

Technical Schedule of ICTACEM-2025 held on 15-17 Dec, 2025 at IIT Kharagpur

Kalidas Auditorium					Duration
15 December	Venue				
		Inauguration Of The Conference -- ICTACEM 2025			
	9:00	Welcome Address By Convenor -- Prof. Arnab Roy			0:05
	9:05	Address By Director, IIT Kharagpur -- Prof. S. Chakraborty			0:15
	9:20	Address By Chief Guest			0:15
	9:35	Inaugural Talk : Turbulent Jets Prof. Joseph Mathew, Department of Aerospace Engineering, Indian Institute of Science Session Chair: Prof. Kalyan Prasad Sinhamahapatra			0:45
	10:20	Inaugural Talk : Digital Technologies in Aerospace Dr. Kallappa Pattada, Executive Director — Boeing Technology & Innovation and Chief Engineer — Boeing Defense India Session Chair: Prof. Kalyan Prasad Sinhamahapatra			0:45
	11:05	Break			0:25
	Venue	Gargi Auditorium	Maitri Auditorium	Kalidas Auditorium	
	Session	Aerodynamics and Fluid Mechanics	Solid Mechanics and Dynamics	Flight Mechanics, Control and Navigation	
		Session Chair Prof. Somnath Ghosh	Session Chair Prof. D K Maiti	Session Chair Prof. Alok Kanti Deb	
15 December	11:30	A Scalar LPCE–ALE Framework for Sound Generation in Low-Mach Flows with Moving Boundaries : ICTACEM2025P813	2D Multiphysics Modeling Framework for Laser Ablation of Al2O3 Ceramic Coating : ICTACEM2025P987	A Lyapunov Guidance Vector Field with Variable Guidance Gain for Elliptical Path Following : ICTACEM2025P880	0:15
		Kevin S. Swamy; Vaibhav Joshi	Nazim Khan; Abinesh K; Rajdip Mukherji; Somnath Bhowmick; Pritam Chakraborty	Ishan Phanse ; Sayantan Pal ; Sikha Hota	
	11:45	Buckling load parameter analysis of Rectangular plate with Full and partial stiffeners under Uniaxial and Biaxial loading conditions : ICTACEM2025P709	A Cohesive Zone Modelling approach for Fatigue Crack Growth and Life Prediction in Adhesively Bonded Joints: ICTACEM2025P601	Altitude Control of Powered Parafoil Systems using Extended State Observer-Finite-time Sliding Mode Control (ESO-FTSMC) : ICTACEM2025P027	0:15
		prabhash kumar yadav ; Dr. AKL Srivastava	Pradeep Kumar Sahoo; Mopidevi Naga Saradvani; Shrimukhi G Shastry	Nitin Pal ; Naba Kumar Peyada	
	12:00	CFD Investigation of Transonic Bucket phenomena for Typical Grid Fin used on Re-Entry Stage Configuration : ICTACEM2025P856	A comparative investigation of electromechanical vibration suppression in imperfect curved fiber laminates and straight fiber laminates with integrated piezoelectric layers: ICTACEM2025P031	Comparative Analysis of Obstacle Avoidance Path Planning Algorithms for Robotic Manipulators: RRT, APF, and CHOMP : ICTACEM2025P898	0:15
		Anubhab Das ; Kunal Garg ; Amit Sachdeva ; Ankur Nagpal	Vanshika Anand; Ansh Kapoor; Narayan Sharma; Pawan Kumar; Prasant Kumar Swain	Adeetya Uppal ; Rakesh Kumar Sahoo ; Manoranjan Sinha	
	12:15	Computation of heat flux over Winged Reusable Launch Vehicle – Technology Demonstrator and comparison with flight data : ICTACEM2025P015	A Meshfree Numerical Solver for a Fractional Calculus Approach to Continuum Damage Mechanics: ICTACEM2025P304	Curvature-Constrained UAV Path Following Using Finite-Time Sliding Mode Control : ICTACEM2025P056	0:15
