

Technical Session -I A, B & C (18.12.09, 16:15 to 18:15 Hrs)

Parallel Session I-A : Mechanics of Solids (MS)

Chairperson: Prof. Sachin Maheshwari

Co-Chairperson: Dr. S. Thakur

Venue: ECE Committee Room, Block IV

- MS-1: Damage Detection and Localization in Reinforced Concrete Structures Using Vibration Based Monitoring.
P.Rathish Kumar, Toshiyuki Oshima, Shuichi Mikami, Yasunouri Miyamouri and Tomoyuki Yamazaki
- MS-2: Free Vibration Analysis of Jointed Tapered FRP Poles by Finite Element Method.
R.K.Mittal, S.M.R Khalili and B.Saboori
- MS-3: Parametric Instability of Composite Stiffened Plates.
A.K.L. Srivastava, Pravin Kumar & S.R. Pandey
- MS-4: Experimental Evaluation, Development and Statistical Analysis of Mathematical Correlations for Wire EDM Machining Parameters for Machining Titanium.
Ch.S.R.A.Srinivasa Rao, Ch.V.S. Parameswara Rao & MMM Sarcar
- MS-5: Eigen Value Approach and Finite Element Method to Study the Thermoelastic Response in a Fibre Reinforced Thin Annular Disc with Three Phase Lag Effect.
Mridula Kanoria.
- MS-6: Free Vibration of Thick Isotropic Plates Using Trigonometric Shear Deformation Theory
Jiji T George, Y.M.Ghugal
- MS-7: Connective Heat and Mass Transfer Flow Through Porous Medium in a Rotating Horizontal Channel.
R.Siva Prasad, Balasubramanyam
- MS-8: Generalized Thermoelastic Functionally Graded Orthotropic Hollow Sphere under Thermal Shock with Three Phase Lag Effect.
Avijit Kar, M.Kanoria
- MS-9: Linear Rate sensitive Dynamical Systems.
Gurmail S. Benipal
- MS-10: Finite Element Modeling of Vibration Based Mass Flow Sensors.
Pravin P. Patil, Satish C.Sharma, Prabhakar Singh and S.C.Jain
- MS-11: Quasi Static Thermal Deflection of a Thin Clamped Hollow Disk Due to Heat Generation.
K.C.Deshmukh, S.D.Warbhe, V.S.Kuklkarni,S.G.Ingale,
- MS-12: A Study of Noncircular 2 Lobe Multirecess Hydrostatic Worn Journal Bearing with Orifice Compensation.
Vikas M Phalle, Satish C Sharma and S.C.Jain

Parallel Session I-B: Mechanics of Fluids (MF)

Chairperson: Dr. S. K. Acharaya

Co-Chairperson: Dr. Vijander Singh

Venue: COE Committee Room, Block V

- MF-1: Electro Convection in Aqueous Solutions of Polymeric Liquids.
C.V. Srikrishna
- MF-2: Prediction of the Minimum Elutriation Velocity in Reverse Fluidization.
U.P.Ganguly
- MF-3: A Model for Predicting Magnetic Targeting in the Permeable Blood Vessel: The Effect of Blood Rheology.

- Sachin Shaw, P.V.S.N Murthy & S.C.Pradhan
- MF-4: Effect of Melting and Thermo Diffusion on Natural Convection Heat Mass Transfer in a Non Newtonian Fluid Saturated Darcy Porous Medium
Rishi Raj Kairi, P.V.S.N.Murthy
- MF-5: Homotopy Analysis Method for Flow over Nonlinearly Stretching Sheet with Magnetic Field.
S.B. Sathyanarayana, L.N.Achala
- MF-6: Three Dimensional Laminar Dispersion of Solute in a Couple Stress Fluid Flow Through a Rectangular Channel.
S. Manjunath, P.G.Siddheshwar
- MF-7: The Effects of Variable Viscosity and Thermal Conductivity on MHD Oscillatory Free Convective Flow Past a Vertical Plate in Slip Flow Regime with Variable Suction and Periodic Plate Temperature.
Mira Choudhury, G.C.Hazarika
- MF-8: Peristaltic Flow of a Viscoelastic Fluid with the Fractional Time Derivative in a Tube.
Dharmendra Tripathi
- MF-9: Study of Flow Parameters of Blood In The Presence of Magnetic Field
G. Manjunatha, K. S. Basavarajappa
- MF-10: Lorenz Model for Rayleigh Benard Convection with Temperature Dependent Heat Source (sink)
Stephen Titus, P.G.Siddheshwar
- MF-11: Strong Plane Shock Waves in Weak Azimuthal Magnetic Field
Arvind Kumar, R.P.Yadav K.Kumar & Manoj Kr.Yadav
- MF-12: Nonlinear Ferroconvection Using a Thermal Non Equilibrium Model
Sunil, Amit Mahajan, Poonam Sharma and Pavan Kumar Bharti
- MF-13: The Effect of Mass Transfer with Mixed Convection Boundary Layer Flow Along Vertical Moving Thin Needles with Variable Heat Flux
Vandana Bisht, Manoj Kumar and Ziya Uddin

