

**11<sup>th</sup> Biennial Conference of the Indian Society of Industrial and Applied Mathematics**  
**(Emerging Mathematical Methods, Models and Algorithms for Science and Technology)**

on 15-16 Dec. 2012  
The National Mathematics Year 2012  
to Commemorate the 125<sup>th</sup> Birth Year of Srinivasa Ramanujan  
**at Gautam Buddha University**  
Gautam Budh Nagar, National Capital Region,  
India

**TENTATIVE PROGRAMME**

**15 Dec. 2012, SATURDAY**

<b>9.00-10.00 AM</b>	-	<b>Session-I</b> <b>REGISTRATION</b> <b>Venue-</b> International Convention Centre
10.00-11.00 AM	-	<b>INAUGURAL FUNCTION</b> (minute to minute prog. given sep.) <b>Venue-</b> International Convention Centre Auditorium
11.00-11.30AM	-	<b>Tea Break</b>
<b>11.30-13.30PM</b>	-	<b>Session- II</b> <b>Venue-</b> International Convention Centre Auditorium
Chair	-	<b>Prof. H. P. Dikshit,</b> <i>Former Vice-Chancellor, IGNOU and former President ISIAM</i>
Co Chair	-	<b>Prof. Aparajita Ojha,</b> <i>Director, Pt. D. P. Mishra IIT Jabalpur</i>
<b>Speakers</b> 11.30-12.10PM	-	<b>Prof. U. B. Desai,</b> <i>Director, IIT Hyderabad</i> <b>Dr. Zakir Husain Memorial Lecture</b>
12.10-12.50PM	-	<b>Prof. M. Brokate,</b> <i>Former Dean Mathematical Science Technical University, Munich, Germany</i> <b>Current Development in Optimal Control Problem</b>
12.50-13.30PM	-	<b>Prof. Moin Uddin,</b> <i>Pro-Vice Chancellor, DTU &amp; Former Director Ambedkar NIT Jalandhar</i> <b>Provisioning QOS in Ad hoc Networks using Fuzzy Logic</b>
13.30-14.30PM	-	<b>Lunch,</b> <b>Venue-</b> International Convention Centre
<b>14.30-16.30PM</b>	-	<b>Session- III</b> <b>Venue-</b> International Convention Centre Auditorium
Chair	-	<b>Prof. M. Brokate,</b> <i>Former Dean Mathematical Science Technical University, Munich, Germany</i>
Co Chair	-	<b>Prof. P. Manchanda</b> <i>Convener Scientific Committee</i>
<b>Speakers</b> 14.30-15.00PM	-	<b>Prof. Karmeshu</b> <i>Dean, School of Computer and system sciences, JNU</i> <b>Nonlinear Stochastic Modeling, Critical Phenomena and Diffusion of Innovation in Social Groups</b>

