

## PROGRAMME

17<sup>th</sup> December, 2009

**Time: 10:30 – 11:30**                      **Session: Opening Ceremony**

Venue: Council Building, BUET

**Time: 11:30 – 13:00**                      **Session: Keynote 01**

Venue: Council Building, BUET

Session Chair: Prof. M. Anwar Hossain

**Keynote Talk : Prof. Saleh Tanveer**

**16MC09-K01: Saleh Tanveer**

Professor of Mathematics, The Ohio State University, 231 West 18th Avenue  
Columbus, OH 43210-1174, U.S.A.

**Regularity, singularity and well-posedness of some mathematical  
models and their physical implications**



**Time: 13:00 – 14:30, Lunch and Prayer Break**

**Time: 14:30 – 16:00**                      **Session: 1A**

Venue: Post Graduate lecture room (Math)

Session Chair: Prof. Khodadad Khan (DU)

Invited talk: Prof. Anjan Mukherjee

**16MC09-032: Anjan Mukherjee**

Professor and Head, Department of Mathematics, Tripura University,  
Surjyamaninagar, Agartala-799130, Tripura, India.  
E-mail: anjan2002\_m@yahoo.co.in

**Lower and Upper Minimal Weakly  $\Delta$ -Semi Continuous Fuzzy  
Multifunctions**

Contributory talks

**16MC09-012: Mostak Ahmed <sup>a</sup>, M. Alamgir Hossain <sup>b</sup>**

<sup>a</sup>Institute of Natural Sciences, United International University, Dhaka-1209

<sup>b</sup>Department of Mathematics, Jagannath University, Dhaka-1100

**Solution of Transcendental Equations Using Quadratic False-Position  
Method**

17<sup>th</sup> December 2009 (Thursday)

**16MC09-013: Bishnu Pada Ghosh, Mostak Ahmed**

Department of Mathematics, University of Dhaka

**Solution of Transcendental Equation Using Quadratic Equation Approximation**

**16MC09-016: Dewan M Ali<sup>1</sup> and Faqrudin A Azam<sup>2</sup>**

<sup>1</sup>Department of Mathematics, Rajshahi University, Rajshahi-6205,

<sup>2</sup>Institute of Natural Sciences, United International University, Dhaka-1209, Bangladesh

**On Some Fuzzy R Topological Spaces**

**16MC09-018: M. Asaduzzaman and M. Zulfiker Ali**

Department of Mathematics, University of Rajshahi, Rajshahi, Bangladesh

E-mail: asad\_math@yahoo.com and julfi1022002@yahoo.com

**Equivalence of Mann and Ishikawa Iterative Schemes for Zamfirescu Operator**

**16MC09-055: Afroza Shirin and Md. Shafiqul Islam**

Department of Mathematics, University of Dhaka, Dhaka-1000, Bangladesh.

Email: afroza\_shirin772@yahoo.com

**Numerical Solutions of Integral Equations Using Piecewise Polynomials**

**16MC09-024: Sudip Biswas, Debajyoti Mondal, and Md. Saidur Rahman**

Dept. of Computer Science and Engineering, BUET, Dhaka-1000, Bangladesh.

sudipp@yahoo.com, debajyoti\_mondal\_cse@yahoo.com,

saidurrahman@cse.buet.ac.bd

**On Convex Drawings of Planar Graphs**



**Time: 14:30 – 16:00**

**Session: 1B**

Venue: Seminar room (Civil)

Session Chair: Prof. S. A. Sarker (RU)

Invited talk: Bidyut Baran Saha

**16MC09-043: Bidyut Baran Saha<sup>1,2,\*</sup> and Kim Choon Ng<sup>1</sup>**

<sup>1</sup>Mechanical Engineering Department, National University of Singapore  
9 Engineering Drive 1, Singapore 119260. \*E-mail: mpebbs@nus.edu.sg

<sup>2</sup>Research and Education Center of Carbon Resources, Kyushu University,  
Kasuga-koen 6-1, Kasuga-shi, Fukuoka 816-8580, Japan

**Thermodynamic Modeling of Isothermic Heat of Adsorption, Specific Heat Capacity and Minimum Heat Source Temperature for Adsorption Processes**

Contributory talks

**16MC09-001: Muhammad Saleem and M. A. Hossain**

CIIT Islamabad Campus, Pakistan. Email: m\_saleem\_cfd@yahoo.com

**Natural convection flow of micropolar fluid in a rectangular cavity heated from below with cold sidewalls.**

**16MC09-009: M. M. Rahman\*, M. A. Alim and M. A. Sarker**

Department of Mathematics, BUET, Dhaka-1000, Bangladesh.

\*Email: mmustafizurrahman@math.buet.ac.bd

**Natural Convection in a Square Cavity with a Flush Mounted Heater: Effect of Positions of the Heater**

**16MC09-030: M. S. I. Mallik<sup>1</sup> and M. A. H. Khan<sup>2</sup>**

<sup>1</sup>Department of Arts & Sciences, Ahsanullah University of Science and Technology, Dhaka,

<sup>2</sup>Department of Mathematics, BUET, Dhaka, Bangladesh

**Hydromagnetic Effects on Internal Flow Separation in a Diverging Channel with Permeable Boundaries**

**16MC09-042: ATM. M. Rahman<sup>1</sup>, M.A. Azim<sup>2</sup>, M.A. Alim<sup>3</sup>, M.M. K. Chowdhury<sup>4</sup>**

<sup>1</sup>Department of Computer Science & Engineering, Dhaka International University, Dhaka-1205, Bangladesh, atmmrahman2005@gmail.com

<sup>2</sup>School of Business studies, Southeast University, Dhaka-1213, Bangladesh

<sup>3,4</sup>Department of Mathematics, BUET, Dhaka-1000, Bangladesh

**Effects of temperature dependent thermal conductivity on conjugate free convection flow along a vertical flat plate with heat generation**

**16MC09-045: M. K. Jaman<sup>1</sup> and M. A. Hossain<sup>2</sup>**

<sup>1</sup>Department of Mathematics, University of Dhaka, Dhaka-1000, Bangladesh

<sup>2</sup>Department of Mathematics, COMSATS Institute of Information Technology, Islamabad, Pakistan

**Oscillating surface temperature on mixed convection flow along a horizontal circular cylinder**

**16MC09-067: M. Ferdows<sup>1</sup>, M.A. Samad<sup>1</sup>, K.C.A. Alam<sup>2</sup> and Hasan Kabir<sup>3</sup>**

<sup>1</sup>Department of Mathematics, University of Dhaka, Dhaka-1000, Bangladesh.

<sup>2</sup>Department of Electronics and Communication Engineering, East West University, Dhaka, Bangladesh

<sup>3</sup>Department of Mathematics, Moulvibazar Government College, Bangladesh.

**Free convection heat transfer flow with surface variable plate temperature and heat flux in a porosity medium**

**16MC09-063: Nurun Nahar<sup>1</sup> Abul Kalam Azad<sup>2</sup>**

Department of Mathematics, Chittagong University of Engineering, Technology, Chittagong 4349,

Dept. of Mathematics, Chittagong University, Chittagong Bangladesh.