Parallel Session I-C: Space Dynamics, Atmospheric Science Oceanography and Biomechanics (SDA-OB)

Computational Fluid Dynamics (CFD)

Chairperson: Dr. N. V. Vighnesam

Co-Chairperson: Dr. S. Pranesh

Venue: Room # 102, Block 8A

- SDA-OB-1 Linear Stability of Equilibrium Points in Photogravitational Restricted Three Body Problem When Both Primaries are Triaxial Rigid Bodies and Oblate Spheroid.
Avdesh Kumar, B. tshwar
- SDA-OB-2: Nonlinear Stability in Generalised Photogravitational Restricted Three Body Problem.
B.Ishwar
- SDA-OB-3: Two Impulse Transfer Trajectories From Earth to Mars.
M.Xavier James Raj, M.Mutyalarao & R.K.Sharma
- SDA-OB-4: Simulation of Synoptic Features along the West Coast of India.
C. Shaji
- SDA-OB-5: Periodic Orbits of Second Kind in the Restricted Three Body Problem with Oblateness
R.K.Sharma
- SDA-OB-6: Influence of Wall Properties on Peristaltic Transport of a Micropolar Fluid in an Inclined Channel
Gurunath C. Sankad , G.Radhakrishnamacharya
- SDA-OB-7: String Cosmological Models in Lyra Geometry
J.K.Singh

- CFD-1: Solution to Magnetogasdynamics.
T.Raja Sekhar
- CFD-2: A Numerical Solution for the Effect of Radiation on Flow of Micropolar Fluid Past a Horizontal Stretching Sheet Through Porous Medium with Viscous Dissipation.
Rajesh Kumar Sharma, R.Bhargava and I.V.Singh
- CFD-3: MHD and Radiation Effects on Mixed Convection Flow in a Non Darcy Porous Medium.
Pranitha Janapthla, D.Srinivasacharya & Ch. Ramreddy
- CFD-4: Effect of Double Stratification on Free Convection in a Micropolar Fluid.
Ch. Ramreddy, D. Srinivasacharya
- CFD-5: Series Solution for the Darcy Forchheimer Brinkman Equation By the Picard Method.
M.S.Jagadeesh Kumar, Pradeep G.Siddheswar and G.Suresh Singh
- CFD-6: Longitudinal and Transverse Dispersion Assessed by a Coupled Inverse Model of Groundwater Flow and Mass Transport: A case Study.
A.K.Rastogi, V.P.Huggi

Technical Session II: A, B & C (19.12.09, 11:00 to 13:00 Hrs)

Parallel Session II-A : Mechanics of Solids (MS)

Chairperson: Dr. P. Ramesh Babu

Co-Chairperson: Dr J. K. Singh

Venue: ECE Committee Room, Block IV

- MS-13: Thermal Stresses in a Simply Supported Plate with Thermal Bending Moments.
Madhavi V Khandait, K.C.Deshmukh, S.D.Warbhe & V.S.Kulkarni
- MS-14: Thermal Stresses Due to Internal Heat Generation in a Thin Hollow Disk by Quasi Static Approach.
Yusuf Iqbal Quazi, K.C.Deshmukh, S.D.Warbe & V.S.Kulkarni
- MS-15: Inverse Heat Conduction Problem in a Semi Infinite Circular Plate and Its Thermal Stresses By Quasi static Approach.
Ganesh D.Kedar, K.C.Deshmukh, S.D.Warbe & V.S.Kulkarni
- MS-16: Transient Thermal Stresses Due to Axisymmetric Heat Supply in a Semi Infinite Thick Circular Plate.
S.D.Warbhe, K.C.Deshmukh, V.S.Kulkarni, V.S.Gogulwar,
- MS-17: Wave Propagation in Rotating Transversely Isotropic Thermoelastic media.
Deepak Grover, J.N. Sharma
- MS-18: Static Analysis of Cylindrical Shell Panels.
Salil Haldar, Aditi Mujumdar and Dipak Sengupta
- MS-19: Mass Sensitivity of Single Walled Carbon Nano Tube Based Non Mechanical Resonators.
Anand Y Joshi, Satish C.Sharma & S.P. Harsha
- MS-20: A Cylindrical Shell Type Crack in a Circular Cylindrical Shell.
P.S.Kushwaha, Anjana Singh, Puneet Sharma
- MS-21: Application of Asymptotic Method in the Theory of Thermoelasticity Without Energy Dissipation.
Sanjeev Kumar, P.K.Sharma and J.N. Sharma
- MS-22: A Griffith-Crack In Circular Cylindrical Shell of Finite Length.
Harendra Singh, P.S.Kushwaha and Amibhav Khaidelwal
- MS-23: The Stress-Intensity Factor for a Griffith Crack in an Isotropic Circular Cylindrical Shell of Infinite Length.
Anjana Singh, P.S. Kushwaha, Puneet Sharma
- MS-24: Comparison Between Consolidation of a Poroelastic Halfspace with Positive or Negative