		Sundeep Kumar Eperi ; Jiju R Justus ; Vidya G ; Manokaran K	Malapeta Hemasundara rao; M Ramji; sai sidhardh	Panasa Pranav Kumar ; Sayantan Pal ; Sikha Hota	
	12:30	Design of Vent system for crew escape system-test vehicle compartments : ICTACEM2025P219	A Reduced-order Homogenized Plate Model of Sandwich Structure Using Variational Asymptotic Method: ICTACEM2025P493	Guidance Law for Surveillance by UAVs Using Curve Paths : ICTACEM2025P537	0:15
		VenkatshivaramJadav B ; Jathaveda.M ; G.Vidya	Anup Kumar Pathak; Pritam Chakraborty	Gururaj Khurd ; Parth Madure	
	12:45	Development and Validation of a Python-Based Preliminary Design Tool for Ramjet Engines : ICTACEM2025P683	Analytical Investigation for Free Vibrations Analysis of Functionally Graded Sandwich Plates with Advanced Gradation Laws: ICTACEM2025P939	Lame Curve Following by UAVs using Vector Field Guidance : ICTACEM2025P744	0:15
		Atharva Mangalkar ; Thivya Ranee ; Akshay Abhyankar	Ankitha Kamath; Supen Kumar Sah; Anup Ghosh	Hemant V Nair ; Sayantan Pal ; Sikha Hota	
	13:00	LUNCH BREAK			1:00

	Venue	Kalidas Auditorium			
15 December		Plenary Session -1: Vertical takeoff of aircrafts: Some new possibilities Prof. P. A. Ramakrishna, Department of Aerospace Engineering, IIT Madras Session Chair: Prof. Amardip Ghosh			0:45
	14:00	Plenary Session -2 : Wave Technologies in SHM of Built Facilities - Theory, Experiments and Practice Prof. Abhijit Mukherjee, School of Civil and Mechanical Engineering, Curtin University, Australia Session Chair: Prof. P K Datta			0:45
	14:45				
	Venue	Gargi Auditorium	Maitri Auditorium	Kalidas Auditorium	
	Session	Propulsion	Solid Mechanics and Dynamics	Solid Mechanics and Dynamics	
		Session Chair Prof. Srinibas Karmakar	Session Chair Prof. Vikranth Racherla	Session Chair: Prof. Kiran Vijayan	
	15:30	Bluff Body Induced Regression Rate Enhancement in Hybrid Motor : ICTACEM2025P797	The assessment to study the free vibration of edge cracked bi-directional SFGM plate with modified inverse hyperbolic shear deformation theory (m-IHSDT): ICTACEM2025P284	Axially-Loaded Column under Earthquake Loading : ICTACEM2025P664	0:15
		Ankush Vilas Khnadare ; Aditya Sanjay Patil ; Jogi Binit Patel ; Sachin Chandrakant Sonage ; Nagendra Kumar ; Narendra Deore	Rahul Sudam Kamble; Achchhe Lal; Bhriugu Nath Singh	Mahendra Gattu	
	15:45	Correlation of Tulip Flame Formation and CH Chemiluminescence Bursts in Confined Propane-Air Combustion : ICTACEM2025P329	ANN-based prediction of the deflection and free vibration characteristics of functionally graded plates for various boundary conditions: ICTACEM2025P996	Comparative Ballistic Impact Simulation of NiTi SMA-Reinforced and Conventional GFRP Composites : ICTACEM2025P571	0:15
		Abhishek kumar : Ratan Joarder	Dabeer Anwer Danish; Sukanta Chakraborty	Sibaram Patro ; Prof. Chandra Sekher Yerramalli ; Prof. Krishnendu Halder	
	16:00	Break			0:15
	Venue	Gargi Auditorium	Maitri Auditorium	Kalidas Auditorium	
