



INCOM 2024

2nd International Conference on Mechanical Engineering

5th & 6th January, 2024

Department of Mechanical Engineering
Jadavpur University, Kolkata, India



List of Accepted Papers for INCOM 2024:

Track 1: Thermo-Fluids

Sl No	Final Paper ID	Paper Title
1	INCOM24-0101	Investigation of Impinging Water Jet Using Volume of Fluid Multiphase Method
2	INCOM24-0102	Impact of Fluidic Force on Extraction of Magnetic Microspheres in Stratified Magnetic Liquid-Liquid Microextraction System
3	INCOM24-0103	A Phase Field Model for Droplet Breakup in Microfluidic Confinement
4	INCOM24-0104	Convective Thermal Performance of Various Polygonal Geometries Using Common and Nanofluids
5	INCOM24-0105	Natural Convective Heat Transfer in An Elliptic Annulus Filled With Nanofluid
6	INCOM24-0106	Role of Magnetic Field on Convective Heat Transport of Pentagonal Thermal Annuli
7	INCOM24-0107	Investigating The Influence of Central Restriction Height On Average Static Pressure in Dump Diffusers
8	INCOM24-0108	Mhd Convection in A Bottom-Heated Semi-Circular Channel With An Impinging Jet At The Middle of Its Top Rectangular Duct
9	INCOM24-0109	Flow Separation of Single-Phase Turbulent Flow Through 90° Pipe Bend: A Numerical Analysis
10	INCOM24-0110	Investigation of Waveform Dynamics for Enhanced Heat Transfer in Twin Synthetic Slot Jets
11	INCOM24-0112	Combustion Behaviour Investigation in Co-Flow and Cross-Flow Hydrogen-Air Microcombustors: A Comparative Study
12	INCOM24-0113	Thermotaxis of A Near Wall Micromotor
13	INCOM24-0114	Numerical Investigation of Heat Transfer Augmentation Using Nanofluids in A Square Duct
14	INCOM24-0115	Thermo-Economic Analysis of Cascade Refrigeration System Using Different Refrigerants
15	INCOM24-0116	Thermodynamic Model of Storage and Discharge of Liquid Hydrogen in Pressure Vessels Under Cryogenic Conditions
16	INCOM24-0117	An Experimental Study on Detection and Mitigation of Thermal Runaway
17	INCOM24-0118	Assessment of Leakage Flow of A Variable Displacement Axial Piston Pump: An Experimental Approach
18	INCOM24-0119	Numerical Study on Natural Convection Inside Enclosure With Two Conducting Bodies



INCOM 2024

2nd International Conference on Mechanical Engineering

5th & 6th January, 2024

Department of Mechanical Engineering
Jadavpur University, Kolkata, India



Sl No	Final Paper ID	Paper Title
19	INCOM24-0120	Impact of Magnetic Field on Buoyancy-Driven Heat Transfer and Fluid Flow in An Enclosure Filled With Porous Media
20	INCOM24-0121	Numerical Analysis To Study The Curvature Effect on Turbulent Flow in A U-Bend Pipe
21	INCOM24-0122	Enhancing Photovoltaic Cell Efficiency Through A U-Shaped Cooling Channel: A Numerical Study
22	INCOM24-0123	Detached Eddy Simulation of Flow in A Two-Dimensional Linear Aerospike Nozzle
23	INCOM24-0124	Flow-Induced Vibrations of An Inclined Elliptic Cylinder
24	INCOM24-0125	Heat Transfer Characteristics of Hybrid Nanofluids in Rectangular Ducts With Constant Heat Flux: A Numerical Study
25	INCOM24-0126	Magneto-Nanofluidic Convection in A Circular Grooved Cavity With Bottom Heating and An Adiabatic Central Obstruction
26	INCOM24-0127	CFD Analysis in A Multi-Segmental Heated Porous Square Cavity Filled With Hybrid Nanofluid Induced By Multi-Segmental Magnetic Field
27	INCOM24-0128	Integration of Trilateral Flash Cycle and Ejector Expansion Refrigeration Cycle for Cooling: A Scheme To Readily Available Recover Low-Grade Geothermal Heat
28	INCOM24-0130	Numerical Investigation of Heat Transfer Enhancement of Impinging Circular Jets Using Al ₂ O ₃ -Water and Cu ₂ O-Water Nanofluids
29	INCOM24-0131	A Computational Analysis of Fluid Flow Around Triangular Object
30	INCOM24-0132	A Computational Analysis of Fluid Flow Around Square Object
31	INCOM24-0133	Visualisation of Laser Melting Using Heatlines
32	INCOM24-0134	BSFC Simulation for Field Test Data Using Vecto Engine-Only Mode
33	INCOM24-0135	Electroosmotic Flow in A Nanochannel With Weak Edl Overlapping and The Influence of Magnetic Field With Hall Current Effect
34	INCOM24-0136	Wavy Wall Cooling Impact on Convective Thermal Performance Enhancement of Common Fluids
35	INCOM24-0137	Impact of Central Conduction Body and Cavity Inclination on Heat Transport in Presence of Magnetic Fields
36	INCOM24-0138	Effect of Prandtl Number on The Hydro-Thermal Characteristics in A Triangular Corrugated Duct
37	INCOM24-0139	Turbulent Flow in Presence of A Slender Bluff Body