Poisson's Ratio due to Surface Loads.
Raman Kumar, Sunita Rani and Sarva Jit Singh

Parallel Session II-B: Mechanics of Fluids (MF)

Chairperson: Dr. S. P. Anjali Devi

Co-Chairperson: Dr. Smriti Srivastava

Venue: COE Committee Room, Block V

- MF-14: MHD Free Convection Flow Past a Tilted Porous Plate in Presence of Radiation.
Ziya Uddin, Manoj Kumar and Vandana Bisht
- MF-15: Determination of the Critical and Equilibrium Time and Their Relationship in the Sedimentation of Aqueous Coal Slurries
U.P.Ganguly, Asit Kumar Saha
- MF-16: Free Convective Flow of Viscous Conducting Fluid Through a Porous Medium Bonded by an Oscillating Porous Plate in Slip Flow Regime.
C. Chandana, K.Jagadeeswara Pillai
- MF-17: Simulating Dry Weather groundwater flow in Temperate Climates using BILAN
Amartya Kumar Bhattacharya
- MF-18: Methodology of Groundwater Assesment.
Amartya Kumar Bhattacharya, Gamal ElSaeed
- MF-19: Geology of Kolkata with a special reference to Groundwater Flow and Land Subsidence.
Amartya Kumar Bhattacharya
- MF-20: Studies on the Effects of Variable Viscosity and Thermal Conductivity on Stagnation Point Flow and Heat Transfer of a Micropolar Fluid With Uniform Suction and Blowing.
Prakash Jyoti Borthakur, G.C.Hazarika
- MF-21: Homotopy Perturbation Solution for Classical Oscillator Problems.
B. Hameeda Banu Begum, P.G.Siddheshwar & B.N. Meera
- MF-22: Steady and Unsteady Convection in Anisotropic Porous Layer with Internal Heat Source (Sink).
Vanishree R.K., Pradeep G.Siddheswar
- MF-23: Ferromagnetic Liquid Flow Due to Gravity Aligned Stretching of an Elastic Sheet.
H.L.S. Rani Titus, Annaninia Abraha
- MF-24: Two Fluid Layered Flow of an Ionized Gas in a Channel Between Two Parallel Porous Walls under Applied Transverse Magnetic Field with Hall Effect.
T. Linga Raju, .M. Nagavalli
- MF-25: Heat Transfer of Two Fluid Layered Flow of an Ionized Gas in a Channel Between Two Parallel Porous Walls Under Transverse Magnetic Field with Hall Effect.
M. Nagavalli, T. Linga Raju

**Parallel Session II-C: Computer Applications, Graphics Theory and Robotics
(CA-GTR)**

Chairperson: Dr. R.K. Sinha

Co-Chairperson: Dr. K. Ramji

Venue: Room # 102, Block 8A

- CA-GTR-1: Microprocessor Based Software Applications in Manufacturing & Sintering of Ferrites and Similar Ceramic Components.
Manu Srivastava, Deepal Bhalla
- CA-GTR-2: Navigation and Effective Obstacle Avoidance of a Mobile Robot using Neuro Fuzzy Approaches.
Deepak Bhalla, Manu Srivastava
- CA-GTR-3: Hiding of Muli Letter Frequency in RSA Algorithm.