	Session	Aerodynamics and Fluid Mechanics	Solid Mechanics and Dynamics	Flight Mechanics, Control and Navigation	
		Session Chair Prof. Chandan Bose	Session Chair: Dr. Ganesh Soni	Session Chair Prof. Suman Maiti	
15 December	16:15	Direct Simulation Monte Carlo Study of Thruster Plume Impingement on Planetary Surface : ICTACEM2025P067	Comparative bending response of imperfect variable-angle tow and straight fiber laminates with integrated PZT layers: ICTACEM2025P016	Mobile Anti-Drone System: A SDR Approach for Defensive Disruption of UAVs : ICTACEM2025P630	0:15
		Malakannan G ; Suman Chakraborty	Ansh Kapoor; Vanshika Anand; Narayan Sharma; Pawan Kumar; Rakesha Chandra Dash	Ajit Kumar ; Namra Patel ; Jagat Rath	
	16:30	Effect of Flight velocity on Mean Flow of an Ideally Expanded Supersonic Jet – a CFD study : ICTACEM2025P990	Deflection Characteristics of Piezoelectric Composite Plates under UDL and SSL Using Refined Second Shear Deformation Theory: ICTACEM2025P690	Model-Less Feedback Control of Space-based Continuum Manipulators using Backbone Tension Optimization : ICTACEM2025P254	0:15
		Sanjoy Kumar Saha ; Manoj T Nair	Raju Sidhu Pawar; Achchhe Lal	Shrreya Rajneesh ; Nikita Pavle ; Rakesh Sahoo ; Manoranjan Sinha	
	16:45	Effect of Mach number on a Compressible Impinging Round Jet: An LES study : ICTACEM2025P072	Deformation Behavior of Soft Electroelastic Membranes Subjected to Large Electric Fields: ICTACEM2025P886	Moving Target Interception using Variable L1 guidance : ICTACEM2025P519	0:15
		Priyakshi Goswami ; Somnath Ghosh	Yadwinder Singh Joshan; Sushma Santapuri; Debashih Khan	Machavolu Venkata Sushanth ; Sayantan Pal ; Sikha Hota	
	17:00	Effect of Pivot Point Location on the Propulsive Performance of Rear Airfoil in Tandem Configuration : ICTACEM2025P440	Design and Development of a Hybrid Model for Impact Analysis on Underwater Vehicles: ICTACEM2025P600	Obstacle Avoidance of UAV in Dynamic Environments Using Direction and Velocity-Adaptive Artificial Potential Field : ICTACEM2025P943	0:15
		Adeetya Uppal ; Rahul Ranjan ; Sunil Manohar Dash	Pankaj Meena; Rajiv Sharma	Nikita Vaibhav Pavle ; Shrreya Rajneesh ; Rakesh Kumar Sahoo ; Manoranjan Sinha	
	17:15	Effect of ply-orientation angle on flutter behaviour of laminated composite plates : ICTACEM2025P264	Reliability analysis of uncertain vibration response in bidirectional sandwich structures using a direct probability integral approach : ICTACEM2025P735	Parameter Estimation of BLDC Motor Using Nonlinear Least Square Method : ICTACEM2025P974	0:15
		Shashank K S ; Subrata Barman ; Rajeev Nayan Gupta ; Saikat Ranjan Maity ; Dipak Kumar Maiti ; Sudip Dey	Narayan Sharma ; Pawan Kumar ; Prateek Chandrakar ; Dipak Kumar Maiti	Rajib Mandi ; N.K. Peyada	
	17:30	Break			0:20
	17:50	Panel Discussion on : Application of AI for Aircraft Technology			
	18:50				1:00

16 December	Venue	Kalidas Auditorium			
	9:00	Plenary Session -3: SPC-I and DPSM – two new developments in the field of NDE and SHM Prof. Tribikram Kundu, Department of Civil and Architectural Engineering and Mechanics, University of Arizona, USA Session Chair: Prof. Arghya Deb			0:45
