Curriculum Vitae

of

DR. SALMA PARVIN

Professor

Department of Mathematics,
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Academic qualifications:

- **Ph.D.**, Mathematics (Computational Fluid Dynamics); from Department of Mathematics, Bangladesh University of Engineering and Technology (BUET), Dhaka-1000, Bangladesh (Year: 2012).
- **M.Phil.**, Mathematics (Quantum Mechanics); from Department of Mathematics, Bangladesh University of Engineering and Technology (BUET), Dhaka-1000, Bangladesh (Year: 2005).
- **M.Sc.**, Applied Mathematics; from Department of Mathematics, University of Dhaka, Bangladesh (Year: 1994 held in 1997, Grade: First Class 2nd position with 71% marks)
- **B.Sc.** (Hons.), Mathematics; from Department of Mathematics, University of Dhaka, Bangladesh (Year: 1993, held in 1995, Grade: First Class 12th position with 66.6% marks)
- **H.S.C.** (Science Group); from Govt. Womens' College, Jessore, Bangladesh (Year: 1990, Grade: First Division with 77.7% marks)
- **S.S.C.** (Science Group); from Noapara Pilot Girls' High School, Abhoynagar, Jessore, Bangladesh (Year: 1988, Grade: First Division with 73.5% marks)

Research Interest

Applied mathematics leading to Computational Fluid Dynamics (CFD), Nanofluids Flow Modelling, Transport in Porous Media, Heat and Mass Transfer, Magnetohydrodynamics and Numerical Analysis.

Computer Expertise

MS-WORD, MS-EXCELL, PAGE MAKER, programming software FORTRAN, MATLAB and graphing software TECHPLOT.

Achievements

a) Awarded travel grant from IMU to attend the Conference on Global Approach to the Gender Gap in Mathematical, Computing and Natural Sciences: How to Measure It, How to Reduce It ? November 04-08, 2019, Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy.

b) Awarded travel grant to attend the annual conference of the Indian Women and Mathematics (IWM 2019), June 10-12, 2019, Indian Institute of Technology Bombay, Mumbai, India.

c) Awarded travel grant to attend the International Conference on Mathematical Methods and Computation (ICOMAC 2019), 20th & 21st February 2019, PG & Research Department of Mathematics, Jamal Mohamed College (Autonomous), Tiruchirappalli, Tamil Nadu, India.

d) Awarded Open Arms travel grant to attend ICM 2018 (August 1 – 9), Reo De Janeiro, Brazil.

e) Awarded travel grant to attend the annual conference of the Indian Women and Mathematics (IWM 2018), June 21-23, 2018 Shiv Nadar University NH91, Tehsil Dadri, Gautam Buddha Nagar, Greater Noida, Uttar Pradesh, India

f) Awarded travel grant to attend the Symposium for South Asian Women in Mathematics, 12-15 October, 2017, Tribhuvan University, Kathmandu, Nepal.

g) Awarded travel grant From BUET to attend 19th International Conference on Mathematical, Computational Science and Engineering ICMCSE 2017, Toronto, Canada, June 15-16, 2017

h) Awarded NANUM 2014 travel grant to attend both ICWM 2014 (August 12 and 14) and ICM 2014 (August 13 – 21), Seoul, Korea.

i) Awarded travel grant From BUET to attend 3rd CUTSE International Conference 2011, Curtin University, Miri, Sarawak, Malaysia, 08-09 November, 2011.

j) Best paper award for the paper titled "Double diffusive natural convection in a partially heated cavity using nanofluid" in *Global Engineering, Science & Technology Conference,* 28-29 December, 2012, BIAM, Bangladesh, Paper ID: 922.

k) Best paper award for the paper titled "Joule Heating Effect on MHD Combined Convection in a Lid-driven Cavity Heated from Wavy Bottom Surface" in *3rd CUTSE International Conference* 2011, 08-09 November, 2011, Curtin University, Sarawak Campus, Malaysia, pp. 011-017.

l) Fellowship award in recognition of contribution to the body of knowledge on 29 December 2012 by Global Institute of Science & Technology, 31 Blacke Street, Berwick 3806, Victoria, Australia**.**

