XX VETOMAC 2025

Day 1 (18 Decemeber 2025)

8.30 - 9.30 Hrs	Registration- Reception, Classroom Complex, Core 5, IITG
9.30 - 10.30 Hrs	Inaugural Session at Core 5 (5G1)
10:30 - 11.00 Hrs	High Tea Break
11.00 - 11.45 Hrs	Planery Talk 1 (Prof. Romuald Rządkowski, Institute of Fluid-Flow Machinery, Poland)
11.45 - 12.30Hrs	Planery Talk 2 (Prof C. Nataraj, Villanova University, USA)
12:30 - 14.00Hrs	Lunch

14.00 - 14.30 Hrs — Technical Session, Venue: Classroom Complex, Core 5, IITG

Session 1 (Room: 5001)	Session 2 (Room: 5002)	Session 3 (Room: 5003)	Session 4 (Room: 5004)
Keynote 1	Keynote 2	Keynote 3	Keynote 4
Prof Pavan Kumar Kankar, IIT Indore	Prof P M Pathak, IIT Roorkee	Mr Nilotpol Kar, Sika India Private Ltd	Prof Ashish K Darpe, IIT Delhi
Condition monitoring and M/c dignostics	Nonlinear Vibrations	Impact and Blast resistant design	Rotor dynamics

14.30 - 15.45 Hrs

Paper ID	Presenter Name	Paper Title	Paper ID	Presenter Name	Paper Title	Paper ID	Presenter Name	Paper Title	Paper ID	Presenter Name	Paper Title
120	**Chandan Pandey** Sachin Kumar Singh	Advanced Gearbox Fault Diagnosis Using Transfer Learning and CNN-Based Hybrid Recurrent Architectures	208	**Subho Mukherjee** Udit Kumar Dewangan Haraprasad Roy	Deflection Approximation of Geometrically Nonlinear Elastic Beams	246	**Mayuresh Salunkhe** Debayan Bhattacharya Arnab Banerjee	A simplified analytical framework for non-circular tunnels under in-plane seismic P-wave excitation with soil-tunnel interface effects	196	**Waquar Ahmed Khan** N Muni Kumar Manish Agrawal	Redesign of a hybrid journal bearing to overcome high pad temperature at operating speed
121	**Sachin Singh** Mahesh Shukla Chandan Pandey	A Hybrid Deep Learning and Ensemble Approach for Bearing Fault Diagnosis	235	**Ranit Roy** Dr Anshul Garg Prof. Santosha K. Dwivedy	Nonlinear Dynamics of a Double Cantilever-Based Piezoelectric Energy Harvester under Combined Galloping and Parametric Excitation	141	**Gaurav Sharad Bhoyar** Dhruv Mevawala Gaurav Sharad Bhoyar Sumit Khare D. P. Vakharia	NUMERICAL SIMULATION OF COMPOSITE SANDWICH PANEL UNDER LOW VELOCITY IMPACT	76	**Pravin Gosavi** Ramchandra G. Desavale Vaishnavi Gavade	Data-Driven Fault Detection in Rotating Machinery: FEA-Guided Machine Learning for Deep Groove Ball Bearing Diagnostics
201	**Anka Datta** S V V S Narayana Pichika Sabareesh G R Vamsi Inturi	Gearbox health identification based on Time varying meshing stiffness and damage index	27	**Ranjan Kumar Mitra** Ponnada Durga Prasad	dynamic stability analysis of a piecewise nonlinear suspension system under harmonic excitation	250	**Tanaz Ikram** Nayanmoni Chetia	Performance Study of Braced Buildings with Plan Irregularities	262	**Santosh Sagar Behera** Prasad Kane Atul Andhare Makarand Lokhande	A Compound CNN-LSTM based Bearing Fault Diagnosis of Switched Reluctance Motor
232	**Devansh Sanju** Saranya Manikandan Udanda kavyasree Naveen Raj R	Predictive Maintenance of Wind Turbine Gearboxes Using Spectrogram-Based Convolutional Neural Networks	180	**Brajesh Panigrahi** Mrinmoy Saha Sabareesh G R	Nonlinear Backbone Curve Characterization of a Piezoelectric Energy Harvester Under Axial Preload and Base Excitation	319	**Mohnish Rajpoot** Suman Kumar Mohnish Rajpoot Sanchit Saxena	Auxetic Configuration-Based Blast Doors Panel: Numerical Investigation and Performance Characterisation under Multiple Blast Loading Scenarios	213	**Vivek E K** Sadanand Kulkarni Janaki Ramy Reddy M Tahzeeb Hassan Danish Soumendu Jana	Rotordynamic Analysis of an Aircraft Electric Propulsion System
259	**Rohit Swarna Venkata Sai** Priyanshu Kishore Rajeev Goel Prashant Malviya Sachin Prakash Ganesh Kolappan Geetha	AR-based human-machine interface for tool condition monitoring using 1D CNN	197	**Pyla Prasad** P.S. Balaji	Nonlinear Dynamics of Quasi-Zero Stiffness Metamaterials for Advanced Vibration Isolation	28	Akashjyoti Barman	Shock Response Analysis in Multicomponent PCBs using FEA-Derived Response Spectra and SHAP-Based Feature Attribution	309	**Vadivelu Prasad** Hema Latha Gourav Dutta Madan Ram Dansena	dynamic analysis of the rotor shaft in a centrifugal pump for fighter aircraft applications