	9:45	Plenary Session - 4: AI-enabled Aircraft Lifecycle and Predictive Maintenance Dr. Partha Adhikari, Associate Technical Fellow — Integrated Vehicle Health Management, Principal Data Scientist - Boeing AI Session Chair: Prof. N K Peyada			0:45
		Gargi Auditorium	Maitri Auditorium	Kalidas Auditorium	
	Session	Aerodynamics and Fluid Mechanics	Solid Mechanics and Dynamics	Flight Mechanics, Control and Navigation	
		Session Chair Prof. S M Dash	Session Chair Prof. Vikranth Racherla	Session Chair Prof. Sourav Patra	
16 December	10:30	Empirical expression to predict the first-mode resonant frequency of a pitching flexible panel : ICTACEM2025P467	Effect of Localized Elastic Supports Representing Ribs and Mounts on the Flutter Behavior of Tailored Composite Panels: ICTACEM2025P427	Real-Time Obstacle Avoidance for Waypoint Following of UAVs : ICTACEM2025P146	0:15
		Abhinav Kumar KSN ; Parag Deshpande ; Ravi Dodamani	Abdul Sadiq ; Aayush Gupta; Dipak Kumar Maiti	Heavenly Dadala ; Sayantan Pal ; Sikha Hota	
	10:45	Estimation of Flight Measured Pressure using CFD for a Typical Launch Vehicle : ICTACEM2025P287	Effects of random orientation of bluff body on the onset speed of galloping-based piezoelectric energy harvester: ICTACEM2025P101	Real-Time Tiny Object Detection and Tracking for High-Altitude UAVs Using Customized YOLO Architectures : ICTACEM2025P536	0:15
		Sreenivasulu Juluri ; Sanjoy Kumar Saha ; Vidya G	Rakesha Chandra Dash	Vishnubhatla Aditya Shankar ; Devshree Kumar	
	11:00	Feature-Alignment Model Order Reduction (FAMOR) for Nonlinear Convective and Shock-Dominated Flows : ICTACEM2025P358	Evaluation of anisotropy via non-destructive indentation in LPBF processed Co-Cr-Mo alloy: The role of scanning strategy: ICTACEM2025P892	Wind-Aware Dubins-Inspired L1 Guidance for Faster Convergence with Bounded Continuous Curvature and Sliding Mode Tracking for UAVs : ICTACEM2025P678	0:15
		Aritro Ghosh ; Aniruddha Sinha ;Sanjay R.	Vinod Kumar Jat; R. U. Patil	Pradyumn Mahajan ; Sayantan Pal ; Sikha Hota	
	11:15	Break			0:15
	Venue	Gargi Auditorium	Maitri Auditorium	Kalidas Auditorium	
	Session	Aerodynamics and Fluid Mechanics	Solid Mechanics and Dynamics	Bio-Inspired FSI	
		Session Chair Prof. K P Sinhamahapatra	Session Chair Prof. P K Datta	Session Chair: Prof. Sandeep Saha	
16 December	11:30	Harnessing wind energy within the conduit-style tall building through the use of wind turbines : ICTACEM2025P104	AI in Finite Element Analysis	Analysis of Temporal Oscillations of a Deflected Wake in a Plunging Foil Using Proper Orthogonal Decomposition : ICTACEM2025P007	0:15
		Amlan Kumar Bairagi	Ganesh Soni	Mohamed Aniffa S : Sunetra Sarkar	
	11:45	Impact of Preheated Central Jet on Intermixing of Confined Multi-Annular Swirling Jets : ICTACEM2025P035		Flow-Induced Vibrations of a Circular Cylinder and an Upstream D-Cylinder of various Elliptical Ratios : ICTACEM2025P036	0:15
		Ritesh Srivastava ; Vivek Kumar Patel		Sachin S B ; Atul Sharma	