Scholarships

- Dhaka University Merit Scholarship (1994-1994)
- Jessore Education Board's Scholarship award for H.S.C. result (1991-1993)
- Jessore Education Board's Scholarship award for S.S.C. result (1989-1990)
- Junior Education Scholarship award for 8^{th} grade high school (1986- 1988)
- Primary Education Scholarship award for 5^{th} grade primary school (1983-1985)

Work experience

- Professor in the Department of Mathematics, Bangladesh University of Engineering and Technology, Dhaka – 1000, Bangladesh (3rd December 2016 to till date).
- Associate Professor in the Department of Mathematics, Bangladesh University of Engineering and Technology, Dhaka – 1000, Bangladesh (12^{th} June 2013 to 2^{nd} December 2016).
- Assistant Professor in the Department of Mathematics, Bangladesh University of Engineering and Technology, Dhaka – 1000, Bangladesh (6^{th} April 2009 to 11^{th} June 2013).
- Lecturer in the Department of Mathematics, Bangladesh University of Engineering and Technology, Dhaka – 1000, Bangladesh (1^{st} December 2004 to 5^{th} April 2009).
- Part time Teacher in the Department of Mathematics, Bangladesh University of Engineering and Technology, Dhaka – 1000, Bangladesh (From April-2002 to October-2004).
- Teaching Assistant in the Department of Mathematics, Bangladesh University of Engineering and Technology, Dhaka – 1000, Bangladesh (From October-2000 to September-2001).

Contribution to the University Administration

- Working as an Assistant Provost in the Chattri Hall, BUET from 22-01-2013 to 13-03-2018.
- Worked as Provost in charge in the Chattri Hall, BUET for several times during the time from June 2015 to March 2018.

Supervisor for Postgraduate research

Supervision of Completed Graduate Research Work: **Two** Master of Philosophy (M. Phil.) students.

Supervision of On-going Graduate Research Work: Currently supervising **nine** postgraduate students (**Two** doctor of Philosophy (Ph.D), **Four** of Master of Philosophy (M. Phil.) and **Three** of Master of Science (MS) program).

Project coordination

Director of the research project titled **" Numerical Study of Heat Transfer and Entropy Generation through a Nanofluid-Based Direct Absorption Solar Collector "** financed by University Grants Commission, Agargaon, Dhaka, Bangladesh.(from 01-04-2015 to 31-03-2016)

Membership of the Different Organizations

1. Life Registered Graduate of University of Dhaka.
2. Life Member of Dhaka University Alumni Association.
3. Life Member of Dhaka University Mathematics Alumni Association.
4. Life Member of BUET Alumni Association.
5. Life Member of Bangladesh Mathematical Society.
6. Executive Member of Bangladesh Mathematical Society (2009-2011, 2013-2015)**.**
7. Life Member of Bangladesh Academy of Science.
8. **IMU Committee for Women in Mathematics (CWM) Ambassador for Bangladesh (**http://www.mathunion.org/fileadmin/templates/wim/Other_Uploads/CWMAmbassadorslistposted2016.pdf)
9. **Member Secretary of the Board of Post Graduate Studies (BPGS) in the dept. of mathematics , BUET, (October 2013 to September 2018)**
10. Member of the Board of Post Graduate Studies (BPGS), Department of mathematics, BUET.
11. Member of the Board of Undergraduate Studies (BUGS), Department of mathematics, BUET.
12. Member of the Faculty of Engineering, Bangladesh University of Engineering and Technology, Dhaka-1000, Bangladesh.
13. Member of the Academic Council, Bangladesh University of Engineering and Technology, Dhaka-1000, Bangladesh.