15.45 - 16.00 Hrs — Tea Break

16.00 - 16.30 Hrs

Session 5 (Room: 5001)	Session 6 (Room: 5002)	Session 7 (Room: 5003)	Session 8 (Room: 5004)
Keynote 5	Keynote 6	Keynote 7	Keynote 8
Dr Benudhar Sahoo, CEMILAC, DRDO, Bangalore	Prof. S K Dwivedy, IIT Guwahati	Prof B. Ravindra, IIT Jodhpur	Dr Arun Kumar, Ex Head, Propulsion Division NAL
Vibration and Acoustic control	Vibration & Waves	Vehicle Dynamics	Rotor dynamics

16.30 - 18.00 Hrs

Paper ID	Presenter Name	Paper Title	Paper ID	Presenter Name	Paper Title	Paper ID	Presenter Name	Paper Title	Paper ID	Presenter Name	Paper Title
224	**Ram Kumar P** Naveen Raj R	Model-Free Active Vibration Control of Linear SDOF Systems Using Reinforcement Learning	63	**Gnanasrenivash N B** Mohanaharish V Saayan Banerjee Mohanaharish V G Srinivasan J Rajesh Kumar	Mathematical vibration model of a tank gun recoil system	47	**Manoj Paul** Ravindra B	Nonlinear Dynamics of Semi-active Vehicle Suspensions with MR Dampers using Bingham and Modified Bouc-Wen models	109	**Harikrishnan C I** Praveen Krishna IR Sudhakar Gantasala	A Pseudo Spectral Approach Towards Analyzing Gas Foil Bearings Performance and Improvement using a Parametric Study
227	Sudip Talukdar	Controlling foot bridge vibration using tuned mass dampers	82	**Vasanth Sai Varshinii Kondreddy** Allen Anilkumar	Analysis of parametric excitation in a playground swing	176	**Niel James** Ashwin Dias Devaansh Sinha Sachin Barve	Evaluation of Vehicle Stability for Passenger Comfort	101	**Ashish Srivastava** Faisal Rahmani	Dynamic stability of textured journal bearing considering non-linear bearing forces
241	**Pravin Abnave** Christian Svendsen Nimmy Thankom Philip Thangasivam Gandhi	Methodology to Design Throttling Grooves for Low Noise ERDs	153	**Himanshu Katwal** Prof. Mohammad Talha Prof Rajeev Kumar	Dynamic Response of Sandwich Beams with Solid, Honeycomb, and Re-Entrant Auxetic Cores using Finite Element Method	258	**S Balaji** Sadanand Kulkarni L P Manikandan Brijeshkumar J Shah Soumendu Jana	Active magnetic bearing supported flywheel rotor design using multi disciplinary optimisation	38	**K Uddayand** Madathala Padmanabham Seelam Sai Kiran Kuppa Sampath Kumar	dynamic stability and vibration control of a multi-shaft system for the unbalance and coupling misalignment fault analysis
