

International Conference on Mathematical and Computational Sciences 2015  
Don Bosco College, Angadikadavu,  
Kannur, Kerala, India – 670706  
22nd to 24th January, 2015

**22nd January 2014**

Registration  
8.00 – 10.00 Hrs

Inaugural Session  
10.00 – 10.30 Hrs  
Venue: Main Seminar Hall

10.00 to 10.05 : Prayer Song.  
10.05 to 10.10 : Words of Welcome by Convenor.  
10.10 to 10.15 : Presidential Address by Dr. Jose Thomas Koyickal, Manager, Don Bosco College.  
10.15 to 10.25 : Inaugural Address and Lighting of the Lamp by Prof. MK Abdul Khader, Vice Chancellor,  
Kannur University.  
10.25 to 10.30 : Vote of Thanks by Dr. Johny Jose, Principal, Don Bosco College.

10.30 – 11.00 Hrs : Tea Break

Plenary Session I  
11.00 – 12.00 Hrs  
Venue: Main Seminar Hall

*Title: Linearization versus Discretization, which should be done first?*  
Mario Paul Ahues Blanchait,  
Université Jean Monnet, France.

12.00 – 13.00 Hrs  
*Title: Approximate Solutions of Integral Equations*  
Rekha P. Kulkarni  
IIT Bombay.

13.00 – 14.00 Hrs : Lunch Break

Plenary Session II  
14.00 to 15.00 Hrs

Venue: Main Seminar Hall

*Title: A super convergent method to solve a nonlinear operator equation*

Grammont Laurence

Université Jean Monnet, France.

Parallel session I

15.05 to 16.05 Hrs

Theme I : Mathematical sciences

Paper presentation by participants

Venue: Main Seminar Hall

Chair :

1. 15.05 – 15.20  
D. Pradeep and M.P. Rajan, *A Modified Newton Iterative Scheme for Solving Nonlinear Ill-posed Problems.*
2. 15.20-15.35  
Shubha V.S., *An Iterative method for nonlinear ill-posed equation with Monotone Operators.*
3. 15.35-15.50  
Sneha S. Venkatesan and S. M. Venkatesan, *Bounds for Chessboard Domination Problems in 3 and Higher Dimensions.*
4. 15.50-16.05  
Vijitha Mukundan and Ashish Awasthi, *A Comparative Study of Three Level Explicit and Implicit Numerical Scheme for Convection Diffusion Equation.*

Theme II: Computational Sciences

Paper presentation by participants

Venue: Don Bosco Hall

Chair :

1. 15.05 – 15.20  
Yasmeen Akhtar, Soumen Maity and R C Chandrasekharan, *Covering Arrays of Strength Four with Budget Constraints.*
2. 15.20-15.35  
Denny Dominic and Shine V. J., *An Implementation of GSM Based Smart Digital Notice Board Using Embedded C.*
3. 15.35-15.50  
T. Radhika, *Dissipativity Analysis of Memristor-Based Recurrent Neural Networks Based on Delay Decomposition Approach.*
4. 15.50-16.05  
Reshma C Chandrasekharan and Soumen Maity, *Covering Arrays of Strength Two and Pair wise Software Testing.*

<p>Tea break 16-05 to 16-15 Hrs</p>	
<p>Parallel Session II</p>	
<p>Venue: Main Seminar Hall Chair:</p> <ol style="list-style-type: none"> <li>5. 16.15-16.30 Lisna P C and M S Sunitha, <i>The b-chromatic Number Mycielskian of Paths.</i></li> <li>6. 16.30-16.45 M.A. Navasués, P. Viswanathan, S.K. Katiyar and A.K.B. Chand, <i>Smooth Fractal Interpolation with Function Scaling Factors.</i></li> <li>7. 16.45-17.00 Shashi Kant and Vivek Kumar, <i>A Stage-structured Eco-epidemiological Model with Refuge.</i></li> </ol>	<p>Venue: Don Bosco Hall Chair:</p> <ol style="list-style-type: none"> <li>5. 16.15-16.30 Kiran Kumar V, Shivamurthy G and Thimmaraju S. N., <i>A Survey on Performance Parameters of Different Cross Layer Design Protocols in WSN.</i></li> <li>6. 16.30-16.45 R. J. D'Souza and Ganala Santoshi, <i>Effect on Coverage due to sensor node mobility.</i></li> <li>7. 16.45-17.00 Raghavan P and Shiva Murthy G, <i>Migration of Legacy Application to Cloud Environment: A Survey.</i></li> </ol>
<p><b>23rd January 2014</b></p>	
<p>Parallel sessions III 09.00 – 09.45Hrs</p>	
<p>Theme: Mathematical Sciences Chair :</p> <ol style="list-style-type: none"> <li>8. 09.00-09.15 Venkata Ramana, Subhashis Chatterjee and Gajendrakumar Vishwakarma, <i>An Efficient Algorithm to Handle the Combinatorial sets of Network reliability.</i></li> <li>9. 09.15-09.30 Sunil Kumar R, Kannan Balakrishnan and M. Jathavedan, <i>The Structure of Zero Divisor Graph of Monogeni Semigroups and their Betweenness Centralities.</i></li> <li>10. 09.30-09.45 Murugan. V and Suresh Kumar, <i>Iterative root problem for PM functions with height greater than one.</i></li> </ol>	<p>Theme: Computational Sciences Chair :</p> <ol style="list-style-type: none"> <li>8. 09.00-09.15 M. Caroline Joyce and K. Vanitha, <i>Localization Scheme for Super Nodes in Underwater Sensor Network Using PSO Algorithm.</i></li> <li>9. 09.15-09.30 Alfiya F., Vijayalekshmi B and Manoj Changat, <i>Prediction of Divergence of Dengue Virus Serotypes by Comparative Analysis of Nucleotide and Amino Acid Sequences.</i></li> <li>10. 09.30-09.45 Vijay Borges and Wilson Jeberson, <i>Modification of Fuzzy kNN by Learning from Data in Activity Recognition Modeling.</i></li> </ol>