15.00-15.30PM	-	<b>Prof. R. Lozi</b> <i>University of Nice FRANCE</i> <b>Cryptography based chaos via geometric under-sampling of ring-coupled chaotic attractors</b>
15.30-16.00PM	-	<b>Prof. D. K. Chaturvedi,</b> <i>Faculty of Engineering Dayalbagh Education Institute Dayalbagh, Agra-Soft Computing Techniques and their Applications</i>
16.00-16.30PM	-	<b>Prof. R. K. Mohanty</b> Dean Faculty of Applied & Computer Science <i>South Asian University</i> <b>Cubic Spline Approximation for Two Dimensional Non-linear Elliptic Boundary Value Problems</b>
16.30-17.00PM	-	<b>Tea Break</b>
<b>17.00-18.30PM</b>	-	<b>Session-IV</b> <b>Venue-</b> International Convention Centre Auditorium
Chair	-	<b>Prof. S. Sunder</b> <i>Indian Institute of Technology Madras (IIT Madras)</i>
Co Chair	-	<b>Prof. D. K Chaturvedi</b> <i>Dayalbagh Education Institute Dayalbagh, Agra</i>
Speakers 17.00-17.30PM	-	<b>Prof. S. Didas,</b> <i>Germany</i> <b>Fourth order anisotropic diffusion for image simplification</b>
17.30-18.00PM	-	<b>Dr. Venky Krishnan,</b> <i>Tata Institute of Fundamental Research Centre Bangalore</i> <b>Micro local properties of transforms in synthetic aperture radar imaging</b>
18.00-18.30PM	-	<b>Dr. Gaik Ambartsoumian,</b> <i>Department of Mathematics, University of Texas, USA</i> <b>On generalized Radon transforms in ultrasound tomography</b>
<b>18.30-19.30PM</b>	-	<b>Session-V(A)</b> <b>Venue-</b> International Convention Centre Auditorium
Chair	-	<b>Prof. Khalil Ahmad</b> Dean, Faculty of Natural Sciences, JMI, New Delhi
Co Chair	-	<b>Dr. Kalim Raza Kazmi</b> <i>AMU, Aligarh</i>
Speakers	-	<b>Dr. Rashmi Bhardwaj</b> <i>G.G.S Indraprastha University, Delhi</i> <b>Hurst Exponent, Predictability Index, Fractal Dimension using Wavelet Method</b>
	-	<b>V. R. Durai</b> <i>Indian Meteorological Department, New Delhi</i> <b>Statistical Bias Correction Methods for Numerical Weather Prediction Model (NWP) Forecasts of Maximum and Minimum Temperatures</b>
	-	<b>Kuldeep Srivastava</b> <i>Indian Meteorological Department, New Delhi</i>
	-	<b>Kulwinder Singh Parmar</b> <i>Department of Mathematics, G. G. S Indraprastha University, Delhi-</i>
	-	<b>Meenu Chawla</b> <i>Department of Mathematics, G. G. S Indraprastha University, Delhi</i>
	-	<b>Parsan Kaur</b>

		<i>Department of Mathematics, G. G. S Indraprastha University, Delhi</i>
<b>18.30-19.30PM</b>	-	<b>Session-V(B)</b> <b>Venue-</b> International Convention Centre conference room 2 <sup>nd</sup> floor
Chair	-	<b>Prof. K. Mustafa</b> <i>JMI</i>
Co Chair	-	<b>Prof. Anjana Solanki</b> <i>GBU</i>
Speakers		<b>Dr. Shelly</b> <i>Department of Mathematics, Punjabi University, Patiala</i>
		<b>Amandeep Kaur</b> <i>Department of Mathematics, SLIET, Longowal, Punjab</i>
		<b>Prof. A. Nejat</b> <i>University of Ankara</i>
		<b>Happy Kumar</b> <i>Department of Mathematics, Guru Nanak College, Budhlada, Punjab</i>
		<b>Prof. Dr. Funda Dökmen</b> <i>The University of Kocaeli</i>

**Ramanujan 125<sup>th</sup> Birth year Celebration**  
(Minute to Minute programme given separately )  
**Venue:** International Convention Centre Auditorium  
**19.30-21.30PM**

**16 Dec. 2012, SUNDAY**

<b>9.00-10.00AM</b>	-	<b>Session-VI(A)</b> <b>Venue-</b> International Convention Centre Auditorium
Chair	-	<b>Prof. Bani Singh,</b> <i>Jaypee University, Noida</i>
Co Chair	-	<b>Dr. Rashmi Bhardwaj</b> <i>G. G. S. Indraprastha University, New Delhi</i>
Speakers	-	<b>Dr. Chefi Tirkı</b> <i>Department of Engineering, Sultan Qaboos University, Oman-</i> <b>Petrol Station Replenishment, Optimization Models &amp; Solution Methods</b>
	-	<b>Dr. F. A Shah</b> <i>University of Kashmir</i> <b>Analysis of Euro-zone fixed income markets: A wavelet based approach</b>
	-	<b>Vikram Sharma</b> <i>Guru Nanak Dev University, Amritsar</i> <b>Vector-valued wavelets and wavelet packets on positive half line</b>
	-	<b>Ruchira Aneja</b> <i>Sharda University, Greater Noida</i> <b>Image denoising of biomedical images using Discrete Shearlet transform</b>
	-	<b>Noor e Zahra</b> <i>Sharda University, Greater Noida</i>

