

**NATIONAL MEET OF RESEARCH SCHOLARS IN
MATHEMATICAL SCIENCES-09
(NMRSMS-09)**

DECEMBER 19-23, 2009



Department of Mathematics, IIT Roorkee, Roorkee

December 19- December 23, 2009		
Venue: Department of Mathematics, IIT Roorkee		
Dec. 19, Saturday	8:00-9:15	Registration
	9:15-10:30	Inaugural session
	10:30-11:00	Inaugural Tea
	11:00-12:00	Technical Session (T1)
	12:00-13:00	Interactive Session
	13:00-14:15	Lunch Break
	14:15-15:30	Paper presentation (S1)
	15:30-15:45	Tea Break
	15:45-17:00	Paper presentation (S2)
	17:00 Onwards	Computer Lab Visit
Dec. 20, Sunday	9:00-11:00	Technical Session (T2)
	11:00-11:15	Tea Break
	11:15-12:30	Paper presentation (S3)
	12:30-13:15	Interactive Session
	13:15-14:15	Lunch Break
	14:15-15:30	Paper presentation (S4)
	15:30-15:45	Tea Break
	15:45 Onwards	Hardwar visit

Dec. 21, Monday	9:00-11:00	Technical Session (T3)
	11:00-11:15	Tea Break
	11:15-12:15	Technical Session (T4)
	12:15-13:15	Library Visit
	13:15-14:15	Lunch Break
	14:15-15:30	Paper presentation (S5)
	15:30-15:45	Tea Break
	15:45-17:00	Paper presentation (S6)
	19:00 Onwards	Cultural Programme followed by Dinner
Dec. 22, Tuesday	9:00-11:00	Technical Session (T5)
	11:00-11:15	Tea Break
	11:15-12:15	Technical Session (T6)
	12:15-13:15	Interactive Session
	13:15-14:15	Lunch Break
	14:15-15:30	Paper presentation (S7)
	15:30-15:45	Tea Break
	15:45-17:00	Paper presentation (S8)
Dec. 23, Wednesday	9:00-10:30	Award papers presentation
	10:30-11:00	Feed Back/Response
	11:00-11:15	Tea Break
	11:15-12:15	Technical Session (T7)
	12:15 Onwards	Valedictory Function followed by Lunch

Note: The breakfast and Dinner will also be provided everyday at 8:00 AM & 20:00PM respectively in Department Lawn, Department of Mathematics, IIT Roorkee

National Meet of Research Scholars in Mathematical Sciences-09

Technical Schedule

1 Day , Saturday, December 19, 2009 (Venue: Bose Hall, Department of Physics, IIT Roorkee)	
8:00-9:15	Registration
9:15-10:30	Inaugural session
10:30-11:00	Inaugural Tea (Lawns: Mathematics Department)
11:00-12:00	Technical session (T1) <i>Computational Mathematics- Some Challenges</i> Prof. M. K. Kadalbajoo Indian Institute of Technology, Kanpur
12:00-13:00	Interactive Session
13:00-14:15	Lunch Break (Lawns: Mathematics Department)
14:15-15:30	Paper Presentation Session (S1) 1. Numerical Solution of Burgers' Equation <i>Sharanjeet Dhawan , NIT Jalandhar</i> 2. Numerical Solution of One-Dimensional Wave Equation Due to Impact of Two Objects <i>K Sharath Babu , NIT Warangal</i> 3. New Results on Complete Integrability of Higher Order Nonlinear Difference Equations <i>Uma Maheshwari, Univ. of Chennai, Chennai</i> 4. Extension of Some Relations Between Vector Variational-Like Inequality Problems and Nonsmooth Vector Optimization Problems to Infinite Dimensional Domains, <i>Triloki Nath, BHU</i> 5. Robpca Biplot: A Graphical Method for the Detection of Outliers <i>T.A. Sajesh, Univ. of Chennai</i>
15:30-15:45	Tea Break

15:45-17:00	<p>Paper Presentation Session (S2)</p> <ol style="list-style-type: none"> 1. A New Type of Difference Sequence Spaces <i>Reyaz Ahmad Rather, NIT Srinagar, J&K Kashmir</i> 2. Riesz Sequence Spaces and Almost Convergence <i>Abdul Hamid Gani, NIT Srinagar</i> 3. Existence and Iterative Approximation of a Unique Solution of System General Quasi- Variational Inequality Problems <i>Faizan Ahmad Khan, AMU</i> 4. On Higher Order Nonlinearities of Some Classes of Boolean Functions <i>Ruchi Telang, IIT Roorkee</i> 5. Some New Integrations Theories Generalising Bochner Integrals <i>Nisar Ahmad Lone, University of Kashmir</i>
17:00 Onwards	Computer Lab Visit