**4-5-6 Dimensional Geometric Properties of Matter**

**Time: 16:00 – 16:15 Tea Break**

**Time: 16:15 – 18:00**

**Session: 2A**

Venue: Post Graduate Lecture room (Math)

Session Chair: Prof. Md. Fazle Hossain (CU)

Invited talk: Prof. Md. Azhar Hussain

**16MC09-054: Md. Azhar Hussain**

Department of Mathematics, Veer Kunwar University, Ara - 802301, Bihar, India.  
email: azharhu@gmail.com

**Fractional Integeration of H-Functions of Multivariable and Applications**

Contributory talks

**16MC09-005: Kumar Sanjeev<sup>1</sup>, Pathak Pooja<sup>2</sup>**

<sup>1</sup>Dept. of Mathematics, Dr. B. R. Ambedkar University, IBS, Khandhari, Agra, India <sup>2</sup>Dept. of Applied Sciences, GLA Institute of Technology and Management, Mathura, India sanjeevibs@yahoo.co.in

**Fuzzy Based Pricing Model for Old Age Insurance**

**16MC09-056: Md. Shafiqul Islam**

Department of Mathematics, University of Dhaka, Dhaka-1000, Bangladesh  
Email: mdshafiqul@yahoo.com

**Numerical Solutions of fourth order linear BVP using Bernstein polynomials**

**16MC09-068: Ramit Azad<sup>1</sup> and Ermolaev Yu. G.<sup>2</sup>**

<sup>1</sup>Department of Electronics and Communication Engineering  
East West University, Dhaka, Bangladesh rmt\_azad@yahoo.com

<sup>2</sup>Department of Theoretical Physics, Peoples Friendship University of Russia, Moscow.

**Evaluation of integrals using the error function and error function of imaginary argument**

**16MC09-003: Md. Azizul Baten and Anton Abdulbasah Kamil**

School of Distance Education, Universiti Sains Malaysia, 11800 USM, Penang, Malaysia. Email: baten\_math@yahoo.com; anton@usm.my

**An Optimal Control Approach to Inventory-Production Systems with Weibull Distributed Deterioration**

**16MC09-020: Muhibul Haque Bhuyan**

Department of Electronics and Telecommunication Engineering,  
Daffodil International University, 102 Shukrabad, Dhanmondi, Dhaka 1207  
E-mail: muhibulhb@daffodilvarsity.edu.bd

**Comparative Study of Different Root Location Methods Using MATLAB Programs**

**16MC09-092: Payer Ahmed**

Department of Mathematics, Jagannath University, Dhaka -1100

17th December 2009 (Thursday)

**The behavior of orbit of probability density functions on the unit interval and fixed convergent formula of Perron-Frobenius operator associated with chaotic maps**

**Time: 16:15 – 18:00**

**Session: 2B**

Venue: Seminar room (Civil)

Session Chair: Prof. M. M. K. Chowdhury (BUET)

Invited talk: Dr. Jahrul M Alam (Canada)

**16MC09-023: Jahrul M Alam<sup>1</sup>, Nicholas K.-R. Kevlahan<sup>2</sup>, Oleg V. Vasilyev<sup>3</sup>**

<sup>1</sup>Department of Mathematics and Statistics, Memorial University of Newfoundland, St John's, NL, A1C 5S7 (Email: alamj@mun.ca)

<sup>2</sup>Department of Mathematics & Statistics, McMaster University, Hamilton, ON, Canada L8S 4K1. <sup>3</sup>Department of Mechanical Engineering, University of Colorado, 427 UCB, Boulder, CO 80309, USA

**A wavelet based direct numerical simulation method for turbulence**

Contributory talks:

**16MC09-002: Muhammad Saleem and M. A. Hossain**

CIIT Islamabad Campus, Pakistan, Email: m\_saleem\_cfd@yahoo.com

**Effect of constant heat source on natural convection flow of Newtonian fluid in open rectangular cavity with cold sidewalls**

**16MC09-010: M. M. Rahman\*, M. A. Alim, M.M.A. Sarker and M. M.K. Chowdhury**

Department of Mathematics, BUET, Dhaka-1000, Bangladesh, m71ra@yahoo.com

**Natural Convection Flow in a Square Cavity with a Flush Mounted Heater on a Side Wall and Heat generation**

**16MC09-034: M. S. Alam Sarker, M.A.K. Azad & M. A. Aziz**

Department of Applied Mathematics, University of Rajshahi-6205, Bangladesh.

**Effect of Coriolis Force on Dusty Viscous Fluid Between Two Parallel Plates in Mhd Flow**

**16MC09-035: Mohammed Ashraf Islam\* and Jamal Nazrul Islam**

RCMPS, University of Chittagong, Chittagong, Bangladesh.

**Gauge Theory In Hamiltonian Classical Mechanics:**

**16MC09-075: M O Gani and L S Andallah**

Department of Mathematics, Jahangirnagar University, Savar, Dhaka.

**A Numerical Scheme for a Fluid Dynamic Traffic Flow Model appended with a Linear Velocity-Density Closure Relation**

**16MC09-025: Debajyoti Mondal, Sudip Biswas, and Md. Saidur Rahman**

Dept. of Computer Science and Engineering, BUET, Dhaka - 1000, Bangladesh.

debajyoti mondal cse@yahoo.com, sudippp@yahoo.com,  
saidurrahman@cse.buet.ac.bd

**On Minimum-segment Convex Drawings**

**16MC09-125: A. Murad<sup>1</sup> and S. K. Sen<sup>2</sup>**

<sup>1</sup>Department of Mathematics, University of Chittagong, Bangladesh.

Email: ammathcu@yahoo.com. <sup>2</sup>Research Centre for Mathematical and Physical Sciences (RCMPS), University of Chittagong, Chittagong-4331, Bangladesh.

**The Stokes flow around a concave smooth body**

---

---

---



**16MC09-086: M. Saifur Rahman, M. Alal Hosen and M. Shamsul Alam**  
Department of Mathematics, Rajshahi University of Engineering and Technology  
(RUET), Rajshahi 6204, Bangladesh

**Harmonic balance solution of Mulholland equation**

**16MC09-108: M. Babul Hasan**

Department of Mathematics, University of Dhaka, Dhaka-1000, Bangladesh  
**A Technique for Solving special Type Quadratic Programming  
Problems**

---

---

**Time: 09:15 – 11:15**

**Session: 3B**

Venue: Seminar room (Civil)

Session Chair: Prof. M. Kaykobad (BUET)

Invited talk: Prof. Absos Ali Shaikh

**16MC09-119: Absos Ali Shaikh, Cihan Özgür and Ananta Patra**

Department of Mathematics, University of Burdwan,  
Burdwan-713104, Burdwan, West Bengal, India.  
Email: aask2003@yahoo.co.in

**ON HYPER GENERALIZED QUASI-EINSTEIN MANIFOLDS**

Contributory talks

**16MC09-015: Shipra Banik<sup>1</sup> & B.M. Golam Kibria<sup>2</sup>**

<sup>1</sup>School of Engineering and Computer Science, Independent University,  
Bangladesh, Email: banik@secs.iub.edu.bd