178	**Amol Vuppuluri** Brajesh Panigrahi K. Shamitha Venkateswara Naidu G Deepak Kumar	investigation of dynamic attributes and mode switching for a cracked cantilever honeycomb beam using modal assurance criteria	142	**Vanshika Vanshika** Mohammad Talha	Assessment of microstructural defects on vibrational behaviour of graded beams using high-order beam model	114	**Vijay Kumar Gupta** Swati Devi	Dynamic Modelling and Multi-Parameter Optimization of Quarter Car Suspension for Enhanced Ride Comfort and Road Handling	55	**Akshay Kulkarni** Shailesh S. Shirguppikar Ramchandra G. Desavale Prasad V. Shinde	An Investigation of the Combined Effect of Load and Misalignment in Rotor-Bearing Systems using the Box-Behnken Approch of Response Surface Methodology.
285	**N Veera Manikanta** P Paresh Das Aakash Ojha	Damping Characteristics of Auxetic Structures Made of Shape Memory Alloys	133	**Balakrishna Pujari** Mohammad Talha Rajeev Kumar	Influence of Re-entrant Core Angle on Natural Frequency of Higher Order Auxetic Sandwich Panels	158	**Naveen Narayan** Dharmendra Kushwaha S.P. Harsha	Comparative study of residual stress distriution in i-beam and rail beam during the roller straightening process by an analytical levelling model	244	**K Rohit Reddy** J Srinivas	Dynamic analysis of bolted joint rotor system subjected to multiple nonlinearities
41	**Siddanagouda Kandagal** Rishi Kaushik	Dynamic Performance of Flapping Beams under Parametric Excitations	87	**Vishnu Narayan and Devarag A** Allen Anilkumar	ANALYSIS OF A COMPOUND PENDULUM EXCITED BY A ROTATING MASS	192	**Ashish Choudhar** Mr Aftab Dafedar Mr Deepak Nimbare Mr Aayan Diwan Mr Patil Himanshu Mr. Vinay Patel	dynamic vibration analysis of motorcycle handlebar with mecahnical inserts	14	**Prathamesh Bhoir** Vishal Salunkhe Srushti Anjarlekar Prajwal Jalke Durvesh Malve	Experimental and Numerical Investigation of Bearing Internal Clearance Faults Using Vibration Analysis and FEA.

19.00 - 21.30 Hrs	Gala Dinner (Core 5)

Day 2 (19 December 2025)

Technical Session, Venue: Classroom Complex, Core 5, IITG

8.30 - 9.30 Hrs — Registration- Reception, Classroom Complex, Core 5, IITG

9.00 - 9.45 Hrs — Plannery Talk 3 (Prof. C W Lim, City University of Hong Kong, Hongkong)

9.45 - 10.15 Hrs

Session 9 (Room: 5001)	Session 10 (Room: 5002)	Session 11 (Room: 5003)	Session 12 (Room: 5004)
Keynote 9	Keynote 10	Keynote 11	Keynote 12
Prof. Alankar, IIT Bombay	Prof Mayank Tiwari, IIT Palakkad	Prof. Arnab Banerjee, IIT Delhi	Prof V Kartik, IIT Bombay