		<b>Shearlet transform in image enhancement</b>
	-	<b>Sarika Jain</b> <i>Amity University, Noida</i> <b>Colour stealing approach for rendering fractals</b>
<b>9.00-10.00AM</b>	-	<b>Session-VI(B)</b> <b>Venue:</b> International Convention Centre conference room 2 <sup>nd</sup> floor
Chair	-	<b>Prof. N. Singh</b>
Co Chair	-	<b>Prof. V. K. Parashar,</b> Faculty of Engineering, AMU, Aligarh
Speakers	-	<b>Dr.S.C.Shiralashetti</b> <i>Dept of Mathematics Karnatak University's Karnatak</i> <b>Orthogonal and Biorothogonal Wavelet Based Algebraic Multigrid Method for the Solution of Elliptic Partial Differential Equations</b>
	-	<b>Dr. P.B. Mutalik Desai</b> <i>Dept of Mathematics Karnatak University's Karnatak</i> <b>Finite Element Based Algebraic Wavelet Multigrid Method for the Numerical Solutions of Partial Differential Equations</b>
	-	<b>Mounesha H. Kantli</b> <i>Dept of Mathematics Karnatak University's Karnatak</i> <b>Modified Haar Wavelet Transform Numerical Method for the Solution of Non-linear Ordinary Differential Equations</b>
	-	<b>Shashi Kant and Vivek Kumar Aggrawal</b> <i>Delhi Technological University</i> <b>Dynamics of a Three Species Food Chain Model with Crowley-Martin Type and Holling Type-II Functional Response</b>
	-	<b>Dr. Lalit Kumar Vashisht</b> <i>University Of Delhi</i> <b>ON DUALITY OF RETRO BANACH FRAMES</b>
	-	<b>Prateek Singh Sengar</b> <i>University of Delhi</i> <b>Color Image Enhancement by Scaling the DCT Coefficients versus other Compressed Domain techniques</b>
<b>10.00-11.00AM</b>	-	<b>Session-VII</b> <b>Venue:</b> International Convention Centre Auditorium
Chair		<b>Prof. R. Lozi</b> France
Co Chair		<b>Dr. Abdul Wahid,</b> <i>Head Department of Computer Science, Information Technology and Mathematics, Maulana Azad National Urdu University Hyderabad</i>
Speakers 10.00-10.30AM	-	<b>Dr. Messaoud Boulbrachene, Chairman Research Committee</b> <i>Department of Mathematics and Statistics, Sultan Qaboos University, Oman</i> <b>On The Impulse Control Quasi-Variational Inequality: Approximation and Computation.</b>
10.30-11.00AM	-	<b>Dr. S. P. Chakrabarty</b> <i>Department of Mathematics IIT Guwahati</i> <b>Optimization of portfolio and consumption subject to multidimensional economic constraints</b>
<b>11.00-11.30AM</b>		<b>Tea Break</b>

<b>11.30-13.00PM</b>	-	<b>Session VIII</b> <i>Panel Discussion on role of Mathematics in Emerging Areas of Science and Technology</i>
Chair	-	<b>Prof. N. K. Gupta</b> , IIT Delhi
Co Chair	-	<b>Prof. Rajat Gupta</b> , Director, NIT Srinagar
Panelis	-	Prof. Karmeshu, Prof. Brokate, Prof. Ajit Tyagi, Prof. Manchanda, Prof. N. B Singh, Prof. Dalal, Prof. Mushahid Hussain, Prof. A. Nejat, Ms. Noor e Zahra, Dr. Chirashree Ghosh Prof. A. H. Siddiqi(Moderator)
13.00 -13.25PM	-	<b>Valedictory Function Auditorium</b>
13.30-20.30PM	-	<b>Excursion to Taj Mahal/Lotus Temple &amp; Akshaydham Temple</b>

Note: The remaining contributory talks will be scheduled in room no. 201 adjacent to Chancellor's suite International Guest House on the confirmation of the participation and registration. Please contact Prof. Manchanda(Mob. 09815010067 Emai: pmanch2k1@yahoo.co.in) after arrival on 14<sup>th</sup> /15<sup>th</sup> Dec.2012.

Prof. A. H. Siddiqi

Chairman Organizing Committee