<sup>2</sup>Department of Mathematics and Statistics, Florida International University  
University Park, Miami FL 33199, USA,  
Email: kibriag@fiu.edu

**Comparison of Some Parametric and Non-Parametric Test Statistics  
for Testing the Mean of a Right Skewed Distribution: An Empirical  
Study**

**16MC09-026: Sanjeev Kumar\* and Alpna Mishra\*\***

Department of Mathematics, Dr. B.R. Ambedkar University  
I.B.S., Khandari Campus, Agra-282002 (India)

\*e-mail: sanjeevibs@yahoo.co.in, \*\*e-mail: alpnamishra@gmail.com,

**Effect of Transport Ratio on Source Term in Determination of Surface  
Emission Coefficient**

**16MC09-029: K. C. A. Alam, R. A. Rouf<sup>b</sup> and M. A. H. Khan<sup>c</sup>**

<sup>a</sup>Department of Electronics and communication Engineering, East-West University,  
Dhaka, Bangladesh, Email: kcaalam@ewubd.edu

<sup>b</sup>School of Engineering and Computer Science, Independent University,  
Bangladesh, Dhaka, Bangladesh,

<sup>c</sup>Department of Mathematics, BUET, Dhaka-1000, Bangladesh,

**Solar Adsorption Cooling based on solar data of dhaka: Part1- Effect  
of Collector size**

18th December 2009 (Friday)

**16MC09-036: M. Ayub Ali<sup>1</sup> and A. S. A. Noor<sup>2</sup>**

<sup>1</sup>Assistant Professor, Department of Mathematics, Govt. Titumir College, Dhaka, Bangladesh, <sup>2</sup>Professor, Department of ECE, East West University, Mohakhali, Dhaka, Bangladesh. Email: noor@ewubd.edu

**Lattices whose finitely generated n-ideals form a generalized Stone Lattice**

**16MC09-037: Md. Abul Kalam Azad<sup>1</sup>, Md. Bazlar Rahaman,<sup>1</sup> and A. S. A. Noor<sup>2</sup>**

<sup>1</sup>Department of Mathematics, Khulna University of Engineering and Technology, <sup>2</sup>Department of ECE, East West University, 43, Mohakhali, Dhaka, Bangladesh, noor@ewubd.edu

**Finitely generated n-ideals which form m-normal lattices.**

**16MC09-039: M. S. Raihan<sup>1</sup> and A. S. A. Noor<sup>2</sup>**

<sup>1</sup>Department of Mathematics, Rajshahi University, Rajshahi, Bangladesh E-mail: msraihan@yahoo.com, <sup>2</sup>Department of ECE, East West University, 43, Mohakhali, Dhaka, Bangladesh, E-mail: noor@ewubd.edu

**Nearlattices Whose Sets of Principal n-ideals form Normal Nearlattices**

**16MC09-044: M. K. Hasan<sup>1</sup>, M. M. Karim<sup>2</sup> and M. A. H. Khan<sup>3</sup>**

<sup>1</sup>Lecturer, Dept. of Mathematics, Rajshahi University of Engineering and Technology,

<sup>2</sup>Professor, Dept. of Naval Architecture and Marine Engineering, BUET,

<sup>3</sup>Professor, Dept. of Mathematics, BUET, Dhaka-1000, Bangladesh

Email: mmkarim@name.buet.ac.bd

**Effects of Hub Taper Angle and Pod-Strut Geometry on Hydrodynamic Characteristics of Podded Propulsors**

---

---

**Time: 09:15 – 11:15**

**Session: 3C**

Venue: Room no. 216 (Math)

Session Chair: Prof. M. A. Sattar (NSU)

Contributory talks

**16MC09-027: M. A. Taher<sup>1\*</sup>, M. M. A. Sarker<sup>2</sup>, M.M.K. Chowdhury<sup>2</sup>, Y. W. Lee<sup>3</sup>**

1. Dept. of Mathematics, Dhaka University of Engineering and Technology, Gazipur-1700, Bangladesh. tahermath@yahoo.com

2. Dept. of Mathematics, BUET, Dhaka-1000, Bangladesh.

3. Department of Mechanical Engineering, Pukyong National University, Busan, S.Korea

**Study on the reduction of fluid forces acting on a circular cylinder with different control bodies using Lattice-Boltzmann method**

**16MC09-058: M. Alamgir Hossain<sup>a</sup>, Md. Shafiqul Islam<sup>b</sup>**

<sup>a</sup>Department of Mathematics, Jagannath University, Dhaka -1100

<sup>b</sup>Department of Mathematics, University of Dhaka, Dhaka.

**Applications of Composite Numerical Integrations Using Gauss Radau and Gauss Lobatto Quadrature Rules**

18th December 2009 (Friday)

**16MC09-066: Subhendu Banik**

Assistant Professor in Mathematics, T.I.T, Narsingarh, Agartala,  
Tripura (West), India. Email: subhendubanic\_in7@yahoo.com

**Buckling of Re-Inforced Anisotropic Cylindrical Shells With Rings and Stringers Without Shear Load**

**16MC09-084: Md. Kutub Uddin<sup>1</sup> and <sup>2</sup>Mohammad Tanzil Hasan**

<sup>1</sup>Assistant Professor, Department of Mathematics, University of Dhaka,  
Bangladesh.

<sup>2</sup>Department of Mathematics, University of Dhaka, Dhaka 1000, Bangladesh.

**Mathematical Modelling of Residential Real Estate Financing and Investments**

**16MC09-087: M. Alal Hosen, M. Saifur Rahman, M. Shamsul Alam and M. Ruhul Amin**

Rajshahi University of Engineering and Technology

**An analytical technique for solving a class of strongly nonlinear conservative systems**

**16MC09-031: Taslima Rehman<sup>1</sup> and Md. Kutub Uddin<sup>2</sup>**

<sup>1</sup>Department of Mathematics, American International University –Bangladesh (AIUB), E-mail: taslima.rehman@hotmail.com

<sup>2</sup>Asst. Professor, Department of Mathematics, University of Dhaka, Dhaka.

**Mathematical Modeling of Life Insurance Policies**

**16MC09-059: T. K. Sheel<sup>1,2</sup>**

<sup>1</sup>MEMA, Universite Catholique de Louvain, 1348 Louvain-La-Neuve, Belgium  
E-mail: tarun.sheel@uclouvain.be

**Optimisation and accuracy of FMM for vortex method calculation**

**16MC09-129: S. M. Chapal Hossain\*\*, Mohammad Ferdows\***

\*Department of Mathematics, University of Dhaka, Dhaka 1000, Bangladesh

\*\*Research student of Department of Mathematics, University of Dhaka

**MHD natural convection in a micropolar fluid with power-law variation in surface temperature and internal heat generation**

---

---

Time: 11:15-11:30    Tea break

Time: 11:30 – 13:30

Session: 4A

Venue: Post Graduate Lecture room (Math)

Session Chair: Prof. A. S. A. Noor (EWU)

Invited talk: Prof. Munibur Rahman Choudhury

**16MC09-057: Munibur Rahman Chowdhury**

Retired Professor of Mathematics, University of Dhaka.