10.15 - 11.15 Hrs

Condition monitoring and M/c dignostics			Rotor dynamics			Vibration and Acoustic control			Vibration & Waves		
Paper ID	Presenter Name	Paper Title	Paper ID	Presenter Name	Paper Title	Paper ID	Presenter Name	Paper Title	Paper ID	Presenter Name	Paper Title
68	**Vishnu Harikumar** , Dr Bijudas C R	Guided Wave Based Machine Learning Framework for Debonded Sensor Identification in Structural Health Monitoring	203	**Himanshu Kumar** , Mayank Srivastava , Professor Anil Kumar , Ankit Bansal , Dileep Kushwaha , Sachin Maurya	performance analysis of machine learning models for vibration-based fault classification in centrifugal pump	300	**Akshay Chandran P** Sudheesh Kumar C P	analytical and numerical study of noise generation from power loom by considering it as two monopoles	268	**Vishesh Prasanna Sarapure** Abhay Dash Shubhankar Das Priyanshu Yadav	AI-Assisted Crack Detection Using Modal Analysis and Frequency Response Data from FEA-Based Structural Simulations
148	**Anand Rengaraj** Adepu Kumaraswamy Lakshmi Narayana Sharma R	Statistical Analysis of Vibrations Induced due to Machinery faults	156	**Sharadchandra Shrikant Patil** Ramchandra Desavale , Suresh Nipanikar Niket malvade	Experimental Investigation Using Response Surface Methodology for Condition Monitoring of Misaligned Cylindrical Roller Bearing in Dual Rotor Shaft Bearing System	321	**D. Nagesh Babu** Yamini Gupta D. Nagesh Babu R. Panneer Selvam	dynamic response of electrical control panels under wind turbine vibration	296	**Ajaykumar panda** Shaikh Altafhusen Akbar Nohin K Avirah	effect of polymer coating on the dynamics and acoustic response of a thin plate
9	**Pavan Kumar Kankar** Aditya Sharma	Bearing Fault Diagnosis using Recurrence Analysis and Convolutional Neural Networks: A Qualitative Investigation	140	**Ankit Ranjan** Rajiv Tiwari	Developing a digital model of a centrifugal pump for performance analysis	131	**Dinesh Kumar Patel** Akhilesh Mimani	noise characterization of trailing-edge serrations on uav propeller by beamforming mapping and acoustic spectra	240	**Dulganti Dheeraj Reddy** Sarit Chanda Pallavi Badry	Performance-Based Seismic Evaluation of Concrete-Filled Steel Tube Columns in High-Rise Buildings with Soil-Structure Interaction Consideration in North-Eastern Part of India
13	**Aniket Bobade** Dhruv Bisht Amit Dede Amar Ghare S. M. Khot Vishal Salunkhe	Integrated Finite Element and Experimental Approach for Spur Gear Fault Identification	264	**Gopal Kumar** Prabhat Kumar	dynamic analysis of an unbalanced and cracked rigid rotor with viscoelastic supported foil bearings	78	**Praveen Nagesh** Mann Sharma Anil Kumar	design and analysis of frustum-based hollow hexagonal metamaterial unit cell for low-frequency band gap formation	130	**Kartik Paul** Santan Kumar Richa Kumari	Surface-interface effects on Rayleigh-type wave propagation in rotating magneto-viscoelastic stratified structure

11.15 - 11.30 Hrs — Tea Break

Session 13 (Room: 5001)	Session 14 (Room: 5002)	Session 15 (Room: 5003)	Session 16 (Room: 5004)