	12:00	Integrating CFD, Experiments, and Bayesian Inference for Aerodynamic Analysis of Serrated Delta Wings : ICTACEM2025P832	Experimental Analysis of the Magneto-Viscous Responses of Magneto-Active Polymers: ICTACEM2025P419	Response Dynamics of Bio-Inspired Morphing Aerofoils : ICTACEM2025P505	0:15
		Sarat Kumar Maharana ; Anand M Raikar ; N. Chikkanna	Rahul Kumar Saini	Chandan Bose ; Hibah Saddal ; Lucky Jayswal	
	12:15	Model Order Reduction for Cerebrovascular Hemodynamics: A POD-Galerkin and Hybrid Physics-Informed Approach : ICTACEM2025P717	Experimental Fabrication and Characterization of E-Glass/Epoxy Composites Using Vacuum-Assisted Resin Infusion: ICTACEM2025P609	Scaling laws for thrust generated from pitching foils : ICTACEM2025P492	0:15
		Rahul Halder ; Arash Hajisariifi ; Kabir Bakhshaei ; Gianluigi Rozza	UMAKANTA MEHER; MOHAMMED RABIUS SUNNY; Praveen Shakya; Iqbal Ahmed	Mahesh K Sawardekar ; Ratnesh K Shukla	
	12:30	Numerical Analysis of Shockwave Boundary Layer Interaction : ICTACEM2025P616	Experimental Static and Fatigue Damage Assessment of Adhesively Bonded CFRP Joints Under Mode II Loading Using AE Technique: ICTACEM2025P138	Wake Modifications arising from a Bio-inspired Flexible Filament placed on NACA0012 Airfoil : ICTACEM2025P643	0:15
		Prahlad V Deshpande ; Suraj J Warang ; Dhruv Bagora ; Pardeep Duneria	Bandaru Bangarraju; Sai Sidhardh; M Ramji	Thangavel Sudeep ; Sachin Yashavant Shinde	
	12:45	Numerical Investigation of a Novel Aerospike–Aero disk–Bleed Channel Configuration for Drag and Thermal Load Reduction in Hypersonic Vehicles : ICTACEM2025P518	FE Modeling of Single Foam-filled Reentrant Unit Cell to Evaluate Deformation Mechanics and Energy Absorption: ICTACEM2025P165	Wave Propagation Mechanisms for Enhanced Jet Impulse in Squid-Inspired Flexible Nozzles : ICTACEM2025P096	0:15
		Sanjay Satish ; Vijay Suresh ; Aswathy K. S. ; A. Abhijith ; Antony J. K. ; Manoj Kumar M.	Viswasarathi N M; Bibhu Prasad Mahapatra; Prasun Jana	Paras Singh ; Daehyun Choi ; Halley Wallace ; Gourav Samal ; Saad Bhamla	
	13:00	LUNCH BREAK			1:00

	Venue	Kalidas Auditorium			
16 December	14:00	Plenary Session -5: Role of Real Fluid Behaviour & Multi-Physics Optimisation in Sustainable Energy System Prof. Jayanta Kapat, Department of Mechanical & Aerospace Engineering, University of Central Florida, USA Session Chair: Prof. C S Mistry			0:45
	14:45	Plenary Session -6: Designing Heavy Payload Unmanned Aerial Systems: The Helicopter Way Prof. Abhishek, Department of Aerospace Engineering, IIT Kanpur Session Chair: Prof. Sikha Hota			0:45
	Venue	Gargi Auditorium	Maitri Auditorium		
	Session	Aerodynamics and Fluid Mechanics	Solid Mechanics and Dynamics		
		Session Chair: Prof. Sandeep Saha	Session Chair: Prof. M R Sunny		
16 December	15:30	Numerical Investigation of an Archimedean Spiral Wind Turbine Using Dynamic Mesh CFD in ANSYS Fluent : ICTACEM2025P217	Finite Element Simulation of Magnetocaloric Effect in Gadolinium: ICTACEM2025P187		0:15
		Shivendraraj Godbole ; Krishnendu Haldar	Busi Swathi priya		
