee, INVEST 2022 and Asst. Professor in Mechanical Engineering FCRIIT presented the summary of conference. Certificates were distributed to authors by dignitaries. A token of appreciation was presented to representatives of corporate associates. The Best Paper Award and Young Researcher award was presented to winners. Dr. T. Pyne delivered his vote of thanks and the conference was concluded with national anthem.





**Valedictory session**



**Receptions Time**



**Team behind the successful event – Together We Can!**