11.30 - 12.45 Hrs

Signal processing and parameter estimation			Rotor dynamics			Vibration and Acoustic control			Multi disciplanry		
Paper ID	Presenter Name	Paper Title	Paper ID	Presenter Name	Paper Title	Paper ID	Presenter Name	Paper Title	Paper ID	Presenter Name	Paper Title
210	**Ms. Ragita Ojha** , Ms. Yasmin Quraishi , Dr. Sneha Singh, Prof Harsha	Transformer Mechanism Based SBiLSTM Architecture for RUL Prediction of Roller Bearings : A comparison between LSTM and its variants for remaining useful life prediction	107	**Sanjay SR** , Rithish G , Ponnada Kranthi Kiran , Dr. Allen Anilkumar	Primary Resonance Features of Electrostatically Actuated Circular Ring Resonators	326	**Mr. Prasad Dattaram Dessai** , Dr. Suraj Rane	Multiphysics Simulation and ALT Reliability Assessment of PCB Copper Traces under Random Vibration Loading	188	**Elanchezhian Tamilselvam** Sharene Esther K Balasubramaniyan Krishnan Elanchezhian Tamilselvam Rajkumar K.S. Mayuresh Pathak	Fatigue Life Prediction of Metal Structures Under Frequency Domain Random Vibration Loads Using Modelica language
93	**Morsalim Mollick** S.H. Upadhyay Kavadi Ravi Teja P C Jain	Tuning Mode Shapes and Modal Frequencies of Simplified Beam Model Using Quantum- behaved PSO and Adaptive PSO.	72	**Nilesh C. Gaikwad** Prasad Vishwasrao Shinde Ramchandra G. Desavale Akshay M. Kulkarni	a diagnosis of unbalance and bearing surface defects in the rotor bearing system with central composite rotatable design (ccrd)	53	**Gaurish Walke** Kevin Remedios Natasha Sharma Saheel Moye Raghavendra Naik	design and analysis of a quasi-zero stiffness vibration isolation system	154	**Rohit Kumar** Mohammad Talha	3D bio printing of the alginate and gelatin-based Auxetic skin grafts: A Rheological Characterization
70	**Chetan Chalurkar** Sneha Singh	Design of Locally Resonant Matryoshka Sonic Crystal using Genetic Algorithm for Optimized Sound Attenuation	74	**Indrajeet More** Ramchandra G. Desavale	Research on the vibration Characteristics of Deep Groove Ball Bearing Considering Outer Race Surface Defect and Bearing Tilt	80	**Tulsi Shrestha** Rachit Rijal Aayush Subedi Ravin Purbey	Design and Experiment of Negative-stiffness Electromagnetic Spring for Low-frequency Vibration Isolation	22	**Mayuresh Pathak** Sharene Esther K Mr Naresh Padillaya	Comparing the efficiency of Meshless FEA Tool with Traditional FEA tool in predicting the durability of a beam structure .
71	**Siddharth Shrivastava** Sneha Singh	A New Acoustic Metasurface with Coplanar labyrinthine and Perforated panel	59	**Noufal N S** Sanjeev Kumar Lal Das Praveen Krishna I R Amarnath M Benny Thomas	Impact of Time-Varying Frictional Torque, Runout, and Tooth Errors on Spur Gear Transmission Error: A Parametric Study	329	**Divyanshu Chaubey** Amit Kumar Niranjan Sahoo	integrated thermodynamic and vibration analysis of micro turbines for aerospace applications using matlab	179	**Dr. Amit Kumar Rai**	Dynamic Behavior of Orthotropic Circular Plates Subjected to Moving Loads on Elastic Foundations
222	**Maram Reddy** J Srinivas	Acoustic Signal processing based on Wavelet denoising for source identification	273	**GANGA D** , Arjun Sasikumar , Suman Kumar Mandal	Variational Autoencoder-Based Anomaly Detection in Vibration Signals for Early Bearing Fault Diagnostics	21	**Siddalingeshwar Patil** Sharan Venkatesh Shamappa Joladarashi Siddalingeshwar Patil Srimanth B H Srilakshmi U S	Enhanced Vibration Damping in Additively Manufactured Ti Alloy and MMC using Optimized Control Strategies for Aerospace Applications	134	**Mr Saransh Bhardwaj** , Prof. Mohammad Talha , Prof Sarbjit Singh , Mr Myand Malik , Asst. Prof. Prateek Saxena	Modeling of Additive Manufacturing Process Parameters using Dimensional Analysis and Support Vector Regression

12.45 - 14.00 Hrs — Lunch

Poster Session

14.00 - 14.45 Hrs — Plannery Talk 4 (Prof Alok Sinha, The PennState University, USA)

14.45 - 15.30 Hrs — Plannery Talk 5 (Prof Pramod Shreshtha, Tribhuvan University, Nepal)