	15:45	NUMERICAL INVESTIGATION OF LOW-FREQUENCY OSCILLATIONS IN SEPARATED SHEAR FLOWS ; ICTACEM2025P194	Flexural and ILSS Performance of GFRP Composites under Extreme Temperature Conditions: ICTACEM2025P970		0:15
		Digpriya; Rajesh Ranjan ; Pradeep Moise	Suplal Tudu; Velmurugan Ramachandran		
	16:00	Break			0:15
	Venue	Gargi Auditorium	Maitri Auditorium	Lecture Hall V1	
	Session	Aerodynamics and Fluid Mechanics	Solid Mechanics and Dynamics	Solid Mechanics and Dynamics	
		Session Chair: Dr. Parag Deshpande	Session Chair: Prof. P K Datta	Session Chair: Prof. Korak Sarkar	
16 December	16:15	Numerical Investigation on the Effect of Acoustic Cavity Geometry, Angle of Attack, and Injectant Molecular Weight for Drag and Heat Flux Reduction over a Blunt Body : ICTACEM2025P074	Free Vibration Analysis of Cranked Sandwich Plates with CSCL Facesheets and Honeycomb Core Comparison: ICTACEM2025P654	Machine Learning based approach to predict the life of damaged wind turbine blade : ICTACEM2025P622	0:15
		Sanjay Satish ; Arun B. S. ; Ashik Muhammad ; Manoj Kumar M. ; Antony J. K.	Gajavada Sanjeevkumar; Pritam Mondal; Jayant Prakash Varun; Prashanta kr Mahato	Praveen Shakya ; Umakant Meher ; Sachin Kumar ; Danial Arias ; Abdenmour C. Seibi ; Mohammad A. S. Masoum	
	16:30	Numerical Prediction of Interaction Between Two Flying Robotic Butterflies : ICTACEM2025P288	Investigation of Delamination Progression in Unidirectional Composite Laminates: ICTACEM2025P309	Magneto-Stiffening Effects on Beam Vibrations Supported by Winkler Foundation : ICTACEM2025P296	0:15
		Aman Shukla ; Debajyoti Kumar ; Chandan Bose; Somnath Roy	Subhabrata Koley	Lakshita Patil	
	16:45	Numerical Study on Drag Reduction of Various Bluff-body Geometries using the Passive Rotation of a NACA0012 Aerofoil : ICTACEM2025P055	Investigation of Flexural Behavior of Functionally Graded Plates through Higher-Order Shear Formulation: ICTACEM2025P045	Micromechanical Homogenization and Electromagnetic Characterization of Radar Absorbing Materials using Multiphysics Simulation : ICTACEM2025P595	0:15
		Bibhas Chand ; Prabir Sikdar ; M S Harihara Sudhan ; Sunil Manohar Dash	Smruti Ranjan sahu; Surendra Verma; Bhrgu Nath Singh	Omkar Bilawar ; Krishnendu Haldar	
	17:00	On the Dynamic Mode Decomposition of Supersonic Cavity Flow : ICTACEM2025P439	Investigation of transonic buffet loads on aeroelastic launch vehicle model using coupled CSD-CFD approach: ICTACEM2025P273	Microstretch Continuum Theory Modeling for Nematic Liquid Crystalline Elastomers: Interplay Between Non-Affinity and Director Stretch : ICTACEM2025P192	0:15
		Satya Prakash ; Ram Kumar Yadav ; Avijit Chatterjee ; Aniruddha Sinha	Amit Kumar Onkar; Mutturaj H Medar; Arun Kumar A; Rahul B Choudhary; Shivaprasad M V; Raja S	Aishwarya Kasarla ; Prof. Krishnendu Haldar	
	17:15	Predictive Multiphysics Simulation of Fluid-Structure Interaction in Deformable Microchannels for Biomedical Applications : ICTACEM2025P232	Large deformation analysis of magneto-active polymer membranes under varying mechanical loads: ICTACEM2025P064	Semi-analytical estimates for three phase elastomeric self-healing composite systems : ICTACEM2025P815	0:15