Professional Work at National and International Levels

External examiner experience

Served as external examiner of M.Phil and Ph.D examination in home and abroad

Reviewer

Served as reviewer of many articles of more than 30 different international journals/Conference Proceedings

Member of the Organizing committee of

(i) 8th National Undergraduate Mathematics Olympiad 2016 (Final Round)

(ii) 7th National Undergraduate Mathematics Olympiad 2015 (Dhaka South Region)

(iii) 5th National Undergraduate Mathematics Olympiad 2013 (Dhaka Region)

(iv) Inter University Mathematical Olympiad 2009

(v) 16th International Mathematics Conference 2009

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List of Publications

a) **Journal publication (***recognized and refereed journals/proceedings***)**:

1. A Nahar, M Hasanuzzaman, **S Parvin**, Computational Modeling for Photovoltaic Thermal System, ICCA 2020: Proceedings of the International Conference on Computing Advancements, January 2020, Article No.: 51, Pages 1–7; https://doi.org/10.1145/3377049.3377129.
2. A. K. Azad, M.M. Rahman, **Salma Parvin** , Mahtab Uddin and M. R. Islam, (2020) Effect Of Joule Parameter On Mhd Mixed Convection In An Open Channel With Semi-Circular Heater On The Bottom Wall; ARPN Journal of Engineering and Applied Sciences, 15(1), (2020) 113 – 121.
3. Ayesha Siddiqua and **Salma Parvin**, Heatline analysis for mixed convection flow of nanofluid in a two sided lid-driven cavity with a heat generating block: effect of Reynolds number, AIP Conference Proceedings 2121, 070010 (2019); https://doi.org/10.1063/1.5115917.
4. Tanzia Zerin Khan and **Salma Parvin**, Effects of Lewis Number on Two Phase Natural Convection Flow of Nanofluid inside a Square Cavity with an Adiabatic Obstacle, AIP Conference Proceedings 2121, 070007 (2019); https://doi.org/10.1063/1.5115914.
5. Abdul Karim, Md. Motahar Hossain, **Salma Parvin**, and Md. Abdul Hakim Khan, Hemodynamic Blood Flow through a Section of Human Artery under the Effect of Applied Magnetic Field, AIP Conference Proceedings 2121, 050010 (2019); https://doi.org/10.1063/1.5115897.
6. Afroza Akter and **Salma Parvin**, Numerical analysis of a blood flow model for arterial stenosis in presence of external magnetic field, AIP Conference Proceedings 2121, 100001 (2019); https://doi.org/10.1063/1.5115932.
7. **Salma Parvin** and Afroza Akter, Mathematical modelling and simulation of blood flow considering shear rate dependent viscosity through arterial stenosis in presence of magnetic field, American International Journal of Research in Science,

Technology, Engineering & Mathematics, Special Issue of 5th International Conference on Mathematical Methods and Computation (ICOMAC -2019), February 20-21, 2019, pp. 373-379.

8. Afroza Nahar , M. Hasanuzzaman, N.A. Rahim, **S. Parvin**, Numerical investigation on the effect of different parameters in enhancing heat transfer performance of photovoltaic thermal systems, Renewable Energy, Vol. 132, pp. 284-295, (2019).
9. M. A. H. Khan, **S. Parvin** and A. Sultana, A Numerical Study on Acoustic Streaming and Tissue Heating During Magnetic Resonance guided High Intensity Focused Ultrasound Through Blood Vessel with an Obstacle, Proceedings of 3rd Thermal and Fluids Engineering Conference (TFEC), TFEC-2018-21810, pp. 129-141, (2018).
10. Afroza Akter and **Salma Parvin**, Numerical Analysis of Heat Generation Effect on MHD natural convection flow in a L Shaped cavity, Journal of Engineering Mathematics and Statistics, Volume 2 Issue 1, pp. 1-8, (2018).
11. A. Akter, **S. Parvin**, Analysys of Natural convection Flow in a Trapezoidal cavity Containing a Rectangular Heated Body in Presence of External Oriented magnetic Field, *Journal of Scientific Research*, Vol. 10, No.1, pp. 11-23, (2018)..
12. **Salma Parvin**, Ayesha Siddiqua and Md. Elias, Effect of Reynold's Number for Mixed Convection Flow of Nanofluid in a Double Lid Driven Cavity with Heat Generating Obstacle, Heat and Mass Transfer Research Journal Vol. 1, No. 1, pp. 79-87, 2017.
13. Afroza Akter and **Salma Parvin**, Numerical Analysis of Heat Generation Effect on Natural Convection Flow in a Trapezoidal Cavity Containing a Rectangular Heated Body, Journal of Engineering Mathematics and Statistics, Volume 1 Issue 2&3, pp. 1-15, (2017).
14. **Salma Parvin**, Aysha Sultana, A Computational Study for Investigating Acoustic Streaming and Heating during High Intensity Focused Ultrasound through Blood Vessel with an Obstacle, AIP Conference Proceedings 1851, 020054 (2017); doi: 10.1063/1.4984683.
15. A.K. Azad, **Salma Parvin**, and Md. Mustafa Kamal Chowdhury, Effects of Hartmann Number on Combined Convection in a Channel with Cavity Using Cu-Water Nanofluid, AIP Conference Proceedings 1851, 020081 (2017); doi: 10.1063/1.4984710.
16. **Salma Parvin,** Md. Sajid Ahmed, Raju Chowdhury, Effect of Solar Irradiation and Mass Flow Rate on Forced Convective Heat Transfer through a Nanofluid-Based Direct Absorption Solar Collector, AIP Conference Proceedings 1851, 020067 (2017); doi: 10.1063/1.4984696.
17. Raju Chowdhury, **Salma Parvin**, Md. Abdul Hakim Khan, Double-diffusive Natural Convection of Cu-Water Nanofluid in a Window Shaped Cavity Containing Multiple Obstacles with a Heater on Bottom Wall, AIP Conference Proceedings 1851, 020027