15.30 - 16.00 Hrs

Session 17 (Room: 5001)	Session 18 (Room: 5002)	Session 19 (Room: 5003)	Session 20 (Room: 5003)
Keynote 13	Keynote 14	Keynote 15	Keynote 16
Prof. S G Rajasekharan, BITS Pilani, HYD	Dr Inderpal Singh Sandhu, TBRL Chandigarh	Prof Pradeep Kundu, KU Leuven	Prof. Devdas Shetty, Uni. District of Columbia, USA

16.00 - 17.00 Hrs

Condition monitoring and M/c dignostics			Fracture, Fatigue and Damage mechanics			Digital twinning and machine learning			Multi disciplanry		
Paper ID	Presenter Name	Paper Title	Paper ID	Presenter Name	Paper Title	Paper ID	Presenter Name	Paper Title	Paper ID	Presenter Name	Paper Title
91	**Goutham K B** Bijudas C R	A Novel Stacked GRU Autoencoder for Unsupervised Loosening Detection with Lamb Waves in Bolted Aluminium Lap Joint	303	**Jignesh Jani** Nikunj Rachchh	Severity Detection of Bone Fractures Through Non-Invasive Shock Response Spectrum Analysis: Ex Vivo Study.	211	**Bala Murugan S** JVV Durga Prasad Rabindra Kumar Behera Dr Anwesa Mohanty	Pipeline leakage detection: by employing the Euler–Bernoulli beam using an iterative algorithm with a machine learning approach	122	**Kazuhiro Oda** , Nao-Aki Noda , Rei Takaki	Brittle fracture behavior and adhesive strength of adhesively bonded butt joints
281	**Arul Pradeep S** Kevin P Naveen Raj R	latent space learning for wind turbine blade fault diagnosis using 1d convolutional variational auto encoder	51	Kumar Shambhav **Dr. Rakesh Kumar** Somnath Chattopadhyaya Dr. Raj Das Bishal Saha Durjoy	Finite Element Simulation of Mechanical Response During Friction Stir Welding of Cu C11000 and AA6061-T6	228	**Venkatesham B** Greeshma S.M. Sucharitha D Venkatesham B Sumohana S. Channappayya	Data-driven methods for modal parameters estimation and material properties updating	89	**Randhir Kumar** Akhilesh Mimani	3-D Finite element analysis of the side-inlet and side-outlet elliptical expansion chamber muffler with mean flow
305	**S Chaitanya** Ruchir Shrivastava	IoT Based Vibrational Monitoring System For Predictive Maintainance of Industrial Equipment	30	**Debabrata Gayen** Soumen Dey Ranjan Kumar Mitra A	thermo-elastic bending behavior of an axially functionally graded beams using power law of material gradation	161	**Dharmendra Kushwaha** Naveen Narayanan S.P. Harsha	Digital twin-based predictive analysis of derailment risk on railway tracks with geometric irregularities	257	**M Yadav** Sumit Basu	Void Nucleation and Interaction in Plastic Solids
23	**Avataram Yarra, Vaibhav Jain**	Condition Monitoring and Machinery Diagnostic	173	**Deepak Sharma** Aman Kuar Deepak Sharma Subhajit Sanfui	Accelerating Structural Topology Optimization by Unifying U-Net Variational Autoencoder with SIMP Method	112	**Ankit Yadav** Abhishek Sharma Srikant Sekhar Padhee	An Artificial intelligence assisted tool for modal analysis of functionally graded beams	328	**Manish K Rajak** , Prof M.L. Chandravanshi , Vivek bajpai	Optimization of Geometric Parameters and Vibration Characteristics Strip Plates

17.00- 17.15 Hrs — Tea Break

Session 21 (Room: 5001)	Session 22 (Room: 5002)	Session 23 (Room: 5003)	Session 24 (Room: 5004)