		Satyabrata Podder ; Tapan Sarkar ; Amit Dhar ; Animesh Das ; Shantanu Dutta	Anuttar Jain; Krishnendu Haldar	Jayram Desai ; Vikranth Racherla	
	17:30	Break			0:30
	18:00	Cultural Evening at Kalidas Auditorium followed by Conference Dinner at Vikramshila Foyer			

17 December	Venue	Seminar Room of Aerospace Engineering Annex Building			
	9:00	Plenary Session -7: Modelling and Simulation of Multiphase Flows: A Personal Perspective Prof. J C Mandal, Department of Aerospace Engineering, IIT Bombay Session Chair: Prof. Somnath Ghosh			0:45
	Venue	Seminar Room of Aero Annex Building	Meeting Room Aero Annex Building	Seminar Room Aero Old Building	
	Session	Aerodynamics and Fluid Mechanics	Solid Mechanics and Dynamics	Solid Mechanics and Dynamics	
		Session Chair: Prof. Ranadev Datta	Session Chair: Prof. Prasun Jana	Session Chair: Prof. Mainak Chakraborty	
17 December	9:45	Prediction of Store Trajectory Using Domain-Decomposed Reduced-Order Modelling : ICTACEM2025P722	Parametric study of friction characteristics of IRS rail steel using ball-on-disk experiments: ICTACEM2025P726	Dynamic Response of Variable Fibre Spacing Composites Under Porous Hemispherical Nosed Impactor: ICTACEM2025P969	0:15
		Navdeep Pandey ; aysinh Jagdishchandra Patel ; Aniruddha Sinha	Shreedhar Sahoo; D S Kushan; Mayank Kumar; Vikranth Racherla	Aayush gupta; Abdul Sadiq; Dipak Kumar Maiti	
	10:00	On the evolution of Lamb vector in pulsating transonic jet flows : ICTACEM2025P040	Random Eigenvalue Characterization for Free Vibration of Centrifugally Loaded Euler-Bernoulli Beams: ICTACEM2025P599	Role of Particle Shape in Fabric Evolution during Compressive Creep Failure of Concrete : ICTACEM2025P303	0:15
		Subhro Halder ; Debayan Das ; Ribhu Pal ; Satvik Jaiswal ; Arnab Roy	Jammu Sarath; Ravi Prakash Prajapati; Korak Sarkar	Subham Mukherjee ; Kumar Anjneya ; Arghya Deb	
	10:15	Shock-Tandem Bubble Interaction: The Effect of Inter-Bubble Gap on the Bubble Flow Dynamics : ICTACEM2025P549	RBFN-based reliability analysis of thermally loaded variable fiber spacing composite plates with damage: ICTACEM2025P184	Morphological Effects of Friction Modifiers for Railway Applications: Binder vs Solid Lubricant : ICTACEM2025P568	0:15
	10:30	Nithin Krishnan S ; Ribhu Pal ; Arnab Roy ; Parthasarathi Ghosh	Prateek Chandrakar; Narayan Sharma; Dipak Kumar Maiti	Kushan D S ; G S P J Ronith ; Shreedhar Sahoo ; Mayank Kumar ; Vikranth Racherla	
		Some Acoustic Measurements on a Thrust-Vectoring Biconical Jet : ICTACEM2025P504	Simulation of Voltage Generation in Thermophotovoltaic (TPV) Cells Using FE Analysis: ICTACEM2025P992	Thermo-elastic vibration characteristics of graphene-reinforced composite stiffened spherical panels : ICTACEM2025P751	0:15
		Saiphanendra Karuchola ; Deeksha Yadav ; Revathy R K ; Arun Kumar Perumal Ashoke De	Samanth Martis; Krishnendu Haldar	Pabitra Maji ; Poonam Kumari ; Bhriugu Nath Singh	