INCOM 2024

2nd International Conference on Mechanical Engineering

5th & 6th January, 2024

Department of Mechanical Engineering
Jadavpur University, Kolkata, India



Sl No	Final Paper ID	Paper Title
38	INCOM24-0140	Proper Orthogonal Decomposition of Wall Shear Stress During Head-On Flame Wall Interaction
39	INCOM24-0142	Improvement in The Convective Heat Transfer in Laminar Pipe Flow By Inserting Twisted Tape
40	INCOM24-0143	Numerical Analysis of Melt Pool Behavior During Pulse Laser Based Micro Drilling of Ss-304 Alloy
41	INCOM24-0144	Performance Analysis of Sudden Expansion and Dump Diffuser Geometries Across Three Reynolds Number Regimes
42	INCOM24-0145	Velocity Profile Analysis of Three Inline Eccentrically Arranged Submerged Vanes: A Step To Understand Sediment Control Structure
43	INCOM24-0146	Analysis of Hydrothermal Performance in Backward Facing Step Channel for Fluids With Different Prandtl Number
44	INCOM24-0147	Fluid-Structure Interaction of Twin Flexible Baffles Enhancing Mixed Convection in A Semicircular Channel
45	INCOM24-0148	Applicability of Energy Transport Models in Modeling Mixed Convection in A Vented Enclosure With A Heat-Generating Porous Body
46	INCOM24-0149	Analytical Solution for Purely Electrically Actuated Time-Dependent Rotational Flows in Microchannel
47	INCOM24-0150	Natural Convection in A Semicircular Channel in Presence of Elastic Thin Baffles
48	INCOM24-0151	Performance of Plate Heat Exchanger With Tapered Channels
49	INCOM24-0153	Improving Aeration Efficiency in Hydraulic Jump: An Approach To Improve Water Quality
50	INCOM24-0155	An Approximate Model for Increase in Temperature of Heat Transfer Fluid Passing Through A Parabolic Trough Solar Collector
51	INCOM24-0156	Measurement of The Thermal Diffusivities of The Insulating Panel Using Boiling Water
52	INCOM24-0157	Artificial Neural Network Code for Prediction of Friction Factor
53	INCOM24-0158	Usage of Thermal Fluids and Pebbles on The Performance of A Solar Cavity Collector System



INCOM 2024

2nd International Conference on Mechanical Engineering

5th & 6th January, 2024

Department of Mechanical Engineering
Jadavpur University, Kolkata, India



List of Accepted Papers for INCOM 2024:

Track 2: Applied Mechanics and Design

Sl. No.	Final Paper ID	Paper Title
1	INCOM24-0201	Impact Analysis of Unidirectional Polyethylene-Glass Fiber Reinforced Phenolic Polymer Composite Laminate
2	INCOM24-0202	Experimental Study and Finite Element Simulation for Stress Analysis of Cross-Ply Laminated Cantilever Curved Beam
3	INCOM24-0203	Influence of Structural Tailoring on The Dynamics of A Tapered Anisotropic Box Beam
4	INCOM24-0205	A Study on Free Vibration Analysis of Composite Tank Considering Fluid-Wall Interaction
5	INCOM24-0206	Design of Single Particle Damper for Variable Frequency Loading
6	INCOM24-0207	An Investigation of Nano Mechanical Properties of Low Viscosity Pmma Bone Cement Using Experimental and Finite Element Analysis
7	INCOM24-0208	Biomechanical Analysis of Box® Total Ankle Replacement Design: A Finite Element Study
8	INCOM24-0209	Nonlinear First Ply Failure Characteristics of Composite Cylindrical Panels Under Non Uniform Load
9	INCOM24-0210	Study of Geometric Nonlinear Free Vibration of AFG Microbeam Embedded on Variable Winkler Foundation
10	INCOM24-0211	Unloading Analysis of Functionally Graded Carbon Nanotubes Reinforced Composite (FG-CNT)
11	INCOM24-0212	Non-Linear Elastic Property Tailoring in Large Deforming Anti-Curvature Honeycomb Lattices
12	INCOM24-0213	An Approach To Reduce Crack Propagation in An Arc-Shaped Cracked Specimen Via Piezoelectric Patch
13	INCOM24-0214	Free Vibration Analysis of Variable Thickness Bfgm Rotating Micro-Disks Using Modified Couple Stress Theory
14	INCOM24-0215	Contact Analysis of Truncated Cylindrical Asperities
15	INCOM24-0216	Numerical Study on Layer Thickness and Nozzle Size Interdependency on Elasticity of FDM Part
16	INCOM24-0217	Design, Synthesis & Optimization of Latch Mechanism Using Mathematical Model for Closing Doors in Aerospace Vehicles
17	INCOM24-0220	Design and Analysis of Rigid Overhead Catenary System
18	INCOM24-0221	Non-Linear Static Deflection Analysis of A Functionally Graded Micro-Beam Based on Modified Couple Stress Theory
19	INCOM24-0222	Free Vibration Analysis of Rotating Porous Power-Law Functionally Graded Conical Shell in Thermal Environment
20	INCOM24-0223	Stress Analysis of Tapered Laminated Composite Beam Under Hygrothermal Environment

List of Accepted Papers for INCOM 2024:

Track 3: Production Engineering and Management

Sl. No.	Final Paper ID	Paper Title
1	INCOM24-301	The Opportunity of Additive Manufacturing, A State of The Art Method and Near-Net-Shape Manufacturing, for The Assembly of Niti Implants: A Review
2	INCOM24-302	Tool Wear Monitoring by Acoustic Signals and Its Influence On Cutting Forces
3	INCOM24-303	Ism Based Hierarchical Framework of PDP Attributes for Better Product Quality
4	INCOM24-304	Modeling and Simulation of Solidification Time in Casting
5	INCOM24-305	Investigation of Tool Life and Chip Formation During Turning Process of EN8 Medium Carbon Steel
6	INCOM24-308	Variation of Friction Stir Processing for Generating Novel Engineering Parts – A Review
7	INCOM24-309	Grey-Based Taguchi Technique for Parametric Optimization of TIG Welded AISI 304L Austenitic Stainless Steel
8	INCOM24-310	Sustainability in Supply Chain of Packaged Marine Products: An Investigation on Challenges
9	INCOM24-311	Experimental Investigation into The Laser Processing of White Pat Silk
10	INCOM24-312	Prediction of Kerf Qualities for Al 7075 Aluminium Alloy on Laser Micro-Machining Using Artificial Neural Network
11	INCOM24-313	Improvement of Machinability in Dry Turning of EN8 Steel Using Taguchi Technique
12	INCOM24-314	Application of Blockchain for Effective Resource Utilisation in Collaborative Distributed Manufacturing System
13	INCOM24-318	Cutting Speed Variation for WEDM Machining of Al-TiB ₂ Composites
14	INCOM24-319	Wire Arc Additive Remanufacturing of Mild Steel Components
15	INCOM24-320	Modelling and Analysis of Fiber Laser Micro-Channelling on Copper
16	INCOM24-322	Effect of Pin Geometries for Joining Dissimilar Metals During FSW
17	INCOM24-323	Characterization of Wire Arc Additively Manufactured SS308L: Study of Microstructure and Mechanical Properties
18	INCOM24-324	Successful Application of Artificial Neural Network for Prediction of Bead Width and Depth of Penetration in ATIG Welding
19	INCOM24-325	Reduction of Drilling Burr by Employing A Step Drill Over Using A Twist Drill