(2017); doi: 10.1063/1.4984656.

18. **Salma Parvin** and Afroza Akter, Effect of Magnetic Field on Natural Convection flow in a Prism Shaped Cavity Filled with Nanofluid, Procedia Engineering Vol. 194C pp. 421-427, 2017.
19. Raju Chowdhury, **Salma Parvin**, Md. Abdul Hakim Khan, Numerical Study of Double-diffusive Natural Convection in a Window Shaped Cavity Containing Multiple Obstacles Filled with Nanofluid, Procedia Engineering, Vol. 194C pp. 471 – 478, 2017.
20. **Salma Parvin** and M.A. Alim**,** Influence of Mass Flow Rate on Forced Convective Heat Transfer through a Nanofluid Filled Direct Absorption Solar Collector**,** International Journal of Mechanical, Aerospace, Industrial, Mechatronic and Manufacturing Engineering Vol:11, No:6, pp. 1107-1111, 2017.
21. **Salma Parvin**, Raju Chowdhury, M.A.H Khan and M.A. Alim, Performance Of Nanofluid In Free Convective Heat Transfer Inside A Cavity With Non-Isothermal Boundary Conditions, Mechanical Engineering Research Journal, Vol. 10, pp. 01-06, 2016.
22. **Salma Parvin**, Rehena Nasrin and M.A. Alim, Effect of Solid Volume Fraction on Forced Convective Flow of Nanofluid through Direct Absorption Solar Collector, *Applications and Applied Mathematics: An International Journal*, Special Issue No. 2, pp. 9-21, 2016.
23. Rehena Nasrin , **Salma Parvin** and M.A. Alim, Prandtl number effect on assisted convective heat transfer through a solar collector, *Applications and Applied Mathematics: An International Journal*, Special Issue No. 2, pp. 22-36, 2016.
24. R. Chowdhury, **S. Parvin**, M. A. H. Khan, Finite Element Analysis of Double-diffusive Natural Convection in a Porous Triangular Enclosure Filled with Al2O3-water Nanofluid in Presence of Heat Generation, *Helyon*, Vol. 2 (8) e00140, pp. 1-20, 2016.
25. **Salma Parvin**, and Ayesha Siddiqua, Heat Line Analysis for MHD Mixed Convection Flow of Nanofluid within a Driven Cavity Containing Heat Generating Block, *AIP Conference Proceedings*, 1754, 050001; doi: 10.1063/1.4958392, 2016.
26. Raju Chowdhury, **Salma Parvin**, and Md. Abdul Hakim Khan, Natural convective heat and mass transfer in a porous triangular enclosure filled with nanofluid in presence of heat generation, *AIP Conference Proceedings*, 1754, 050004; doi: 10.1063/1.4958395, 2016.
27. M. M. Rahman, M. S. Alam, **S. Parvin** and K. Vajravelu, Finite Element Simulation for Heatline Visualization of Natural Convective Flow and Heat Transfer inside a Prismatic Enclosure, *International Journal of Heat and Technology*, Vol. 34, No. 3, pp. 391-400, 2016.
28. **Salma Parvin**, M.A. Alim And N.F. Hossain, Heat and Mass Transfer due to Double Diffusive Mixed Convection in a Parallel Plate Reactor with Chemical Reaction and Heat Generation, *International Journal of Chemical and Process Engineering Research*, Vol. 2, No. 2, pp. 17-29, 2015.