CA-GTR-4:	B.S.Chengappa, C.V.Srikrishna An Overview of Knowledge Discovery and Data Mining . S. Manjunath,
CA-GTR-5:	On the Rate of Convergence for Certain Family of Linear Positive Operators. Vijay Gupta, Prerna Maheshwari
CA-GTR-6:	Hamiltonian Laceability in $G(n,2)$ Graphs. Leena N.Shenoy, R. Murali
CA-GTR-7:	Quality Rigour in Software Project Life Cycle. A.Pathanjali Sastri, V.Esther Jyothi & K. Nageswara Rao
CA-GTR-8:	Study of Buffer Storage in Video Channelization. Satish Chand
CA-GTR-9:	Fourier Transform: 2D-Represntation Satish Chand
CA-GTR-10:	Simulation of TranMSission Model to Minimize the Total Installatio Cost of TranMSission Media Optical Fibre. Archana Sharma, P.R.Sharma
CA-GTR-11:	Application of Quantitative Feedback Control Theory Bherulal, Y. V. Hote, and J. R. P. Gupta
CA-GTR-12:	Study of fractional order PID controller for dc motor speed control. Mehra Vishal, Smriti Srivastav.
CA-GTR-13:	Information Rate in Physical Network Coding With Channel Estimation <i>Jaypal Chouhan and Parul Garg</i>

Technical Session_III: A, B & C (19.12.09, 15:30 to 17:30 Hrs)

Parallel Session III-A : Mechanics of Solids (MS)/ Statistical Mechnics

Chairperson: Dr. O. P. Thakur

Co-Chairperson: Dr. D. Srinivasacharya

Venue: ECE Committee Room, Block IV

MS-25:	Buckling of Shaft Under Torsion and Flexure. V.K. Verma
MS-26:	Interaction effect on Stress Concentration Factor in Presence of Auxiliary holes in a Rectangular Isotropic Plate with Central Circular Hole. Shubhrata Nagpal, Nitin Jain, S.Sanyal & S.K. Dhagat
MS-27:	Geometric Effects of the Distributed Attached Mass on the Natural Frequency of Thick Shell Using Higher Order Theory. R.K.Mittal, S.M.R.Khalli, S.Tafazoli,K Malekzadeh and B, Saboori
MS-28:	Finite Element Method and its Applications to Study the Dynamic Behaviour of Biological Systems. D.Ramajogi Naidu, K.Ramji
MS-29:	Crack Growth Behaviour in the Lever of Guide Vane MechaniMS of a Horizontal Francis Turbine. Prakash Kantilal Dhakan, Nishant H Shah
SM-1:	Theoretical Scheme for Dense Hard Body Fluid Mixtures. Madan Kumar Choudhary, T.K.Dey,M.K.Sinha and P.K. Sinha
SM-2:	Thermophysical Properties of Molecular Fluid Halogens. Kudan Kumar Singh, T.K.Dey, Anjana Kumari, Jyotish Kumar and S.K.Gokhul
SM-3:	Numerical Solution of 3-D Nonlinear Heat Transfer Problem Using EFGM.

Akhilendra Singh, I.V.Singh
SM-4: Numerical Solution of Burgers Equation Using Quadratic B-spline Finite Element Method.
Sharanjeet Dhawan, Sheo Kumar and Saurabh Kumar

Parallel Session III-B: Mechanics of Fluids (MF)

Chairperson: Dr. J. K. Misra

Co-Chairperson: Dr. Mridula Kanoria

Venue: COE Committee Room, Block V

- MF-26: MHD Forced Convection Flow in a Horizontal Porous Channel with Anisotropy Permeability
L.Hari Krishna, K.Jagadeeswara Pillai
- MF-27: Thermal Radiation and Magnetohydrodynamic Effects on Heat and Mass Transfer
Chemically Reacting Fluid Over a Semi Infinite Vertical Porous Plate with Periodic Suction.
Sahin Ahmed
- MF-28: Boundary Layers in Oscillatory MHD Visco Elastic Flow Past a Porous Vertical Plate with
Periodic Suction.
Utpal Jyoti Das
- MF-29: Oscillatory Magnetoconvection in Jeffrey-Boussinesq Liquids.
G. Jayalatha, G.N. Sekhar
- MF-30: Free Convective Flow of a Visco Elastic Fluid Along a Vertical Channel With Heat Transfer.
Madhumita Mahanta, Rita Choudhury
- MF-31: Prandtl Number Dependence of MHD Flow Past an Infinite Vertical Plate Immersed in a
Stably Stratified Fluid.
Anjana Bhattacharya, R.K.Deka
- MF-32: Hall Current Effects in Generalized Couette Flow under the Influence of Magnetic and
Electric Fields Through Porous Media.
Venkateswara Raju Konduru, K.Jagadeeswara Pillai
- MF-33: Convection in a Porous Medium with Heat Generation and Density Maximum:Non
Equilibrium Regime.
S.Saravanan
- MF-34: Chemical Reaction, Double Dispersion Effects on Heat and Mass Transfer in Non Darcy Free
Convective Flow over a Horizontal Surface
P.Kameswara Kameswaran, A.S.N. Murti
- MF-35: Rayleigh Benard Megnetoconvection in Boussinesq Stokes Suspension with
Thermorheological and Heat Source Effects.
D. Uma, V.Ramachandra Murthy
- MF-36: Melting with Thermal Dispersion and Radiation on Non Darcy Mixed Convective Flow From
a Vertical Plate Embedded in a Saturated Porous Medium.
K. Hemalatha, B.D.C.N. Prasad
- MF-37: Couette Flow and Heat Transfer of Two Imcompressible ,Immiscible Liquids Occupying
Different Heights Between Two Parallel Plates in a Rotating System.
Ch. Baby Rani, G. Koteswara Rao