List of Accepted Papers for INCOM 2024:

Track 4: Material Science and Engineering

Sl. No.	Final Paper ID	Paper Title
1	INCOM24-0401	Study of Structural and DC Electrical Conductivity Mechanism of V ₂ O ₅ -Nd ₂ O ₃ -ZnO Glass System
2	INCOM24-0402	Crystallization Kinetics and Physio-Chemical Study of Multicomponent Chalcogenide M ₅ -Se ₆₀ -Te ₂₀ -Ge ₁₅ (M=Sn, Zn, Sb) Nanocomposites
3	INCOM24-0403	Parametric Analysis on Laser Marking on Pure Aluminium and Optimisation Using Multi-Objective Particle Swarm Optimization Technique.
4	INCOM24-0404	Synthesis and Characterization of Silicon Doped Graphene Oxide: A Novel Nanomaterial
5	INCOM24-0405	Corrosion Resistance of Electroless Ni-B-W Coatings
6	INCOM24-0406	Optimization of Electroless Ni-P-Cu Coating Under Dry Lubrication
7	INCOM24-0407	Investigation of Tribological Behaviour of Electrodeposited Ni-Co-P Alloy Film
8	INCOM24-0408	Low Cycle Fatigue Behaviour of 316L Austenitic Stainless Steel At 873K
9	INCOM24-0409	Effect of Temperature and Strain Rate on Tensile Flow Behaviour of 316LN Steel
10	INCOM24-0410	Experimental and Ann Evaluation on Tribological Performance of Corn-Husk Filler-Based Composites
11	INCOM24-0411	Microstructure Evaluation of Friction Stir Welded 316L Stainless Steel Pipes
12	INCOM24-0412	Rheological Characteristics of Al ₂ O ₃ -TiO ₂ Composite Inks for Direct Ink Writing
13	INCOM24-0413	Development of Silicon Carbide Thin Film for White Light Emission
14	INCOM24-0414	Comparison of Corrosion Resistance of Electroless Ni-B, Ni-B-W, Ni-B-Mo and Ni-B-W-Mo Coating Obtained From Stabilizer Free Bath
15	INCOM24-0415	Optimization of Microhardness of Electroless Ni- Cu -Sn- B Quaternary Coating By Using Taguchi Based Optimization
16	INCOM24-0416	The Effects of Treated Rice Husk Bio-Filler At Different Weight Fraction on Tribological Characteristics of Sustainable Composites
17	INCOM24-0417	Free Vibration of Sandwich Cantiliver-Folded Plate With A Homogeneous Core
18	INCOM24-0419	Predicting An Optimal Electroless Ni-B Coating Bath Composition for Higher Thickness Using ANN-GA Technique