17.15 - 18.15 Hrs

Vibration & Waves			Multi disciplanry			Vehicle Dynamics			Multi disciplanry		
Paper ID	Presenter Name	Paper Title	Paper ID	Presenter Name	Paper Title	Paper ID	Presenter Name	Paper Title	Paper ID	Presenter Name	Paper Title
88	**Abel George Abraham** Minu A Pillai Ezhilarasi Deenadayalan	Physics-Informed Neural Network Based Approach for the Analysis of Vibration Energy Harvesting using Piezoelectric Bimorph Cantilever Beams with a Tip Mass	52	**Mr Kanishq Garg** , Mr Pratham Kogta , Dr. Piyush Shakya , Mr Sitesh Mishra	Multi-Sensor Data Fusion for Fault Detection in Mechanical Systems: A Bayesian Modeling Approach	7	**Saayan Banerjee** Deokar Arun Kumar G Srinivasan S Pazhanikumar J Rajesh Kumar	Ride and Structural dynamic analysis of a military recovery vehicle	29	**Ayan Roy Chaudhary** Debabrata Gayen Kallol Khan	THERMOELASTIC ANALYSIS OF AN FGM CYLINDRICAL PRESSURE VESSEL USING POWER LAW OF MATERIAL GRADATION
155	**Manan Pathak** Shrutidhara Sarma Kundan K Verma	High-gauge Factor Flexible Strain Sensors for Structural Health Monitoring for Aerospace Components	45	**Ashesh saha** MD Narayanan Prakash T.	Identification of parameters from data acquired from experiments on a friction induced system	54	**T L Narasimha** Saayan Banerjee Yatesh Kumar Singh Ravi Shankar Sarath Shankar G Srinivasan J Rajesh Kumar	Military vehicle lashing dynamics during air transportation	247	**P. Maheswar Reddy** Tara Sen Joyanta Pal	Formulation and Response Surface Optimization of Bamboo-Fiber Lime Jaggery Mortars for Enhanced Carbon Sequestration and Climate Resilience
135	**R Karthik** Jhalu Gorain Srinivasan K	Acoustical Performance of an Array of Intruded Neck Helmholtz Resonators	132	**Parthib Halder** Gora Chand Chell	h link optimization : optimization of h link linkage in case of bucket arm & rock breaker excavator	200	**Sauranga Das** R. Ganesh Narayanan Sougata Karmakar	topology optimisation of a vehicle lifting device component using dynamic loading input and comparison with mass manufactured components	209	**Aditya Sharma** , Dr. Krishanu Ganguly , Prof Jayanta Kumar Dutt	A robust approach to incorporate dissipative behaviour in the linear constitutive relationship of material model
34	**Chander Kant Susheel** Vikas Rana	Numerical Study on Vibrational Behaviour of Sandwiched Honeycomb Structure Embedded with Magnetorheological Elastomers (MREs)	64	**Shashank Srivastava** Jayanta Kumar Dutt Kshitij Gupta Manish Trikha	Design and Analysis of A Resilient Passive Isolation System for Satellite On-Board Micro-Vibration	99	**Mukesh Pandey** V.S.S. Pavan Kumar Hari P. Seshu	Assessing Well-to-Wheel Emissions of Alternative Powertrains for Light Duty Commercial Vehicles in India	282	**Pradyum Girish Chandra Prajapati** Sumit Basu	Rapid and accurate "Life estimation" toolbox in MATLAB