29. **Salma Parvin**, Finite Element Analysis of Convective Heat and Mass Transfer through a Parallel Plate Reactor with Heat of Reaction Effect, *International Journal of Modern Physics and Applications* (IJMPA), Vol. 1 (4), pp. 152-158, 2015.
30. K. F. U. Ahmed,**S. Parvin** and A.J. Chamkha, Numerical Analysis Based on Heatline Approach for Natural Convection Flows within Prismatic Enclosures, *International Journal of Energy & Technology*, Vol. 7, No. 2, pp. 19-29, 2015.
31. R. Chowdhury, **S. Parvin**, M. A. H. Khan, Ali J. Chamkha, Effect of magnetic field and heat generation on free convection in a porous media filled equilateral triangular cavity, *International Journal of Energy & Technology*, Vol. 7, No. 1, pp. 49-61, 2015.
32. Rehena Nasrin, **Salma Parvin** and M.A. Alim, Heat transfer and collector efficiency through direct absorption solar collector with radiative heat flux effect, *Numerical Heat Transfer, Part A: Application*, 2015, Vol. 68 (4), pp. 887-907, 2015.
33. R. Chowdhury, **S. Parvin**, M. A. H. Khan, Ali J. Chamkha, MHD natural convection in a porous equilateral triangular enclosure with a heated square body in presence of heat generation, *Special Topics & Reviews in Porous Media*, Vol. 6 Issue 4, pages 353-365, 2015.
34. Afroza Akter, Prof. Dr. Showkat Ali, Dr. **Salma Parvin**, A Theorem on Riemannian Curvature Generalizes Gaussian Curvature, *Global Journal of Mathematics*, Vol. 2, No. 1, pp. 108-114, 2015.
35. **Salma Parvin**, Rehena Nasrin and M. A. Alim, Heat Transfer and Entropy Generation through Nanofluid Filled Direct Absorption Solar Collector, *International Journal of Heat and Mass transfer*, Vol. 71C. pp. 386-395, 2014.
36. **Salma Parvin** and A.J. Chamkha, An Analysis on Free Convection Flow, Heat Transfer and Entropy Generation in an Odd-shaped Cavity filled with Nanofluid, *International communications in Heat and Mass transfer*, Vol. 54C, pp. 8-17, 2014.
37. **Salma Parvin**, Rehena Nasrin, MA Alim, Heat Transfer Performance of Nanofluid in a Complicated Cavity Due to Prandtl Number Variation, *Procedia Engineering*, Vol. 90, pp. 377-382, 2014.
38. Rehena Nasrin, **Salma Parvin,**M.A. Alim, Heat Transfer by Nanofluids Through a Flat Plate Solar Collector, *Procedia Engineering*, Vol. 90, pp. 364–370, 2014.
39. Rehena Nasrin, **Salma Parvin** and M.A. Alim, Entropy generation inside a narrow channel with thermal radiation, *International Journal of Energy & Technology*, Vol. 6, No. 27, pp. 1-9, 2014.
40. **Salma Parvin**, Rehena Nasrin, M. A. Alim and N. F. Hossain, Double Diffusive Natural Convection in a Partially Heated Cavity Using Nanofluid: An Aanlysis, *Global Science and Technology Journal*, Vol. 1. No. 1, pp.123-134, 2013.
41. Rehena Nasrin, **Salma Parvin** and M.A. Alim, Buoyant flow of nanofluid for heat-mass transfer through a thin layer, *Mechanical Engineering Research Journal*, Vol.9, pp.7-12, 2013.
42. **Salma Parvin,** Rehena Nasrin, M. A. Alim and N. F. Hossain, Double diffusive

natural convective flow characteristics in a cavity, *Procedia Engineering*, Vol. 56, pp. 480-488, 2013.