INCOM 2024

2nd International Conference on Mechanical Engineering

5th & 6th January, 2024

Department of Mechanical Engineering
Jadavpur University, Kolkata, India



Sl. No.	Final Paper ID	Paper Title
19	INCOM24-0420	Study of Heat Treated RHA Armor Steel Plate Penetration Using Numerical Modeling
20	INCOM24-0421	Effect of Load Ratio on FCGR Behaviour of Alloy 617M Base
21	INCOM24-0422	Fabrication and Characterization of Mg-ZrO ₂ Composites
22	INCOM24-0423	Low Cycle Fatigue Behaviour of Cu-Cr-Zr Alloy in Solution Treated and Aged Conditions
23	INCOM24-0426	A Study on Kerf Width of EN36B Steel in WEDM
24	INCOM24-0427	Improving Mechanical Properties of Magnesium Matrix Composite Using Reutilization of E-wastes
25	INCOM24-0429	Ultrasonic Assisted Stir Casting Synthesis and Characterisation of Magnesium Metal Matrix Composites
26	INCOM24-0430	Formability Control Using Forming Limit Curve and Hole Expansion Ratio in Single Point Incremental Forming
27	INCOM24-0431	Synthesis and Characterization of Copper and Silver Coated Hydroxyapatite Particles
28	INCOM24-0433	Mechanical Characteristics of Glass Fibre Epoxy Resin Woven Matrix Composites
29	INCOM24-0434	Grey Taguchi Based Parametric Optimization Studies on Machinability of Cupola Slag Reinforced Lm11 Matrix Composites
30	INCOM24-0435	Utilization of Cupola Slag As Fine Aggregates in Green Concrete
31	INCOM24-0436	Mechanical Property Prediction of High-Entropy Alloys Using Machine Learning Methodology
32	INCOM24-0437	Multi-Response Optimization Via Taguchi-Based Grey Relational Analysis: A Case Study for TIG Welding on Is 2062A Steel Plate
33	INCOM24-0438	Three Interval Thixotropy Test (3ITT) of Alumina Dispersed in 14 Wt% Pluronic F-127 Hydrogel
34	INCOM24-0439	Study of The Electrical Property of Rear Earth Doped Manganites
35	INCOM24-0440	Environmental Influences on Physical and Mechanical Properties of Gudro Species of Domestic Abyssinia Banana (Gsdab) Fiber Epoxy Composite
36	INCOM24-0441	Green Nano-Fluid on The Tribological Properties of AA6082 Alloy
37	INCOM24-0442	Scratch Resistance Behavior of Al-Wc Nanocomposites
38	INCOM24-0446	Microstructure-Property Relations in A Hydraulically Pressed and Machined Medium Carbon Low Alloy QP Steel
39	INCOM24-0447	Evaluation of Strength and Durability Parameters of Geopolymer Concrete
40	INCOM24-0448	Numerical Analysis of Coir Filler Based Polymeric Composites for Evaluating The Flexural Performance



INCOM 2024

2nd International Conference on Mechanical Engineering

5th & 6th January, 2024

Department of Mechanical Engineering
Jadavpur University, Kolkata, India



Sl. No.	Final Paper ID	Paper Title
41	INCOM24-0449	Corrosion Performance of Banana Peel Based Epoxy Polymer Composite
42	INCOM24-0450	A Comparative Analysis of Mechanical Properties in FDM-Printed PLA and CFRPLA Components Under Different Printing Parameter Variations
43	INCOM24-0451	Effect of Deep Cryogenic Treatment with Post Tempering on Hardness of Nimonic-90
44	INCOM24-0452	Development and Testing of Mechanical Properties of Particle Reinforced Rubber Composite
45	INCOM24-0453	Microstructural and Tribological Characteristics Study of TiO ₂ Reinforced Ni-P-Mo Alloy Coatings
46	INCOM24-0456	Neural Network Modeling of Dual Phase Steel Coiling Temperature
47	INCOM24-0457	Minimization of Friction Coefficient of Electroless Ni-B Coatings Using Particle Swarm Optimization (PSO)
48	INCOM24-0458	Effect of Microstructure on Fatigue Crack Growth Rate of Ti-6Al-4V Alloy
49	INCOM24-0459	Characterization and Tribological Behaviour of Duplex Electroless Ni-W-P/Ni-P Coating



INCOM 2024

2nd International Conference on Mechanical Engineering

5th & 6th January, 2024

Department of Mechanical Engineering
Jadavpur University, Kolkata, India



List of Accepted Papers for INCOM 2024:

Track 5: Mechatronics and Control

Sl. No.	Final Paper ID	Paper Title
1	INCOM24-0501	Characteristics Study of Load-Sensing Hydraulic System
2	INCOM24-0505	Yaw Motion Control Strategy for Autonomous Underwater Vehicles (AUVs)
3	INCOM24-0507	PID Controlled Linear Motion of Low Cost Electric Actuator
4	INCOM24-0508	Position Control of Hydraulic Actuator of Electrohydraulic Positioning System Using Pid and Fuzzy-PID Controller
5	INCOM24-0510	Development Of IoT Based Device for Monitoring and Control of Lean Blowout in Model Gas Turbine Combustors Using Open Source Software and Hardware
6	INCOM24-0511	Conceptual Design of A Low Cost Underwater Glider for Educational Purpose