**National Meet of Research Scholars in
Mathematical Sciences-09**

Technical Schedule

2 Day , Sunday, December 20, 2009 (Venue: L-117 Department of Mathematics, IIT Roorkee)	
9:00-11:00	<p>Technical Session (T2)</p> <p><i>Prof R.C. Mittal, Indian Institute of Technology Roorkee</i> Title to be announced</p> <p><i>Dr. Yogendra Singh, Indian Institute of Technology Roorkee</i> Title to be announced</p>
11:00-11:15	Tea Break
11:15-12:30	<p>Paper Presentation Session (S3)</p> <ol style="list-style-type: none"> 1. On Variations of Super Edge Bimagic Labelling <i>S. Babitha, Anna University, Chennai</i> 2. Optimal Maintenance Scheduling of Textile Weaving Process <i>Manwinder Kaur, Thapar University, Patiala</i> 3. A Production Inventory Model for Deteriorating Items With Alternating Replenishment Rates And Backlogging of Demand <i>Nisha Arora, JNV University, Jodhpur</i> 4. A Mathematical Approach to Solve Inventory distribution model <i>Shweta Sachdeva, University of Petroleum And Energy Studies, Dehradun</i> 5. Developments in Linear Fractional Programming: A Review <i>Geetika Sharma, University of Petroleum And Energy Studies, Dehradun</i>
12:30-13:15	Interactive Session
13:15-14:15	Lunch Break

14:15-15:30	<p>Paper Presentation Session (S4)</p> <ol style="list-style-type: none"> 1. Analysis of a Three Species Food Chain Model Using Discrete Time Mean Field and Spatial Domain Representation <i>Randhir Singh Baghel, Jiwaji Univ, Gwalior</i> 2. Prey Predator Models in Marine System <i>Neeta Mazumdar, Goa</i> 3. Mathematical Study of the Diffusive Population Based on Resource Density in Heterogeneous Habitat: Effect of Industrialization <i>Kunwer Singh Jatav, IIITM-Gwalior</i> 4. Synchronization of Chaos in Food Web in Ecological Systems <i>Anuraj Singh, IIT Roorkee</i> 5. Analysis of an Epidemic Model with Immunity and Delay in Incubated Class <i>Govind Prasad Sahu, IITM Gwalior</i> 6. Complex Dynamics in Ratio Dependent Two Prey One-Predator Model <i>Tanuja Agarwal, AMU</i> 7. Study of Allee Effect on a Prey Predator System <i>Ayan Sen, Sarat Chandra Sur Institution (H.S.), Kolkata</i>
15:30-15:45	Tea Break
15:45 Onwards	Hardwar visit

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Technical Schedule

3 Day , Monday, December 21, 2009 (Venue: L-117 Department of Mathematics, IIT Roorkee)	
9:00-11:00	<p>Technical Session (T3)</p> <p><i>Prof. Pradeep Banerjee, JNV University, Jodhpur</i> Title to be announced</p> <p><i>Prof. Rama Bhargava, Indian Institute of Technology, Roorkee</i> Title to be announced</p>
11:00-11:15	Tea Break
11:15-12:15	<p>Technical Session (T4)</p> <p><i>Prof. V Vetrivel, Indian Institute of Technology, Madras</i> Title to be announced</p>
12:15-13:15	Library Visit
13:15-14:15	Lunch Break
14:15-15:30	<p>Paper Presentation Session (S5)</p> <p>1. On Simple Connectedness of Minkowski Space with t-Topology <i>Sampada Srivastava, Dayalbagh Educational Institute, Agra</i></p> <p>2. Some Classes Of Difference Sequence Spaces of Fuzzy Real Numbers Defined By Modulus Function <i>Stuti Borgohain, IASST, Guwahati</i></p> <p>3. Weak Compatibility and Fixed Point Theorem in Fuzzy Metric Spaces <i>Virendra Singh Chauhan, S.G.S.I.T.S., Indore</i></p> <p>4. Pairwise C-Compactness Modulo An Ideal <i>Rajneesh Garg, C.C.S. University, Meerut</i></p> <p>5. On the Eneström Takeya Theorem <i>Tawheeda Rasool, NIT Kashmir</i></p>
15:30-15:45	Tea Break