**Strong Approximation in Global Fields**

18th December 2009 (Friday)

Contributory talks

**16MC09-072: M. Ayub Ali<sup>1</sup> and A. S. A. Noor<sup>2</sup>**

<sup>1</sup>Assistant Professor, Department of Mathematics, Govt. Titumir College, Dhaka,  
<sup>2</sup>Professor Department of ECE, Eastwest University, Mohakhali, Dhaka, Email:  
noor@ewubd.edu

**Some properties of modular n-ideals of a lattice**

**16MC09-083: Avik Roy**

Department of Electrical and Electronic Engineering, BUET, Dhaka-1000.  
avik\_3.1416@yahoo.co.in

**A Simple Proof showing that  $\aleph_0$  is the smallest infinite cardinal number**

**16MC09-088: Jahanara Begum<sup>1</sup> and A.S.A. Noor<sup>2</sup>**

<sup>1</sup>Department of Mathematics, Dhaka College, Dhaka,  
<sup>2</sup>Department of ECE, East West University, Dhaka, E mail: noor@ewubd.edu

**Around a Central Element of a Nearlattice**

**16MC09-091: M.R. Talukder**

Department of Mathematics, Shahjalal University of Science and Technology,  
Sylhet 3114, Bangladesh. E-mail address: r.talukder-mat@sust.edu

**Natural Duality for Ālukasiewicz's Model**

**16MC09-098: Md. Zaidur Rahman<sup>1\*</sup>, Md. Mizanur Rahman<sup>2</sup> and Md. Abul Kalam Azad<sup>1</sup>**

<sup>1</sup>Department of Mathematics, Khulna University of Engineering & Technology,  
Khulna, \* Email:zaidur@math.kuet.ac.bd,

<sup>2</sup>Department of Mathematics, Rajshahi Govt. City College, Rajshahi

**Standard Ideals and Homomorphism Kernel of a Lattice**

**16MC09-105: Khondokar M. Ahmed<sup>1</sup> and Fatema-Tuz-Zohra<sup>2</sup>**

<sup>1</sup>Department of Mathematics, University of Dhaka, Dhaka-1000, Bangladesh.

<sup>2</sup>Department of Mathematics, University of Dhaka, Dhaka-1000, Bangladesh

Email: fatema\_tz@yahoo.com , mdshafiqul@yahoo.com

**Transformation of Lie Groups and Lie Algebra of Vector Fields on Manifolds**

**16MC09-120: Farzana Hossain<sup>1</sup>, Razwan Ahamad, M. S. Karim<sup>2</sup>, Mizanur Rahman, M. Rahman**

Department of Mathematics, Shahjalal University of Science and Technology,  
Sylhet-3114, Bangladesh, Email:1: farzanahn@live.com, 2: msk-mat@sust.edu

**An accurate evaluation procedure of triangular domain integrals**

**16MC09-128: Md. Shariful Islam and A.F.M. Khodadad Khan**

School of Engineering and Computer Science

Independent University, Bangladesh.

Email: sharif@secs.iub.edu.bd, khoda@secs.iub.edu.bd

**Approximating solution of system of volterra integral equations of second kind by adomian decomposition method**

18th December 2009 (Friday)

**Time: 11:30 – 13:30**

**Session: 4B**

Venue: Seminar room (Civil)

Session Chair: Prof. Md. Mubarak Hossain (DU)

Contributory talks

**16MC09-040: M. S. Raihan<sup>1</sup> and A. S. A. Noor<sup>2</sup>**

<sup>1</sup>Department of Mathematics, Rajshahi University, Rajshahi, Bangladesh  
E-mail: msraihaan@yahoo.com, <sup>2</sup>Department of ECE, East West University,  
Dhaka, Bangladesh, E-mail: noor@ewubd.edu

**Nearlattices Whose Sets of Principal n-ideals form Relatively Normal  
Nearlattices**

**16MC09-022: M. Mahfooz,**

Department of Mathematics, C.I.I.T, Islamabad, Pakistan  
Email: mustafamahfooz@gmail.com

**Transient analysis of heat transfer by natural convection along a  
vertical wavy surface**

**16MC09-028: K C A Alam<sup>a</sup>, R. A. Rouf<sup>b</sup> and M. A. H. Khan<sup>c</sup>**

<sup>a</sup>Department of Electronics and communication Engineering, East-West University,  
Dhaka, Bangladesh. Email: kcaalam@ewubd.edu

<sup>b</sup>School of Engineering and Computer Science, Independent University,  
Bangladesh, Dhaka, Bangladesh.

<sup>c</sup>Department of Mathematics, BUET, Dhaka-1000, Bangladesh

**Solar Adsorption Cooling based on solar data of dhaka: Part1- Effect**

**16MC09-038: Md. Abul Kalam Azad<sup>1</sup>, Md. Bazlar Rahaman<sup>1</sup> and A. S. A. Noor<sup>2</sup>**

<sup>1</sup>Department of Mathematics, Khulna University of Engineering and Technology,  
<sup>2</sup>Department of ECE, East West University, Dhaka, Bangladesh, noor@ewubd.edu

**Finitely generated n-ideals which form relatively m-normal lattices**

**16MC09-046: S. K. Sen<sup>1</sup> and M. Jalal Ahammad<sup>2</sup>**

<sup>1</sup>Professor, RCMPS, University of Chittagong, Bangladesh.

<sup>2</sup>Department of Mathematics, University of Chittagong, Bangladesh.  
mjacbd@yahoo.com

**An Inviscid Fluid Motion Between Two Fixed Cylinders**

**16MC09-050: R. Mojumder<sup>1</sup>, M. M. T. Hossain<sup>1,2</sup> and M. A. Hossain<sup>1,3</sup>**

<sup>1</sup>Department of Mathematics, Khulna University of Engineering & Technology,  
Khulna- 9203, Bangladesh, <sup>2</sup>Corresponding author, Email: mthosain@yahoo.co.in,  
<sup>3</sup>Email: arifhkhan63@kuet.ac.bd

**Similarity Solution of Natural Convection Boundary Layer Flow above  
a semi-infinite Porous Horizontal Plate for a Boussinesq Fluid with  
Suction and Blowing**

**16MC09-064: M. M. Karim<sup>1</sup>, N. Mostafa<sup>2</sup> and M. M. A. Sarker<sup>3</sup>**

<sup>1</sup>Associate Professor, Dept. of Naval Architecture and Marine Engineering, BUET,  
Dhaka-1000, <sup>2</sup>Doctoral Student, Environment and Information Science, Yokohama  
National University, Japan, <sup>3</sup>Professor, Dept. of Mathematics, BUET, Dhaka-1000

**Numerical Prediction of Unsteady Cavitating Flow around a Hydrofoil**

18th December 2009 (Friday)

**16MC09-085: Mohammad Mansur Rahman**

Department of Mathematics and Statistics, College of Science, Sultan Qaboos University, P.O. Box 36, Al-Khod 123, Muscat, Sultanate of Oman

**Thermophoretic deposition of particles due to a porous rotating disk in the presence of non uniform heat source (or sink) with a transverse magnetic field**

---

---

**Time: 11:30 – 13:30**

**Session 4C**

Venue: Room no. 216 (Math)

Session Chair: Prof. M. A. Rashid Sarkar (BUET)