End of Day 2

Day 3 (20 December 2025)												
Technical Session, Venue: Core V												
9.00 - 9.45 Hrs	**Plannery Session 6 (Prof. G. Litak, Lublin Uni. of Technology, Poland)**											
9.45 - 10.10 Hrs	**Talk by Sponsors**											
10.30 - 10.45 Hrs	**Tea Break**											
10.45 - 11.15 Hrs	**Session 25 (Room: 5001)**			**Session 26 (Room: 5002)**			**Session 27 (Room: 5003)**			**Session 28 (Room: 5004)**		
	Keynote 17			**Keynote 18**			**Keynote 19**			**Keynote 20**		
	Prof Poonam Kumari, IIT Guwahati						**Prof N NODA, Kyushu Ins. of Tech., Japan**			**Prof Ramesh Singh, IIT Bombay**		
11.15 - 12.30 Hrs	**Compostie and Nano structure**			**Renewable Energy And Climate Change**			**Multi-physics And Flexible Multi Body Dynamics**			**Machining and dynamics and Chatter**		
	Paper ID	**Presenter Name**	**Paper Title**	**Paper ID**	**Presenter Name**	**Paper Title**	**Paper ID**	**Presenter Name**	**Paper Title**	**Paper ID**	**Presenter Name**	**Paper Title**
	331	Kiran Kumar K **Amit Kumar** Niranjan Sahoo	Dynamic Shock Absorption Behavior of Closed-Cell Metallic Foams and Glass Fiber Composites: A Shock Tube Experimental Study	**325**	**Pradeep Malaji** Mr Basavaraj Satappagol Asif Momin Girish Khodnapur Grzegorz Litak Sondipon Adhikari	Energy Harvesting from a Two Degrees-of-Freedom Vibratory System with Inertial Amplifier: Modeling, Analysis, and Biomedical Application	**66**	**Tushar Santosh** Adepu Kumaraswamy Gaurav Sharma Sriramulu Bokka	Kinematic Analysis and Realization of a Compound Planetary Gear Train for Compact High-Torque Applications	**85**	**Souvik Das** Kundan K. Singh	Analysis and Development of Optimum Structure for Automated Tap Testing of Micro Cutting tool
	327	**Dhruv Chaudhary** Anchith Murthy Srinivasa Prasad	Dynamic Analysis of Re-entrant Auxetic Honeycomb structures for implementation in Helmet Liner	**83**	**Atul B** Harsh Chittora	Effect of wind velocity and installation angle on pressure and velocity distribution on PV module for vibration control using CFD approach.	**175**	**Sanjana Talukdar** Santosha K. Dwivedy Poonam Kumari	A two-way coupled chemo-mechanics numerical scheme to determine electrochemical performance of batteries	**84**	**Mr. Sumitava Paul** , Dr. Kundan K. Singh	Vibration Signal-Based Clustering Approach for Cutting Tool and Workpiece Contact Detection in Micromachining Process
	318	**Shashank Pandey**	Effect of Porosity and Geometrical Imperfection on Crack Propagation Analysis of S-FGM blade under Cyclic Cryogenic Thermal Shock	**167**	Mr. Jishnu Rajeev , Dr. Kishor Kumar V V	Boosting Solar-Powered Peltier Cooler Performance Using PCM-Integrated Heat Sinks for Better Renewable Energy Utilization	**170**	**Vishakha Vilas Harlapur** Pranav Lad Salil Kulkarni	Non-linear dynamics of a bi-stable mechanical oscillator with a toggle spring mechanism	**94**	**Mr. SURAJ KUMAR** , Dr Mittal R K , Mr. Soham Mujumdar , Mr. Ramesh K. Singh	Investigation of Tool-Tip Stiffness Variation Along the Cutting Path in Robotic Micromilling
	75	**Anandakumar Paramasivam**	A Data-Driven Design Strategy for Over-Molded Composites Using GAN and Machine Learning	**172**	**Shamim Pathan** Prayag Sutar Purva Jambhale	Machnine learning based fault detection in rotating system.	**102**	Mr. Arunshek G. , Dr. Allen Anilkumar **, Dr. Ashesh Saha**	Vibration isolation using bio inspired compliant springs			
	111	**Dr. Manjeet Keshav** , Dhruv Pancholi	Finite Element Modeling and Analysis of Cochlear Implant Electrode Arrays	**171**	**Dr PANKAJ KUMAR** , Dr. S. Narayanan	Vibration and Acoustic energy harvesting of linear and nonlinear systems under random excitation and stochastic analysis by neural networks and radial basis functions approach						
	164	**SUMIT GAUR** Srikant Sekhar Padhee	Ensuring Desired Dynamic Behavior of Composite Strip like structure under stochastic environment	**272**	**GANGA D** , Arjun Sasikumar	Noise-Robust Feature Extraction and Fault Diagnosis in Rotating Machinery Using EEMD and Random Forest						
12.30- 13.15 Hrs	**Valedictory session**											
13.15- 14.30 Hrs	**Lunch**											