43. Rehena Nasrin, **Salma Parvin** and M. A. Alim, Effect of Prandtl number on free convection in a solar collector filled with nanofluid, *Procedia Engineering*, Vol. 56, pp.54-62, 2013.
44. **Salma Parvin**, Rehena Nasrin, M.A. Alim and N.F. Hossain, Effect of Prandtl number on forced convection in a two sided open enclosure using nanofluid, *Journal of Scientific Research*,Vol. 5 No.1, pp. 67-75, 2013.
45. M. M. Rahman, **S. Parvin**, M. Hasanuzzaman, R. Saidur and N.A. Rahim, Effect of heat-generating solid body on mixed convection flow in a ventilated cavity, *Heat Transfer Engineering*, 34 (15) pp. 1-13, 2013.
46. **Salma Parvin** and N.F. Hossain, Effect of Temperature Dependent Thermal Conductivity on Buoyant Convection in an Enclosure with a Heated Obstacle, *Antarctica Journal of Mathematics*, 9 (1), pp. 75-84, 2012.
47. **Salma Parvin** and Rehena Nasrin, Effects of Reynolds and Prandtl number on mixed convection in an octagonal channel with a heat-generating hollow cylinder, *Journal of Scientific Research*, 4 (2), pp. 337-348, 2012.
48. M. M. Rahman, **S. Parvin**, N.A. Rahim, M.R. Islam, R. Saidur, and M. Hasanuzzaman, Effects of Reynolds and Prandtl number on Mixed Convection in a Ventilated Cavity with a Heat-Generating Solid Circular Block. *Applied Mathematical Modelling*,**36** (5) pp. 2056-2066, 2012.
49. Rehena Nasrin and **Salma Parvin**, Flow behavior for combined convection in a vertical channel controlled by a heat-generating tube, *International Journal of Energy & Technology*, Vol. 4, No. 1, pp. 1-7, 2012.
50. **Salma Parvin** , K.F.U. Ahmed, M.A. Alim and N.F. Hossain, (2012), Heat transfer enhancement in an enclosure including nanofluid with a heat source, *International Journal of Mechanical and Materials Engineering* (IJMME), Vol.7 No. 2, pp. 128-135, 2012.
51. **Salma Parvin** and N. F. Hossain, Finite Element Simulation of MHD Combined Convection through a Triangular Wavy Channel, I*nternational Communications in Heat and Mass Transfer*, 39 (6), 811–817, 2012.
52. Rehena Nasrin and **Salma Parvin**, Investigation of buoyancy-driven flow and heat transfer in a trapezoidal cavity filled with water-Cu nanofluid, *International Communications in Heat and Mass Transfer*, 39 (2), 270-274, 2012.
53. Rehena Nasrin, **Salma Parvin,** M. A. Alim and Ali J. Chamkha, Non-darcy forced convection through a wavy channel using CuO nanofluid, *International Journal of Energy & Technology*, Vol.4, No. 8, pp. 1-8, 2012.
54. Rehena Nasrin, **Salma Parvin** and M. A. Alim, Free convective phenomena in a tilted enclosure filled with water-Al_2O_3 nanofluid, *International Journal of Engineering, Science & Technology*, Vol. 4 No. 3, pp. 1-14, 2012.
55. **Salma Parvin**, M.A. Alim and N.F. Hossain, Prandtl number effect on cooling

performance of a heated cylinder in an enclosure filled with nanofluid, I*nternational Communications in Heat and Mass Transfer*, Vol. 39 No. 8, pp. 1220-1225, 2012.