Contributory talks

**16MC09-070: N. Parveen and M. A. Alim**

Department of Mathematics, BUET, Dhaka-1000, Bangladesh,  
nazma@math.buet.ac.bd, maalim@math.buet.ac.bd

**MHD natural convection flow of viscous incompressible fluid with temperature dependent variable viscosity along a uniformly heated vertical wavy surface**

**16MC09-078: S. F. Ahmmed<sup>1</sup> and M. S. Alam Sarker**

<sup>1</sup>Mathematics Discipline, Khulna University, Khulna-9208, Bangladesh  
Department of Applied Mathematics, Rajshahi University, Rajshahi-6205, Bangladesh. Email: sfahmmed@yahoo.com, sasmath@yahoo.com

**MHD Natural Convection Flow of Fluid From a Vertical Flat Plate Considering the Viscosity Depending on Temperature**

**16MC09-095: Amena Ferdousi<sup>a\*</sup>, M. A. Alim<sup>b1</sup>**

<sup>a</sup>Faculty of Engineering and Technology, Eastern University, Road # 4, Dahanmondi, Dhaka-1207, Bangladesh

<sup>b</sup>Department of Mathematics, BUET, Dhaka-1000, Bangladesh

**MHD Natural Convection Flow from a Porous Vertical Plate in Presence of Heat Generation**

**16MC09-097: Mahmuda Ruma, M. A. Alim**

Department of Mathematics, BUET, Dhaka-1000, Bangladesh  
Email: ruma\_11@live.com

**Conjugate Effects of Heat and Mass Transfer on Natural Convection Flow Along a Vertical Flat Plate with Chemical Reaction**

**16MC09-100: Rowsanara Akhter<sup>a\*</sup>, Mohammad Mokaddes Ali<sup>b</sup> and Md. Abdul Maleque<sup>c</sup>**

<sup>a</sup>Department of Mathematics, BUET, Dhaka-1000, Bangladesh,

<sup>b</sup> Faculty of life science, Mawlana Bhashani Science and Technology University, Tangail-1902, Bangladesh, Email: mmokaddesali@yahoo.com,

<sup>c</sup>Department of Mathematics, BUET, Dhaka-1000, Bangladesh

**The effects of radiation and viscous dissipation on MHD natural convection flow along a vertical flat plate in presence of heat conduction.**

18th December 2009 (Friday)

**16MC09-106: Tania S. Khaleque<sup>1</sup> and M.A. Samad<sup>2</sup>**

<sup>1</sup>Institute of Natural Science, United International University, Dhaka-1209

<sup>2</sup>Department of Mathematics, Dhaka University, Dhaka-1000, Bangladesh

E-mail: taniask2002@yahoo.com

**MHD Free Convection Heat and Mass Transfer along a Vertical Stretching Sheet with Heat Generation and Radiation Effect**

**16MC09-110: R. Nasrin, S. Parvin and M. A. Alim**

Department of Mathematics, Bangladesh University of Engineering and Technology, Dhaka-1000, Bangladesh, salpar@math.buet.ac.bd

**Numerical study of variable viscosity and thermal conductivity with Conduction and Joule Heating on MHD Free Convection**

**16MC09-126: G. C. Paul<sup>1</sup>, S. Datta<sup>2</sup>, J. N. Pramanik<sup>3</sup> M. M. Rahman<sup>4</sup>**

<sup>1,2,3</sup>Department of Mathematics, University of Rajshahi, Rajshahi-6205, Bangladesh, <sup>4</sup>Department of Mathematics, Shahjalal University of Science & Technology, Sylhet 3114, Bangladesh. Email: sdatt\_ru@yahoo.com

**Dust grain growth and settling in a gaseous protoplanet**

**Dust grain growth and settling in a gaseous protoplanet**



**Time: 13:30-15:00 Lunch and Jumm'ah Prayer Break**

**Time: 15:00 – 16:30**

**Session: 5 (Keynote 02)**

**Venue: Seminar room (Civil)**

Session Chair: Prof. Munibur Rahman Chowdhury (DU)

**Keynote Talk: Prof. J. N. Islam**

**16MC09-K02: J. N. Islam**

Research Centre for Mathematics and Physical Sciences (RCMPS),  
University of Chittagong, Bangladesh

**An Overview of Mathematical and Theoretical Physics Through a Quartet of Problems**



**Time: 16:30-16:45 Tea Break**

18th December 2009 (Friday)

**Time: 16:45 – 18:00**

**Session 6A**

Venue: Post Graduate Lecture room (Math)

Session Chair: Prof. M. Shahabuddin (AUST)

Invited talk: Prof. Anukul De

**16MC09-127: Anukul De**

Dept. of Mathematics, Tripura University, Agartala, Tripura, India.  
E-mail: anukuldetu@yahoo.com

**A Note on Anisotropic Shell**

Contributory talks

**16MC09-061: Md. Emran Chowdhury, Muhammad Jawaherul Alam and Md. Saidur Rahman**

Dept. of Computer Science and Engineering, BUET, Dhaka - 1000, Bangladesh.  
emranbuet2002@gmail.com, jawaherul@yahoo.com,  
saidurrahman@cse.buet.ac.bd

**On Upward Point-Set Embedding of Upward Planar Digraphs**

**16MC09-041: Abu Zafor Khan and L. S. Andallah**

Department of Mathematics, Jahangirnagar University, Savar, Dhaka-1342,  
Bangladesh

**A Hexagonal Model Boltzmann Equation Discretized on a Triangular Grid in  $R^2$**

**16MC09-052: A. S. Bhuiyan<sup>1</sup> M .M. K. Chowdhury<sup>2</sup>**

<sup>1</sup>Department of Civil Engineering, Presidency University, Dhaka, Bangladesh  
Email: bhuiyans@mail.presidency.edu.bd, <sup>2</sup>Department of Mathematics,  
Bangladesh University of Engineering and Technology, Dhaka, Bangladesh

**Exponential expression involving scalar field in the early universe**

**16MC09-060: Abul Kalam Azad**

Department of Mathematics, Chittagong University, Chittagong 4331, Bangladesh.

**On the Cosmologies**

**16MC09-076: Mohammed Ashraf Islam\* and Jamal Nazrul Islam**

RCMPS, University of Chittagong, Chittagong, Bangladesh.

**Anharmonic Solution of Schrödinger Time-Independent Equation.**

**16MC09-101: A. De and D. Debnath**

Dept. of Mathematics, Tripura University, Agartala, Tripura, India.