15:45-17:00	<p>Paper Presentation Session (S6)</p> <ol style="list-style-type: none"> 1. On Applications of Q-Fractional Calculus Operators and Transformation Involving Generalized Basic Hypergeometric Functions <i>Vijay Kumar Vyas, J N V Univ Jodhpur</i> 2. Some Extension Theorems on Zeros of Polynomials <i>R K Pavan Kumar Pannala, University of Petroleum &Energy Studies Dehradun</i> 3. On Some Ramanujan-Selberg Continued Fraction, <i>S K Bairy ,Bangalore Univ Bangalore</i> 4. On A Generalized Riemann-Liouville Fractional Operator Through Pathway Model <i>Seema S Nair, CMS Pala Kerala</i> 5. Some Integral Transforms of Pathway Model and Connections to Statistical Mechanics <i>Dhannya P Joseph, CMS Pala Kerala</i>
19:00 Onwards	Cultural Programme followed by Dinner

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Technical Schedule

4 Day , Tuesday, December 22, 2009 (Venue: L-117 Department of Mathematics, IIT Roorkee)	
9:00-11:00	<p>Technical Session (T5)</p> <p>Efficient Numerical Techniques for Singularly Perturbed Differential Equations <i>Prof. S Natesan, Indian Institute of Technology Guwahati</i></p> <p>Principles of Professional Writing <i>Prof. L. Radhakrishnan, Bangalore</i></p>
11:00-11:15	Tea Break
11:15-12:15	<p>Technical Session (T6)</p> <p>Some Snapshots of Computational Mathematics at the Frontiers of Science and Technology <i>Prof B V Rateesh Kumar, Indian Institute of Technology Kanpur</i></p>
12:15-13:15	Interactive Session
13:15-14:15	Lunch Break
14:15-15:30	<p>Paper Presentation Session (S7)</p> <ol style="list-style-type: none"> 1. Computational Problems Associated with Petri Nets that Generate the Binary N-Dimensional Hypercube <i>Gajendra Prasad Singh, Delhi Tech. Univ, Delhi</i> 2. Packet Transmission in High-Speed Networks with Out Packet Reordering on High-Speed TCP Variants <i>V.K Sabapathi, Anna University, Chennai</i> 3. Analysis of Fault Diagnosis Problem Using Fuzzy Relation Equations and a Genetic Algorithm <i>Ankita Thapar, Dayalbagh Educational Institute Agra</i> 4. Ant Colony Algorithms in Evolutionary Computing <i>Ravi Kiran Maddali, Petroleum Univ Dehradun</i> 5. A Non Linear Stability Analysis of a Rotating Magnetized Ferro Fluid Heated from Below in Presence of Suspended Particles <i>Virendra Kumar, NIT Hamirpur</i> 6. Harmonic Structures on a Graph <i>Madhu V Soothanan, University of Chennai, Chennai</i> 7. Three Dimensional Finite Element Model to Study Thermal Disturbances Due to Tumor in Peripheral Regions of Elliptical Shaped Human Limbs <i>Mamta Agarwal, MANIT Bhopal</i>

15:30-15:45	Tea Break
15:45-17:00	<p>Paper Presentation Session (S8)</p> <ol style="list-style-type: none"> 1. Mathematical Modelling of the Proliferating Tumor Cells <i>Sushma Nema, SRITS, Bhopal</i> 2. Prediction of DO in Streams Having Stagnant Zone on the Bank <i>Nitash Kaushik, Noida</i> 3. Mathematical Models for Energy Conservation in Washing Zone in Pulp & Paper and Allied Industries: A Review <i>Archana Singhal, J V Jain College, Saharanpur</i> 4. Performance Model and Analysis of Blood Flow in Small Vessels with Magnetic Effects <i>Anil Kumar Gupta, Dronacharya College Of Engineering, Greater Noida</i> 5. Deciphering of Modular Chimera of Olfactory Receptor Loci DNA Sequencing Using L-System <i>SK. Sarif Hassan, ISI Kolkata</i> 6. On Some Charged Analogues of Henning Knutsen's Interior Solutions in General Relativity <i>Sachin Ambariya, IIT Roorkee</i>

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Technical Schedule

5 Day , Wednesday, December 23, 2009 (Venue: L-117 Department of Mathematics, IIT Roorkee)	
9:00-10:30	Award papers presentation
10:30-11:00	Feed Back/Response
11:00-11:15	Tea Break
11:15-12:15	Technical Session (T7) to be announced
12:15 Onwards	Valedictory Function followed by Lunch