Parallel Session III-C: Composite Materials (CM)

Chairperson: Dr. Vijay Gupta

Co-Chairperson: Dr. R. Shiva Prasad

Venue: Room # 102, Block 8A

- CM-1: Automotive Applications of Metal Matrix Composites.
Rajesh Purohit
- CM-2: Thermo Elastic Analysis of Functionally Graded Aerodynamic Wing Structures in Supersonic
Conditions.
V. Pramod Kumar, B.Pradhan

CM-3:	Errors in Estimation of Electrostrictive Strains in Dielectric Elastomers <u>Asha Dahiya</u> , O. P.Thakur, Anjani Kumar Singh & Nidhi Agarawal
CM-4:	Thermal Buckling of Hybrid Laminated Composite Plate with Circular Cutout. K.Santosh Kumar, Ramesh Babu
CM-5:	Suitability of Electro-Elastic Materials in Capacitive Sensing Nidhi Agarawal, O. P. Thakur, Anjani Kumar Singh, Asha Dahiya
CM-6:	Design Analysis and Manufactureing of Composite Casing for Hyper Velocity Vehicle. K.Ramaswamy, Ramesh Babu
CM-7:	Dielectric behaviour of rare earth substituted nano-ferrites. Anu Rana and O P Thakur
CM-8:	Theoretical Modelling of Electromechanical behaviours of Elastic Dielectrics. Anjani Kumar Singh, O P Thakur, Asha Dahiya and Nidhi Agarawal
CM-9:	A Virtual Internal Bond Method for the Estimation of Crack Growth Behaviour in Nanomaterials. G.Balachandar, B.Pradhan
CM-10:	Static Analysis of Delaminated Composite Conoidal Shells Using Finite Element Method. Suman Kumari, Dipankar Chakravorty
CM-11:	An Investigation of Frp Composite Laminae Behaviour Under Low Velocity Impact Load. Ramesh Babu, K.Devraj Kumar
CM-12:	Adhesion Failure of Bonded Single Lap Joints in FGM Plates. B. Aruna Sri, R.R.Das & B.Pradhan

Technical Session_IV A, B & C (20.12.09, 11:00 to 13:00 Hrs)

Parallel Session IV-A : Operations Research (MCM-OR)

Chairperson: Dr. S. Manjunath

Co-Chairperson: Dr. Niraj Kumar

Venue: ECE Committee Room, Block IV

MCM-OR-1:	A Uniformly Convergent Hybrid Numerical Method on Shishkin Mesh for Modified Burgers Equations. Ashish Awasthi
MCM-OR-2:	Exact Error Report on SLR and LALR Parsers. U. Srinivasa Rao, Pawan Kumar
MCM-OR-3:	Power Series Solution for Skyrme Model for Nucleons Under Spherical Symmetry. L.N. Achala, N.M. Bujurke
MCM-OR-4:	A Numerical Simulation of Multiple Cracks Using Enriched EFGM. Mohit Pant, I.V.Singh & B.K.Mishra
MCM-OR-5:	Quintic B-Spline Collocation Method for Fourth Order Boundary Value Problems. P. Murali Krishna, K.N.S.Kasi Viswanadham
MCM-OR-6:	Vibration Analysis of Over Head Travelling Crane. Rajwinder Singh, V.P.Singh
MCM-OR-7:	Mathematical Analysis of the Effects of Injection and Suction in a Rotating Fluid. Satyanarayana Badeti, Somaraju Vempaty
MCM-OR-8:	New A stable Method for Numerical Solution of Burgers Equation. M. Ebadi, M.Y.Gokhale
MCM-OR-9:	Gauss Legendre Quadrature Formulas for Composite Numerical Integration Over Arbitrary Linear Tetrahedral in Euclidean Three Dimensional Space. K.V. Nagaraja, H.T.Rathod
MCM-OR-10:	He's Variational Iteration Method for Higher Order Linear and Non Linear