List of Accepted Papers for INCOM 2024:

Track 6: Energy, Energy Resources and Sustainability

Sl. No.	Final Paper ID	Paper Title
1	INCOM24-0601	Potential of Solar-Biomass-Based Hybrid Microgrid System in Indian Context
2	INCOM24-0603	Assessment of Melting Performance of a Phase Change Material-Based Energy Storage: Effect of Fins
3	INCOM24-0605	Evaluation of Performance and Emission Characteristics of Diesel Engine Using Microalgae Biodiesel with Nanoparticles
4	INCOM24-0606	A Comparative Study on Perovskite Solar Cell on The Basis of Electron Transport Layer and Its Thickness Optimization
5	INCOM24-0608	Techno-Economic and Social Impact of An EV-Charging Station: Comparison of Different Storages With Decentralized Hybrid Energy System
6	INCOM24-0609	Performance Study of A CI Engine Using Emulsified Diesel as Fuel
7	INCOM24-0610	Study of Electrooxidation of Methanol for Low Temperature Fuel Cell: Pd Based Pluri-Metallic Electrocatalysts
8	INCOM24-0612	Parametric Optimization of Energy Characteristics of Agricultural Waste Briquettes.
9	INCOM24-0613	Combustion, Performance and Emission Analysis: Alcohol-Diesel Blends
10	INCOM24-0614	Vehicle Mounted Solar and Wind Power Energy System
11	INCOM24-0615	Performance Analysis of Pressurized SOFC-Based Generation System from An Energy, Exergy, and Economic Viewpoint
12	INCOM24-0616	Organic Rankine Cycle-Based Biomass Energy Production Using Agricultural Residue in Rural Communities
13	INCOM24-0617	Investigation and Improvement of Performances of a Two-Stage Thermoelectric Generator
14	INCOM24-0619	Microstructural Investigation of Laser Engraving of Jalore Pink Granite
15	INCOM24-0620	A Detailed Review of The Combustion and Emission Characteristics of A CI Engine Using Nano-Particle Additives and Biodiesel and Diesel Blended Fuel
16	INCOM24-0621	Mathematical Modelling of Wave Generated by Sluice Gate Closure in A Trapezoidal Non-Prismatic Open Channel
17	INCOM24-0622	Effect of Irradiance and Temperature on Performance of A Solar Photovoltaic (PV) Power Plant in India
18	INCOM24-0624	Mechanical Vibrational Effect on Melting of Phase Change Material Applicable to Thermal Energy Storage



INCOM 2024

2nd International Conference on Mechanical Engineering

5th & 6th January, 2024

Department of Mechanical Engineering
Jadavpur University, Kolkata, India



Sl. No.	Final Paper ID	Paper Title
19	INCOM24-0627	Unlocking The Potential of Constructed Wetlands for Sustainable Development: Some Case Studies Focussing on Sustainable Development Goals (SDGs)
20	INCOM24-0628	Numerical Analysis of Entropy Generation in Solar Parabolic Trough Collector Using Water (H ₂ O) As Heat Transfer Fluid
21	INCOM24-0630	Biomass Regenerated Two-Stage Desiccant Cooling (TSDC) System Used for Greenhouse Farming in Hot and Humid Regions: A Seasonal Performance Study
22	INCOM24-0631	Mathematical Modelling and Numerical Simulation for Studying The Trajectory of Dust Particle Approaching Solar Photovoltaic Panel
23	INCOM24-0632	Understanding Sustainability of Agrarian Practices in Western Basins of South 24 Parganas
24	INCOM24-0633	Review of Different Catalytic Pyrolysis of Biomass
25	INCOM24-0634	Energetic and Exergetic Analysis of Basic and Regenerative Organic Rankine Cycle for Waste Heat Recovery System
26	INCOM24-0635	Evaluation and Multi-Objective Optimization of A Two-Stage Desiccant Cooling (TSDC) System Integrated With Biomass-Based Regeneration Unit for Sub-Tropical Greenhouse Cooling
27	INCOM24-0637	A Hybrid PTC-Dish Based Concentrated Solar Power Steam Generator: Design and Analysis
28	INCOM24-0638	Biomethane Polygeneration in India
29	INCOM24-0639	Process Modelling and Analysis of Producer Gas Reactors for Biomass-Derived Gas Quality Enhancement