E-mail: doyal\_debnath@yahoo.com

**Thermal Stress in a Long In-Homogenous Cylinder Subject To  $\gamma$ -Ray Heating with Variable Elastic Constants and Thermal Conductivity**

**16MC09-093: Payer Ahmed**

Department of Mathematics,  
Jagannath University, Dhaka -1100

**Compute simulations of physical phenomena using transport and diffusion equations in solid**

18th December 2009 (Friday)

**Time: 16:45 – 18:00**

**Session 6B**

Venue : Seminar room (Civil)

Session Chair: Prof. M. A. H. Khan, (BUET)

Invited talk: Prof. Francine Diener

**16MC09-065: Francine Diener<sup>1</sup>, Marc Diener<sup>2</sup>, Osman Khodr<sup>3</sup>, Philip Protter<sup>3</sup>**  
Labo J. A. Dieudonne, Department Of Mathematics, Nice Sophia-Antipolis  
University  
28, Avenue Valrose, 06108 Nice Cedex-2, France  
E-mail: diener@unice.fr, osman.khodr@unice.fr, pep4@cornell.edu  
**Mathematical Models for Microlending**

Contributory talks

**16MC09-073: S. K. Sen**

Research Center for Mathematical and Physical Sciences (RCMPS),  
University of Chittagong, Chittagong – 4331, Bangladesh

**On the Slow Viscous Fluid Motion About a Cylinder**

**16MC09-006: Rabindra Nath Mondal, Anup Kumar Datta and Shaha Md. Tarif Hossain<sup>1</sup>**

Mathematics Discipline; Science, Engineering and Technology School,  
Khulna University, Khulna-9208, Bangladesh, Email: rnmondal71@yahoo.com

<sup>1</sup>Dept. of Mathematics, Govt. B. L. College, Khulna, Bangladesh,

**Time-dependent Solutions of the Flow through a Curved Rectangular Duct for Various Aspect Ratios**

**16MC09-007: Rabindra Nath Mondal, Anup Kumar Datta and Bichakhan Mondal<sup>1</sup>**

Mathematics Discipline; Science, Engineering and Technology School,  
Khulna University, Khulna-9208, Bangladesh, Email: rnmondal71@yahoo.com,

<sup>1</sup>Dept. of Mathematics, Govt. M. M. City College, Khulna, Bangladesh

**Laminar Flow through a Rotating Curved Square Duct: The Case of Negative Rotation**

**16MC09-004: Subrata Bhowmik, Anjan Mukherjee**

Department of Mathematics, Tripura University, Suryamaninagar,  
Tripura-799130, INDIA, E-mail: subrata\_bhowmik\_math@rediffmail.com

**Fractionally Action of a Group**

**16MC09-089: M. Alhaz Uddin<sup>1</sup> and M. A. Sattar<sup>2</sup>**

<sup>1</sup>Department of Mathematics, Khulna University of Engineering and Technology,  
Khulna-9203, Bangladesh, E-mail address: alhazuddin@yahoo.com

<sup>2</sup>Department of Mathematics, Rajshahi University, Rajshahi-6205, Bangladesh

**Approximate solution of a fourth order weakly nonlinear differential system with strong damping and slowly varying coefficients by unified KBM method**

**16MC09-122: Md. Anwar Hossain, M. Mahfooz**

Department of Mathematics, COMSATS Institute of Information Technology,  
Islamabad, Pakistan. Email: mustafamahfooz@gmail.com

18th December 2009 (Friday)

**Viscous Dissipation Effects on Transient Natural Convection  
Flow Past a Vertical Flat Surface**

**16MC09-123: S K Deb Nath<sup>1</sup>, S R Ahmed<sup>2</sup> and P Modak<sup>2</sup>**

<sup>1</sup> Division of Mechanical and Automotive Engineering, Kongju National University, South Korea

<sup>2</sup> Department of Mechanical Engineering, Bangladesh University of Engineering and Technology, Bangladesh (Email: sankar20006@yahoo.com)

**Analytical Solution to a Stiffened 0<sup>0</sup>/90<sup>0</sup>/0<sup>0</sup> Laminated Composite Plate Subjected To a Combined Shear and Axial Loading**

**16MC09-131: Md. Showkat Ali\*, Md. Abu Hanif Sarkar\*\*, Md. R. Islam Bhuiyan\*\***

\*Department of Mathematics, University of Dhaka, Dhaka 1000, Bangladesh

\*\*Research student of Department of Mathematics, University of Dhaka

**Totally Geodesic Submanifolds of the Tangent Bundle**

**16MC09-132: Tanzia Zerine Khan<sup>1</sup> and Md. Showkat Ali<sup>2</sup>**

<sup>1</sup> Research student of Department of Mathematics, University of Dhaka

<sup>2</sup> Department of Mathematics, University of Dhaka, Dhaka-1000

**A General Theorem on Vector Bundle in Riemannian Manifolds**

---

---

18th December 2009 (Friday)

19th December, 2009

**Time: 09:15 – 11:15**

**Session 7A**

Venue : Post Graduate seminar room (Math )

Session Chair: Prof Gazi Md. Khalil (BUET)

Invited talk: Dr. Manosh C Paul, (University of Glasgow, UK)

**16MC09-121: Manosh C Paul**

Department of Mechanical Engineering, University of Glasgow  
Glasgow G12 8QQ, UK

Email: m.paul@eng.gla.ac.uk

**Fluid Mechanics in Atherosclerotic Arteries**

Contributory talks

**16MC09-017: Sk. Farid<sup>a</sup>, M. Z. I. Khan<sup>b</sup>, , S. Sultana<sup>c</sup>**

<sup>a</sup>Mirpur Girls' Ideal Laboratory Institute, Mirpur-10, Dhaka-1216

<sup>b</sup>Bangladesh University of Engineering and Technology (BUET)

<sup>c</sup>Stamford University of Bangladesh

**Effect of Cooling Water Temperature on an Innovative Two-Stage Adsorption Chiller**

**16MC09-049: Joydeep Chakraborty**

Assistant Professor of Mathematics, NAGAR COLLEGE, W.B. India.

Email : joydeep\_sweety2007@rediffmail.com

**Black Hole: An Analytical Approach**

**16MC09-094: U. A. Mofiz and M. J. Hossen**

Department of Mathematics and Natural Sciences

BRAC University, 66 Mohakhali, Dhaka-1212, Bangladesh

Email: mofiz@bracu.ac.bd

**Numerical Analysis of Earthquake Solitons in Space Plasmas**

**16MC09-102: A. Malek, Gour Chandra Paul and Ashabul Hoque**

Department of Mathematics, University of Rajshahi, Rajshahi-6205, Bangladesh.

**Pressure Profiles of Oxygen in Skeletal Muscle During Exercise: A Theoretical Study**

**16MC09-103: R. A. Rouf<sup>1</sup>, M. S. Alam<sup>2</sup>**

<sup>1</sup>School of Engineering and Computer Science, Independent University, Bangladesh

<sup>2</sup>Institute of Natural Sciences, United International University

E-mail: sarwar.alamuiu@gmail.com

**Dominating Singularity behaviour of the Laminar Unsteady Flow of a viscous fluid away from a plane Stagnation point**

19th December 2009 (Saturday)

**16MC09-115: Ashish Kumar Upadhyay**

Dept. of Mathematics, Indian Institute of Technology Patna,  
Patliputra Colony, Patna - 800013.  
Email: ashish.k.upadhyay@gmail.com

**Covered triangulation on non orientable surface of Euler  
Characteristic -1**

**16MC09-082: M. Shahidul Islam and M. S. Islam**

Institute of Information and Communication Technology, Bangladesh University  
of Engineering and Technology, Dhaka-1000, Bangladesh, E-mail address:  
mshahid.buet@yahoo.com, mdsaiifulislam@iict.buet.ac.bd