MCM-OR-11:	Boundary Value Problems. K.Aruna, A.S.V.Ravi Kanth Computer Extended Series Solution for Steady Flow in a Porous Pipe With Slip Velocity. Nagraj N. Katagi
MCM-OR-12:	Computer Assisted Solution of the Darcy Brinkman Forchheimer Equation Using the Continuation Method for Flow Through Rectangular Porous Channels and Cylindrical Porous Annulus. S.B. Ashoka, P.G.Siddheshwar

Parallel Session IV-B: Mechanics of Fluids (MF)

Chairperson: Dr. P. G. Siddheshwar

Co-Chairperson: Dr. N. K. Choudhury

Venue: COE Committee Room, Block V

- MF-38: Soret and Radition Effects on a Transient MHD Free Convection with Mass Transfer from an Impulsively Started Infinite Vertical Plate.
Hemanta Kr. Sarmah, N.Ahmed
- MF-39: Unsteady Free Convective Flow Past an Infinite Moving Vertical Cylinder.
Ashish Paul, R.K.Deka
- MF-40: MHD Mixed Convection and Mass Transfer From an Infinte Vertical Porous Plate with Chemical Reaction in Presence of a Heat Source.
Dipak Sarma, H.Deka and N Ahmed
- MF-41: Mixed Convective MHD Flow of a Non Newtonian Fluid Past a Vertical Porous Oscillating Plate with Constant Heat Flux.
Debasish Dey, Rita Choudhury
- MF-42: Effect of Magnetic Field on the Onset of Rayleigh Benard Convection in Boussinesq Stokes Suspensions with Time Periodic Boundary Temperatures.
Sangeetha George, S. Pranesh
- MF-43: A Study of Similarity Solutions for Non Conformal and Non Static Accelerating Perfect Fluid Plates in 5-D Flat Space.
Sachin Kumar, Y.K.Gupta & J.R.Sharma
- MF-44: Rayleigh Benard Convection with Temperature Modulation.
Renu Bajaj, Jitender Singh
- MF-45: An Analytical Study on Cariolis Force and Double Diffusive Convection in Isotropic and Anisotropic Porous Channels.
A. Pranasha Setty, P.M.Balagondar
- MF-46: Thermal Convection in Micropolar Fluids Occupying a Rectangular Box.
N.P.Chandrashekar, S. Manjunath
- MF-47: Unsteady Convective Diffusion of Solute in a Hagen Poiseuille Flow of a Simplified Cross Liquid.
Shripad Markande, P.G.Siddheshwar
- MF-48: MHD Flow of a Micropolar Fluid Dut to An Inclined Stretching Sheet.
L. Venkata Reddy, S.Manjunath
- MF-49: Laminar MHD Flow in the Entrance Region of a Plane Channel.
S.Venkateswarulu, M.Veera Krishna and R. Siva Prasad

Parallel Session IV-C: Composite Materials (CM)

Chairperson: Dr. G. S. Benipal

Co-Chairperson: Dr. T. K. Dey

Venue: Room # 102, Block 8A

CM-13:	Design and Analysis of Composite Prosthetic Pylon. S.K.Abdul Khadeer, Ramesh Babu
CM-14:	Delamination Damage Analysis of Adhesive Bonded Tabular Single Lap Joints in Laminated FRP Composites. B. Pradhan, R.R.Das
CM-15:	Performance of Vertically Reinforced 1-3 Piezoelectric Composites for Active Damping of MSart Laminated Composite Panels. A.K.Pradhan
CM-16:	Effect of Fibre Orientation on Abrasive Wear Behaviour of Natural Fibre (Lantana-Camara) Reinforced Polymer Composite Chittaranjan Deo, S.K.Acharya
CM-17:	Pressure Settlement Behaviour of Footing Resting on Granular Soil Reinforced with Waste Tyre Chip. Ravi Kant Mittal
CM-18:	Friction and Wear Behaviour of RH Ceramic Reinforced Epoxy Composite. Gujjala Raghavendra, S.K.Acharya
CM-19:	On the Elastic Plastic Analysis of Metal Matrix Laminated Composite Plate. Priyank Verma, Debashis Khan
CM-20:	A Study on the Effect of Surface Treatments on the Flexural Strength of Bagasse Fibre Reinforced Epoxy Composite. Suraj Kumar Mehar, S.K.Acharya and Punya Priya Mishra
CM-21:	Effect of Location of Circular Cutout on Stability and Failure Characteristics of Composite Laminate. Shamsher Bahadur, Dinesh Kumar
CM-22:	Microstructural and Mechanical Aspects of Bagasse Fibre Reinforced Epoxy Composites at Liquid Nitrogen Temperature. S.K.Acharya, P.Mishra
CM-23:	Mechanical Properties of Polymer/ Bamboo Fiber Composites. Anu Gupta, Ajit Kumar
CM-24:	Solid Particle Erosion of Glass Fibre Reinforced Red Mud Filled Epoxy Resin Composites. Niharika Mohanta, S.K.Acharya