	10:45	Stability characteristics of ORV at Transonic and Supersonic Mach number : ICTACEM2025P161	Strength and Environmental Durability of Epoxy/Graphene Oxide Composites:An AI-Driven Framework for UAV Applications: ICTACEM2025P166	Thermo-Mechanical Analysis of thermally Autofrettaged Functionally Graded Disk : ICTACEM2025P949	0:15
		Nalin Singh Sirohi ; M Jathaveda ; Dileep K N ; G Vidya	Santosh Maharana; SK Maharana; R. Vijayakumar	Mohit Rajput ; .M. Kamal ; R.U. Patil	
	11:00	Thrust Vectoring of an Actively Controlled Supersonic Jet : ICTACEM2025P312	Study of lamb wave propagation for sandwich plates of fiber-reinforced functionally graded transverse isotropic material with an adhesive modelled as linear elastic material with voids using frobenious method: ICTACEM2025P694	Transonic flutter prediction of delta wings using coupled CSD-CFD approach : ICTACEM2025P760	0:15
		Mayank Kumar ; Saiphanendra Karuchola ; Arun Kumar Perumal ; Ashoke De	Rokkam Saketh; Tatipaka Anand	Arun Kumar A ; Amit K Onkar ; Rahul B Choudhary ; Arun K ; Raja S	
	11:15	Break			0:15
	Venue	Seminar Room of Aero Annex Building	Meeting Room Aero Annex Building	Seminar Room Aero Old Building	
	Session	Aerodynamics and Fluid Mechanics	Solid Mechanics and Dynamics	Solid Mechanics and Dynamics	
		Session Chair: Prof. J C Mandal	Session Chair: Prof. Prasun Jana	Session Chair: Prof. M R Sunny	
17 December	11:30	Venting analysis of a Typical Launch Vehicle Inter Stage Structure near to strapon nose cone : ICTACEM2025P605	Temperature-Driven Deformation Mechanisms in CNT- and Graphene-Reinforced Al _{0.3} CoCrFeNi High-Entropy Alloys: A Molecular Dynamics Approach: ICTACEM2025P827	Vibration-Based Energy Harvesting Using Mass-in-Mass Metamaterial with Piezoelectric Coupling : ICTACEM2025P307	0:15
		Darshit Gajera ; Sanjoy Kumar Saha	Subrata Barman; Sudip Dey	Subrata Barman ; Pushpa Pandey ; Hamed Haddad Khodaparast ; Tanmoy Mukhopadhyay ; Hadi Madinei ; Michael Friswell	
	11:45	Computational Investigation of Aerodisk Geometries in a Spiked Blunt Body for Hypersonic Heat Reduction : ICTACEM2025P875	Analytical Modelling of Electro-Mechanical Impedance (EMI) in Adhesively Bonded Beams for Multi-Damage Detection: ICTACEM2025P019	XFEM based Free vibration analysis of thin Circular plates using 2DOF on Multiple crack characteristics : ICTACEM2025P653	0:15
		Sanjay Satish ; Satheeshkumar S. ; Nivin Francis	Umakanta Meher; Mohammed Rabius Sunny	Babasaheb Kisan Varpe ; Achchhe Lal	
	12:00	Validating Combined Vector Field Approach With Full Quadrotor Dynamics ; ICTACEM2025P514	Tailoring Flow-Induced Vibrations of Flexible Plates via Perforation: ICTACEM2025P108	Aerodynamic Performance of a Multi-Element Flapping Foil Inspired from the Feathered Wings of Birds : ICTACEM2025P761	0:15
		Dheeraj ; Sikha Hota	Shubham Giri; V. Kartik; Amit Agrawal; Rajneesh Bhardwaj	Avinash Kumar Pandey ; Rajneesh Bhardwaj ; Rajat Mittal	
	12:15	Poster Presentation Sessions Will Take Place at the End of Oral Presentations.			
	Venue	Seminar Room of Aerospace Engineering Annex Building			
	12:30	Valedictory Session of ICTACEM 2025			0:30
	13:00	LUNCH BREAK			