**Analysis and Mitigation of Signal-dependent Noise  
in Fiber-Optic Transmission System**

**16MC09-033: B. K. Karmaker and M. S. Islam**

Institute of Information and Communication Technology  
Bangladesh University of Engineering and Technology, Dhaka-1000, Bangladesh  
E-mail: bijoy\_ice@yahoo.com, mdsaiifulislam@iict.buet.ac.bd

**Modeling the Effects of Chromatic Dispersion and Self-Phase  
Modulation in Optical Fibers**

---

---

**Time: 09:15 – 11:15**

**Session 7B**

Venue: Seminar room (Civil)

Session Chair: Prof. A. C. Mondal, (DU)

Contributory talks

**16MC09-008: M. H. Kabir, A. Afroz and L. S. Andallah**

Department of Mathematics, Jahangirnagar University, Savar, Dhaka,  
hkabirju@gmail.com

**A Finite Difference Scheme for a Macroscopic Traffic Flow Model  
based on a nonlinear Density-Velocity Relationship**

**16MC09-123: S K Deb Nath, S R Ahmed and P Modak**

1 Division of Mechanical and Automotive Engineering, Kongju National  
University, South Korea  
2 Department of Mechanical Engineering, Bangladesh University of Engineering  
and Technology, Bangladesh (Email: sankar20006@yahoo.com)

**Analytical Solution to a Stiffened 00/900/00 Laminated Composite  
Plate Subjected to a Combined Shear and Axial Loading**

**16MC09-077: Abdur Rahman<sup>1</sup> and M. Ashraf Uddin<sup>2</sup>**

<sup>1</sup>Mathematics Division, Sylhet Model College, TB Gate, Shahi Eidga, Sylhet-3100,  
<sup>2</sup>Department of Mathematics, Shahjalal University of Science &  
Technology,  
Sylhet-3114

**Direct Numerical Simulation in Two-Dimensional Homogeneous  
Isotropic Turbulence Using the Spectral Method**

19th December 2009 (Saturday)

- 16MC09-111: M. H. R. Khan<sup>1\*</sup>, A. K. M. Akther Hossain<sup>2</sup> and M. Huq<sup>2</sup>**  
1Dept. of Arts & Sciences, Ahsanullah University of Science & Technology, Dhaka, Bangladesh, 2Dept. of Physics, Bangladesh University of Engineering & Technology, Dhaka, Bangladesh, hamid1272n@yahoo.com  
**Electrical and Magnetotransport properties of  $\text{La}_{2-x}\text{Pb}_x\text{SrMn}_2\text{O}_7$  manganites**
- 16MC09-112: Humaira Farzana<sup>1</sup>, Md. Obayedullah<sup>2</sup>, M. A. Alim<sup>2</sup>**  
<sup>1</sup>Department of Arts & Science, Ahsanullah University of Science & Technology, Dhaka-1215, Bangladesh, humaira\_tithy@yahoo.com  
<sup>2</sup>Department of Mathematics, Bangladesh University of Engineering and Technology, Dhaka-1000, Bangladesh, obayed@math.buet.ac.bd  
**Effect of Hyperbolic Interpolation in the Finite Element Solution of an Eigenvalue Problem**
- 16MC09-014: Md. Shafiqul Islam**  
Barisal Government College, Barisal, Bangladesh.  
Email: shafiq71bd@yahoo.com  
**Gendered Mathematics Education and Math-phobia of Women: The Bangladesh Context**
- 16MC09-011: M. S. Alam<sup>a</sup>, M. A. H. Khan<sup>b</sup>**  
<sup>a</sup>Institute of Natural Sciences, United International University, Dhaka-1209, Bangladesh, sarwar.alamui@gmail.com,  
<sup>b</sup>Department of Mathematics, Bangladesh University of Engineering and Technology, Dhaka-1000, Bangladesh  
**An analysis of Critical behaviour of the flow in Convergent-Divergent Channels in presence of MHD**
- 16MC09-051: Md. Ismail Jabiullah<sup>1</sup>, Abdullah Al-Shamim<sup>2</sup> and M. Lutfar Rahman<sup>3</sup>**  
<sup>1</sup>Department of Software Engineering, Daffodil International University, Dhaka, Bangladesh, E-mail: jabi1964@hotmail.com  
<sup>2</sup>Institute of Science and Technology, Dhaka, Bangladesh  
<sup>3</sup>Department of Computer Science and Engineering, Dhaka University, Bangladesh  
**A Novel Random Number Generation Technique**
- 16MC09-124: M. S. Rahman**  
Department of Mathematics, Jahangirnagan University, Savar, Dhaka-1342 Bangladesh.  
**A Class of  $K^*$ -spaces**

---

---

Time: 11:15 – 11:30    Tea break

19th December 2009 (Saturday)

**Time: 11:30 – 13:30**

**Session 8A**

Venue : Post Graduate seminar room (Math )

Session Chair: Prof. M. Abdul Matin (DU)

Contributory talks

**16MC09-021: A.R.M. Jalal Uddin Jamali, Mohammad Arif Hossain, G.M. Moniruzzaman, M. M. A. Hashem<sup>†</sup>**

Dept. of Mathematics, Khulna University of Engineering & Technology, Khulna 9203, Bangladesh.

<sup>†</sup>Dept. of Computer Science and Engineering, Khulna University of Engg. & Tech., Khulna 9203, Bangladesh.

armjamali@yahoo.com, arifhkan63@hotmail.com, jamali@math.kuet.ac.bd, hashem@cse.kuet.ac.bd

**For Solving Linear Equations by Uniform Adaptive Hybrid Evolutionary Algorithms – Crossover – a Superfluous Sperator**

**16MC09-107: Mohammed Ashraful Islam and Md. Sayeed Iftekhar Yousuf**

Department of Mathematics, University of Chittagong, Bangladesh.

Email: ashrafulmath@yahoo.com

**Solutions of Einstein's Equations for Radiating Relativistic Matter in Geodesic Motion.**

**16MC09-113: M Asifuzzaman, Partha Pratim Dey**

Department of Electrical Engineering & Computer Science, North South University, Bangladesh, ppd@northsouth.edu

**Sample Size for a Monte Carlo Approximations of Pi**

**16MC09-114: Partha Pratim Dey<sup>1</sup>, John L. Hayden<sup>2</sup>**

<sup>1</sup>Department of Electrical Engineering & Computer Science

North South University, Dhaka, Bangladesh

and <sup>2</sup>Department of Mathematics & Statistics, Bowling Green State University, Bowling Green, Ohio, USA

**Collineations for Finite Planes**

**16MC09-117: ATM Safiul Azam<sup>1</sup>, A.K.M. Azharul Islam<sup>2</sup> and M. Aftabuz**

<sup>1</sup>Institute of Natural Sciences, United International University, Dhaka-1209.