Technical Session V: A, B & C (21.12.09, 9:30 to 12:30 Hrs)

Parallel Session V-A : Operations Research (MCM-OR)/ Mechanics of Fluids (MF)

Chairperson: Dr. Satish Chand

Co-Chairperson: Dr. C. Shaji

Venue: ECE Committee Room, Block IV

MCM-OR-13:	Simulation of Ground State Properties of Bulk Solids and Their Nano Particles Using DFT. Manish Verma, M.Gautam,P.Tripathy,G.Misra and K.P.Tiwari
MCM-OR-14:	The Use of Cubic Arc in Matching Curved Boundary By Point Transformations for Quartic Order Tringular Element. V. Kesavulu Naidu, K.V.Nagaraja
MCM-OR-15:	Non Markovian Bulk Arrival General Bulk Service Queueing System With Two Heterogeneous Services and Multiple Vacations.

MCM-OR-16:	K.S.Rama Swami Numerical Solution of 3-D Nonlinear Heat Transfer Problem Using EFGM Akhilendra Singh and I. V. Singh
MCM-OR-17:	Approximation Properties of q–Bernstein Polynomials. Honey Sharma
MF-66:	An analytical study of a weakly two-dimensional non-linear dynamics of a Walters' liquid B around a flexible sheet undergoing quadratic stretching. P.G. Siddheshwar ^{a*} , Andrew Chan ^b and U.S. Mahabaleswar ^c
MF-67:	Effects Of Variable Viscosity And Thermal Conductivity On Hydromagnetic Boundary Layer Micropolar Fluid Flow Over A Stretching Surface Embedded In A Non-Darcian Porous Medium With Radiation. B. Borgohain, G. C. Hazarika
MF-68:	A Study of an Arbitrary Stokes Flow Past a Fluid Coated Sphere in a Fluid of a Different Viscosity. Debarjoyti Choudhuri and B. Sri Padmavati
MF-69:	Study of Flow Parameters of Blood in The Presence of Magnetic Field. G.Manjunatha, K.S.Basavarajappa
MF-70:	Nonlinear Hydromagnetic Flow and Heat Transfer with Variable Conductivity and Dissipation Effects Over a Stretching Porous Surface Embedded in a Porous Medium. S. P. Anjalidevi , Sara Mathew
MF-71:	Effects of variable viscosity and thermal conductivity on combined free-forced convection and mass transfer flow past a vertical porous plate in a porous medium. Utpal Sarma
MF-72:	Self Similar Shocks in a Reacting Gas. Randheer Singh and J. Jena
MF-73:	MHD Free Convective and Mass Transfer Flow of Viscous Fluid through a Porous Medium with Heat Source. N. K. Chaudhury, S. Mohanty, N. Mishra
MF-74:	Two-dimensional natural convection in a cavity filled with an anisotropic porous Material. K. Tiwari, A. K. Singh, N. C. Sacheti and P. Chandran
MF-75:	Financial portfolio optimization for discrete and continuous time model. Siddhartha P. Chakrabarty
Parallel Session V-B: Mechanics of Fluids (MF)	
Chairperson: Prof. V. D. Sharma	
Co-Chairperson: Dr. Mamta Misra	
Venue: COE Committee Room, Block V	
MF-50:	Effect of Temperature Modulation and Maxwell Cattaneo Law in a Couple Stress Fluid. S.Pranesh
MF-51:	Double Diffusive Convection in a Micropolar Fluid. N. Arun Kumar