<p>Plenary Session II Venue: Main Seminar Hall</p> <p>10.00-11.00 Hrs. <i>Title: Ray, Radon, Fourier Transforms and Inverse Problem in Image Reconstruction</i> Nandakumaran, A. K., IISc, Bangalore.</p> <p>11.00-11.15 Tea break.</p> <p>11.15-12.15 <i>Title: The Role of Best Approximation Theory in the Study of Fixed Point Theorems</i> P. Veeramani IIT Madras.</p> <p>12.15-13.15 Hrs <i>Title: Machine Learning and Financial Time Series Prediction</i> M.P. Rajan, IISER, Trivandrum</p>	
<p>13.15 – 14.00 Hrs : Lunch Break</p>	
<p>Plenary Session IV 14.00 – 14.30Hrs Venue: Main Seminar Hall</p> <p><i>Title: Van der Waerden's Theorem: A pearl of Number Theory 6</i> M. Kunhanandan Goa University. 14.30 – 15.00Hrs <i>Title: Asymptotic Expansions for Approximate Eigen values of Integral Operators with a Weakly Singular Periodic Kernel.</i> Akshay S. Rane IIT, Bombay.</p>	
<p>Parallel Session IV 15.00 – 17.00 Hrs</p>	
<p>Theme: Mathematical Sciences Chair :</p> <p>11. 15.00-15.15 Ramu GeddaValasa, <i>K-frames and frame operators.</i></p> <p>12. 15.15-15.30 Pratap Kumar Dakua and Abhijit Upadhyaya, <i>Study and Implementation of Telemetry system using VHDL.</i></p> <p>13. 15.30-15.45 Huda Bakodah and R. H. Khan, <i>Adomian Decomposition Method and its Modification for Nonlinear Abel's Integral Equation.</i></p>	<p>Theme: Computational Sciences Chair :</p> <p>11. 15.00-15.15 Sangita Gupta and Suma. V., <i>Data mining for Performance Improvement of Human Aspect of Software Engineering.</i></p> <p>12. 15.15-15.30 Debina Laishram and Iona Sudheendran, <i>Detection of back attack in a TCP network using Hidden Markov Model.</i></p> <p>13. 15.30-15.45 Sisna M and Sruthi N, <i>Routing Messages in a Human Network.</i></p>

<p>14. 15.45-16.00 Md. Abu Talhamainuddin Ansary and Geetanjali Panda, <i>Higher Order Interval Newton Method for Unconstrained Optimization.</i></p> <p>15. 16.00-16.15 M.P. Rajan and G.D. Reddy, <i>An a Posteriori Parameter Choice Rule for Singularly Perturbed Elliptic PDE.</i></p>	<p>14. 15.45-16.00 Saravana Balaji B, Raj Kumar R.S, Karthikeyan N.K, <i>Fuzzy Predicate Petri Net and T-invariant Analysis based Cloud Service Recommendation using Cloud Service Ontology.</i></p> <p>15. 16.00-16.15 Pavan Kumar C, Pavithra Balaji, R Selvakumar and Raghunadh K Bhattar, <i>Realization of Maximum Likelihood (ML) decoding by Modified Multi Stack Pushdown Automata.</i></p>
<p>16.15 – 16.30 Hrs Tea break</p>	
<p>16.30 – 17.00 Hrs Valedictory Function</p>	
<p>16.30 to 16.40 Review of the Conference : Dr. Johny Jose, Convener 16.40 to 16.50 Participant's Sharing 16.50 to 16.55 Honoring Prof. R. J. D'Souza 16.55 to 17.00 Vote of thanks by Dr. Santhosh George 17.00 National Anthem</p>	
<p><b>24<sup>th</sup> January 2014</b></p> <p>Optional sightseeing trip to Wayanad (Lakkidi view point, Soochippara waterfalls, Banasura Sagar Dam). Starting at 6.30 am and reaching back by 6.30 pm.</p> <p>Rate: 500/- per head. (Transportation will be taken care of by the tour organizers, for this payment. Visit <a href="http://wayanad.nic.in/places.htm">http://wayanad.nic.in/places.htm</a> to know more about these tourist attractions.)</p> <p>You may register for the tour, on arrival for the conference. Kindly reserve your return tickets in advance, based on this schedule.</p>	