INCOM 2024

2nd International Conference on Mechanical Engineering

5th & 6th January, 2024

Department of Mechanical Engineering
Jadavpur University, Kolkata, India



List of Accepted Papers for INCOM 2024:

Track 7: Interdisciplinary and Emerging trends in Mechanical Engineering

Sl. No.	Final Paper ID	Paper Title
1	INCOM24-0701	Performance Assessment of Electroosmotic Micromixers
2	INCOM24-0702	Structural Analysis of A Multi-Purpose Plucking Frame
3	INCOM24-0703	Mixed Ionic-Electronic Conductivity and Dielectric Relaxation of Na ₂ O Doped ZnO-P ₂ O ₅ -V ₂ O ₅ Quaternary Glass System
4	INCOM24-0704	Spontaneous Motion of Isotropic Active Particles in Complex Media
5	INCOM24-0705	Design and Numerical Analysis on Scaffold Architecture to Achieve Patient Specific Mechano-Biological Environment
6	INCOM24-0706	Modelling of Performance of Electric Three-Wheelers on Indian Roads For Development of Range Extension Strategy
7	INCOM24-0708	Implementation of Artificial Neural Network to Forecast Liquid Desiccant Regenerator Performance
8	INCOM24-0711	Effect of Bed and Nozzle Temperature on The Accuracy of FDM Parts Printed With PLA Filaments.
9	INCOM24-0712	Impact of Mechanical Stimuli on Cellular Response: A Computational Study
10	INCOM24-0713	Numerical Assessment of Electroosmotic Micromixer with Time-Varying Electric Potential
11	INCOM24-0714	Comparison of Linear Kinematic Parameters for Overground and Treadmill Walking
12	INCOM24-0715	Analysis of European Systems for Checking and Monitoring of Pantographs For Railway Transport Through 3D Laser Scanning
13	INCOM24-0716	Fracture Characteristics of Peek Biomaterial Plate with Circular Discontinuities Using Phase-Field Method
14	INCOM24-0717	Alkali Activated Composite Using Tannery Sludge and GGBs As an Alternative of Portland Cement For Sustainable Development
15	INCOM24-0718	Experimental Study on Micro-Milling of Bulk Metallic Glass
16	INCOM24-0722	Multi-Criteria Decision-Making for Laser Metal-Polymer Welding: A MACONT Approach
17	INCOM24-0723	Effect of Surface Wave on Infinite Reservoir Subjected to Dynamic Excitation
18	INCOM24-0726	PINNs To Detect and Quantify Damage in Dynamical Systems
19	INCOM24-0727	Genetic Algorithm-Based Cable Mode Deployment Strategy for Tensegrity Utility Bridge



INCOM 2024

2nd International Conference on Mechanical Engineering

5th & 6th January, 2024

Department of Mechanical Engineering
Jadavpur University, Kolkata, India



Sl. No.	Final Paper ID	Paper Title
20	INCOM24-0728	Assessing Flow Induced Maximum Scour Depth in Clear Water Conditions Using XGBoost and Random Forest
21	INCOM24-0729	Additive Manufacturing of Polylactic Acid (PLA) Based Biopolymer Using Inhouse Fabricated Filament and Its Characterization for Bio-Medical Application
22	INCOM24-0730	Thermal Challenges with Next Generation Computer Chips and Proposed Mitigations
23	INCOM24-0731	Modeling of Blood Flow Through A Deformable Artery
24	INCOM24-0732	Energy Amplification Approach for Analyzing Linear Stability of Rotating Microchannel Flows
25	INCOM24-0733	Development and Characterization of A Low-Cost Hemostatic Film With Marine Shell Waste
26	INCOM24-0735	AI & ML in Manufacturing Sectors in An Industry 4.0 Revolution
27	INCOM24-0739	Lithium-Ion Battery Thermal Management Using Phase Change Materials
28	INCOM24-0740	Predicting Heat Transfer Coefficient Using Bidirectional Long Shortterm Memory
29	INCOM24-0741	Optimizing Thermal Fluids: The Role of Machine Learning in Predicting Nanofluid Heat Capacity