- MF-52: Effect of the Rayleigh Benard Convection in a Second Order Fluid with Maxwell Cattaneo Law and General Boundary Conditions.
Smita S. Nagouda, S. Pranesh
- MF-53: Marangoni Magneto Convection in a Micropolar Fluid with Maxwell-Cattaneo Law.
Kiran R.V.
- MF-54: The Effect of Blood Rheology on Magnetic Targeting in the Blood Vessel.
P.V.S.N.Murthy, Sachin Shaw and S.C.Pradhan
- MF-55: Pulsatile Flow of Blood Through a Stenosed Tube Under Periodic Body Acceleration and Magnetic Field.
Pankaj Mathur, Surekha Jain
- MF-56: Laminar Natural Convection For Fluids of All Prandtl Numbers with Variable Viscosity and Internal Heat Generation.
G. Santhi, C.N.B.Rao and A.S.N. Murthy
- MF-57: Existence Uniqueness and Sensitivity Analysis of Solution of Two Point Boundary Value Problem Associated with a Non Linear First Order Difference System.
Ramu Malladi, P.V.S.Anand
- MF-58: Radiation Effect on Flow Past an Accelerated Vertical Plate an Exact Solution.
Dharmeswar Deka, R.K.Deka
- MF-59: Electrohydrodynamic Rayleigh Taylor Instability in a non Newtonian Fluid Layer.
Krishna B.Chavaraddi, N.Rudraiah & IS.Shivakumara
- MF-60: Hall Current Effects on Oscillatory Flow of Viscous Conducting Fluid in a Tapered Channel Bounded Above by a Permeable Bed.
K. Janardhan, K.Jagadeeswara Pillai
- MF-61: Study of Non Linear Dynamical Processes Leading to Anharmonic Effects Using Homotopy Perturbation Method.
B.N. Meera, P.G.Siddheshwar
- MF-62: Study of Axi Symmetric Flow of Electrically Conducting Fluid over a radiallt Stretching Surface Under a Transverse Magnetic Field.
Deva Kanta Phukan
- MF-63: Mixed Convection of Electrically Conducting and Non Conducting Fluids in a Vertical Enclosure.
J. Prathap Kumar, J. C. Umavathi & Basawaraj M Biradar
- MF-64: Steady Hydro Magnetic Flow of a Couple Stress Fluid Through a Composite Medium in a Rotating Parallel Plate Channel with Porous Bed on the Lower Half.
M. Veera Krishna, S.V.Suneetha and R.Siva Prasad
- MF-65: Unsteady MHD Flow, Heat Mass Transfer Through a Rotating Porous Medium.
Mukesh Kumar Sharma

Parallel Session V-C: Experimental Techniques (ET)/ Composite Materials (CM)

Chairperson: Prof L. S. Tanwar

Co-Chairperson: Dr. S. P. Singh

Venue: Room # 102, Block 8A

- ET-1: Influence of Multi Axis Whole Body Random Vibrations on Sedentary Activity-
An experimental Study.
Mahesh K Bhiwapurkar, V.H.Saran, S.P. Harsha & V.K.Goel
- ET-2: Some Studies on Electric Discharge Drilling (EDD) of Hybrid Aluminium Matrix
Composites Based on Taguchi Techniques.
Shankar Singh, V. Sahni

- ET-3: Active Control of Electrodynamical Shaker Using Intelligent Technique.
K.P.S. Rana, Vineet Kumar, Ashish Parkash and Aniket Srivastava
- ET-4: Vibration Based Fault Diagnosis of Rolling Element Bearings Using Response Surface Method.
Pavan Kumar Kankar, Satish C.Sharma & S.P. Harsha
- ET-5: Experimental Studies on Dynamic Behaviour of Cantilever Slender Pipe Conveying Compressed Air.
Narasimha Marakala, P.Kondaiah, Appu Kuttan K K and Ravikiran Kadoli
- ET-6: Differential scanning calorimetric study of phase transitions for some Cyclohexanediols.
Sanjeev Thakur and Arvind Kumar
- ET-7: Aspects of Ion selective electrodes study: Chemical Sensors.
Aruna Rawat, Deepshikha, Sulekh Chandra, Anjana Sarkar, Deepali Jain
- ET-8: Intelligent Controller for Spring-Mass System.
Vineet Kumar, K.P.S Rana, Ashish Parkash and Aniket Srivastava
- ET-9: A DAQ Card Based Virtual Instrument For Controlled Random Vibration Generation.
K.P.S Rana, R. Singh and K.S. Sayann
- CM-25: Initiation and Propagation of Delamination Damages in Adhesive Bonded Tabular Socket Joints in Laminated FRP Composites.
Rashmi Ranjan Das, B. Pradhan
- CM-26: Nonlinear Finite Element Analysis of Prestressed Concrete Slab.
Sanjoy Das Neogi, Dipankar Chakravorty
- CM-27: Use and Performance Evaluation of Vertically Reinforced 1-3 Piezoelectric Composites for Active Damping of MSart Laminated Composite Shells.
V.K.Gaba, A.K.Pradhan:
- CM-28: Short fiber reinforced Polymer Composites-Mechanical properties and industrial Applications.
J. Himani, S. Ranjana, J. Purnima