<sup>2</sup>Department of Physics, Rajshahi University, Rajshahi-6205.

atm\_shafi@yahoo.com

**AB INITIO DFT STUDIES OF MOB<sub>2</sub>**

**16MC09-118: Farzana Hossain, Razwan Ahamad, M. S. Karim, Mizanur Rahman, M. Rahman**

Department of mathematics Shahjalal University of Science and Technology, Sylhet-3114, Bangladesh. Email: farzanahn@live.com, 2: msk-mat@sust.edu

**Study on Extended Gaussian Quadrature For Triangle**

**16MC09-062: M. Ismail Jabiullah<sup>1</sup>, Md. Zakaria Sarker<sup>2</sup> and M. Lutfar Rahman<sup>3</sup>**

<sup>1</sup>Professor, Department of Software Engineering, Daffodil International University, E-mail: mijjabi@daffodilvarsity.edu.bd

<sup>2</sup>Institute of Science and Technology, National University, Dhanmondi, Dhaka.

<sup>3</sup>Professor, Department of Computer Science and Engineering, Dhaka University, Bangladesh. Email: lrahman@univdhaka.edu

**A Dynamic Hill Cipher Technique for Secured Message Transactions**

19th December 2009 (Saturday)

**16MC09-096: M A E Akhter<sup>1</sup>, M M Alam<sup>1</sup> and M A Hossain<sup>2\*</sup>**

<sup>1</sup> Department of Physics, <sup>2</sup> Department of Mathematics  
Khulna University of Engineering & Technology, Khulna-9203, Bangladesh  
\* E-mail: arifhkhann63@hotmail.com

**Use of Physics Options in MM5 To Predict the Severe Cyclonic Storm  
Aila**

**16MC09-130: M. Zillur Rahman and M. Hamidul Islam**

Applied Mathematics Rajshahi University  
Email: mzillurr@yahoo.com, mhislam.ru\_bd@yahoo.com

**Crucial Roles of Water Vapor in Global Warming and Climate  
Change Scenarios of Bangladesh**

---

---

**Time: 11:30 – 13:30**

**Session: 8B**

Venue : Seminar room (Civil)

Session Chair: Prof. J. N. Islam (CU)

Invited talk: Prof. M. Anwar Hossain

**16MC09-069: Md. Anwar Hossain**

CIIT Islamabad Campus, Pakistan

**Joules and viscous dissipation on mixed convection boundary layer  
flow with variable electrical conductivity: Uniform magnetic field**

Contributory talks

**16MC09-048: A. S. Bhuiyan<sup>1</sup>, NHM. A. Azim<sup>2</sup>, M. K. Bashar<sup>3</sup>, M.M. K. Chowdhury<sup>4</sup>**

<sup>1</sup>Department of Civil Engineering, Presidency University, Dhaka, Bangladesh  
Email: bhuiyans@mail.presidency.edu.bd

<sup>2</sup>School of Business studies, Southeast University, Dhaka, Bangladesh

<sup>3</sup>Department of Civil Engineering, Presidency University, Dhaka, Bangladesh

<sup>4</sup>Department of Mathematics, BUET, Dhaka-1000, Bangladesh

**Effects of pressure stress work and viscous dissipation in natural  
convection flow from a horizontal circular cylinder**

**16MC09-053: NHM. A. Azim<sup>1</sup>, ATM. M. Rahman<sup>2</sup>, M. M. K. Chowdhury<sup>3</sup>**

<sup>1</sup>School of Business studies, Southeast University, Dhaka, Bangladesh,  
email: nhmarif1@gmail.com,

<sup>2</sup>Department of Computer Science and Engineering, Dhaka international  
University, Dhaka, Bangladesh ,

<sup>3</sup>Department of Mathematics, BUET, Dhaka-1000, Bangladesh,  
email: mkamal@math.buet.ac.bd

**Magnetohydrodynamic(MHD) conjugate free convection flow from an  
isothermal horizontal circular cylinder in presence of heat generation**

**16MC09-081: ATM Safiul Azam and M.A Saklayen**

Institute of Natural Sciences, United International University, Dhaka

**Seasonal Variation of Latent Heat and its Fluxes in Bangladesh**

**16MC09-090: SK. Anwar Hossain<sup>1</sup> and M. A. Alim<sup>2</sup>**

<sup>1</sup>Department of Mathematics, Jagannath University, Dhaka -1100

<sup>2</sup>Department of Mathematics, BUET, Dhaka -1000

**Numerical investigation of Natural Convection from an open square cavity containing a heated circular cylinder**

**16MC09-099: Rowsanara Akhter<sup>a</sup>\*, Mohammad Mokaddes Ali<sup>b</sup>, Md. Abdul Maleque<sup>c</sup> and A. A. Mamun<sup>d</sup>**

<sup>a</sup>Department of Mathematics, BUET, Dhaka-1000, Bangladesh,

<sup>b</sup> Faculty of life science, Mawlana Bhashani Science and Technology University, Tangail-1902, Bangladesh, Email: mmokaddesali@yahoo.com,

<sup>c</sup>Department of Mathematics, BUET, Dhaka-1000, Bangladesh

<sup>d</sup>Institute of Natural Science, United International University, Dhaka-1209, Bangladesh

**The effect of combined radiation and conduction on MHD natural convection flow along a vertical flat plate.**

**16MC09-104: Md. Shariful Alam<sup>1</sup>, Md. Abdus Sattar<sup>2</sup> and M. M. Rahman<sup>3</sup>**

<sup>1</sup>Department of Mathematics, Dhaka University of Engineering and Technology (DUET), Gazipur-1700, Bangladesh. Email: msalam631@yahoo.com

<sup>2</sup>Department of EECS, North South University, Bashundhara, Baridhara R/A, Dhaka-1229, Bangladesh.

<sup>3</sup>Department of Mathematics, University of Dhaka, Dhaka-1000, Bangladesh. , msalam631@yahoo.com

**Local similarity solutions of an unsteady MHD two-dimensional convective heat transfer flow past a moving semi-infinite vertical porous flat plate with variable suction/injection**

**16MC09-109: Quamrul Islam<sup>1</sup> and Md. Abu Kawser<sup>2</sup>**

<sup>1</sup>Professor, RCMPS, University of Chittagong, BANGLADESH.

On leave and now at AUST, Dhaka

<sup>2</sup>Department of Mathematics, CUET, Chittagong, BANGLADESH.

**On the equilibrium of Perfect Fluid Spheres**

**16MC09-116: M. Obayedullah<sup>1</sup>, M. M. K Chowdhury and M. M. Rahman**

Department of Mathematics, BUET, Dhaka-1000, Bangladesh.

<sup>1</sup>obayed@math.buet.ac.bd

**Magnetohydrodynamic natural convection in a square cavity containing internal energy sources with parabolic temperature profile in the wall**

19th December 2009 (Saturday)

---

---

Time: 13:30-15:00 Lunch and Prayer Break

**Time: 15:00 – 17:00**

**Session: 9**

Venue: Seminar room (Civil)

Session Chair: Prof. Shamsur Rahman, Department of Math, JU, Savar,  
Dhaka

**Plenary Talk on Mathematics**

**Prof. Dr. M. Shamsheer Ali**

Vice Chancellor, Southeast University, Dhaka.

Former Vice-Chancellor, Bangladesh Open University

.E-mail: msali@seu.ac.bd , msali\_37@yahoo.com

**Ways and Means of Creating Interest in Mathematics**

**Open Discussion**

19th December 2009 (Saturday)