56. **Salma Parvin**, M.A. Alim and N.F. Hossain, Double diffusive natural convection with MHD and Joule heating effect in a chamber, I*nternational Journal of Energy and Technology*,Vol. 4 No. 35 pp. 1-10, 2012.
57. M. M. Rahman, **S. Parvin**, N.A. Rahim, M. Hasanuzzaman and R. Saidur, Simulation of mixed convection heat transfer in a horizontal channel with an open cavity containing a heated hollow cylinder. *Heat Transfer- Asian Research*, 41 (4), 339-353, 2012.
58. **Salma Parvin**, Rehena Nasrin, M. A. Alim, N. F. Hossain and Ali J. Chamkha, Thermal conductivity variation on natural convection flow of water-alumina nanofluid in an annulus, *International Journal of Heat and Mass transfer*, **55** (19-20) pp. 5268-5274, 2012.
59. **Salma Parvin,** Rehena Nasrin, M.A. Alim and N.F. Hossain, Double diffusive natural convection in a partially heated enclosure Using Nanofluid, *Heat Transfer-Asian Research*, Vol. 41 No. 6, pp. 484-497, 2012.
60. **Salma Parvin**, M.A. Alim and N.F. Hossain, Study of Magneto-Convection in a Square Cavity with a Central Spherical heat Source , *Journal of Engineering and Technology*, Vol. 10 No. 1, pp. 39-53, 2012.
61. **S. Parvin**, M.A. Alim and N.F. Hossain, (2012), Mixed convection in a lid-driven cavity using nanofluid: effect of physical parameters, *Engineering e-Transaction*, Vol. 7 No. 2, pp. 86-95, 2012.
62. Rehena Nasrin, **Salma Parvin**, Ali J. Chamkha and M. A. Alim, Transient analysis on forced convection phenomena in a fluid valve using nanofluid, *Numerical Heat Transfer, Part A: Application*, Vol. 62 No.7, pp589-604, 2012.
63. **Salma Parvin,** M. A. Alim and N. F. Hossain, Finite Element Simulation of Mixed Convection in a Lid-Driven Cavity Having Wavy Bottom Surface with Internal Heat Generation, *Journal of Engineering and Technology* (JET), 9(1) pp. 30-44, 2011.
64. **S. Parvin** and R. Nasrin, Analysis of the Flow and Heat Transfer Characteristics for MHD Free Convection in an Enclosure with a Heated Obstacle, *Nonlinear Analysis: Modelling and Control*, 16(1), 89-99, 2011.
65. **Salma Parvin** and N. F. Hossain, Investigation on Conjugate Effect of Joule heating and Magnetic Field on Combined Convection in a Lid-driven Cavity with Undulated Bottom Surface, *Journal of Advanced Science and Engineering Research*, 1 (2), 210-223, 2011.
66. **Salma Parvin,** M. A. Alim and N. F. Hossain, MHD Mixed Convection Heat Transfer through Vertical Wavy Isothermal Channels, *International Journal of Energy and Technology*, 3 (34), 1-9, 2011.
67. M.M. Rahman**, S. Parvin**, R. Saidur, N.A. Rahim, Magnetohydrodynamic mixed convection in a horizontal channel with an open cavity, I*nternational Communications in Heat and Mass Transfer*, 38 (2), 184-193, 2011.

68. Rehena Nasrin and **Salma Parvin,** Hydromagnetic Effect on Mixed Convection in a Lid-driven Cavity with Sinusoidal Corrugated Bottom Surface, I*nternational Communications in Heat and Mass Transfer*,38 (6), 781-789, 2011.
69. **Salma Parvin** and Rehena Nasrin, Magnetohydrodynamic Mixed Convection Heat Transfer in a Lid-driven Cavity with Sinusoidal Wavy Bottom Surface, *Journal of Tripura Mathematical Society*, (ISSN-0972-1320)12, 1-9, 2010.
70. **Salma Parvin,** Nilufar Farhat Hossain and Amal Krisna Halder, *Dependence of In-Medium Nucleon-Nucleon Cross-Section on Density of Nuclear Matter*, GANIT, *J.* Bangladesh Math. Soc.(ISSN 1606-3694), 25, 59-72, 2005.

b) **Conference (national and international conferences and seminars)**:

Proceedings and presentations

1. Ayesha Siddiqua and **Salma Parvin**, Heatline analysis for mixed convection flow of nanofluid in a two sided lid-driven cavity with a heat generating block: effect of Reynolds number, AIP Conference Proceedings 2121, 070010 (2019); https://doi.org/10.1063/1.5115917.
2. **Salma Parvin**, Mathematical Modelling and Numerical Simulation of Blood Flow through a Stenosed Artery in Presence of External Oriented Magnetic Field, Annual Conference of Indian Women and Mathematics (IWM), 2019, 10th June-12th June, 2019 in the Indian Institute of Technology Bombay, Mumbai, India.
3. **Salma Parvin** and Afroza Akter, Mathematical Modelling and Simulation of Blood Flow Considering Shear Rate Dependent Viscosity through Arterial Stenosis in Presence of Magnetic Field, International Conference on Mathematical Methods and Computation (ICOMAC 2019), on 20th & 21st February 2019, organized by the PG & Research Department of Mathematics, Jamal Mohamed College(Autonomous), Tiruchirappalli, Tamil Nadu, India.
4. Ayesha Siddiqua and **Salma Parvin**, Heatline analysis for mixed convection flow of nanofluid in a two sided lid-driven cavity with a heat generating block: effect of Reynolds number, The 8th BSME International Conference on Thermal Engineering, (BSMEICTE-2018), 20 – 22 December, 2018, Venue: BUET, Dhaka, Bangladesh.
5. Tanzia Zerin Khan and **Salma Parvin**, Effects of Lewis Number on Two Phase Natural Convection Flow of Nanofluid inside a Square Cavity with an Adiabatic Obstacle, The 8th BSME International Conference on Thermal Engineering, (BSMEICTE-2018), 20 – 22 December, 2018, Venue: BUET, Dhaka, Bangladesh.

6. Abdul Karim, **Salma Parvin**, Md. Abdul Hakim Khan and Dr. Md. Motahar Hossain, Hemodynamic Blood Flow through a Section of Human Artery under the Effect of Applied Magnetic Field, The 8th BSME International Conference on Thermal Engineering, (BSMEICTE-2018), 20 – 22 December, 2018, Venue: BUET, Dhaka, Bangladesh.
7. Afroza Akter and **Salma Parvin**, Numerical analysis of a blood flow model for arterial stenosis in presence of external magnetic field, The 8th BSME International Conference on Thermal Engineering, (BSMEICTE-2018), 20 – 22 December, 2018, Venue: BUET, Dhaka, Bangladesh.
8. Tanzia Zerin Khan and **Salma Parvin**, Two Phase Natural Convection Flow of Nanofluid Inside a Square Cavity with an Adiabatic Obstacle , A F Mujibur Rahman- Bangladesh Mathematical Society, National Mathematics Conference 21-22 December 2018, Venue: University of Dhaka, Dhaka, Bangladesh.
9. M. A. H. Khan, **S. Parvin** and A. Sultana, A Numerical Study on Acoustic Streaming and Tissue Heating During Magnetic Resonance guided High Intensity Focused Ultrasound Through Blood Vessel with an Obstacle, 3rd Thermal and Fluids Engineering Conference (TFEC) Fort Lauderdale, FL, USA, March 4–7, 2018.
10. Ayesha Siddiqua and **Salma Parvin**, Effect of solid fluid thermal conductivity ratio on mixed convection flow of nanofluid within a driven cavity containing heat generating block, 20 th *International Mathematics Conference*- 2017, Dhaka University, Dhaka, 8-10 December, 2017.
11. Afroza Akter and **Salma Parvin**, Numerical Analysis of Heat Generation Effect on MHD natural convection flow in a L Shaped cavity, 20 th *International Mathematics Conference*- 2017, Dhaka University, Dhaka, 8-10 December, 2017.
12. **Salma Parvin**, A Numerical Study of Heat Transfer and Entropy Generation through a Nanofluid-Based Direct Absorption Solar Collector, Symposium for South Asian Women in Mathematics, Kathmandu, Nepal, 12-15 October 2017.
13. **Salma Parvin** and M.A. Alim**,** Influence of Mass Flow Rate on Forced Convective Heat Transfer through a Nanofluid Filled Direct Absorption Solar Collector**,** 19th International Conference on Mathematical, Computational Science and Engineering (ICMCSE 2017), Toronto, Canada, June 15-16, 2017.
14. **Salma Parvin**, Aysha Sultana, A Computational Study for Investigating Acoustic Streaming and Heating during High Intensity Focused Ultrasound through Blood Vessel with an Obstacle, ***The 7th BSME International Conference on Thermal Engineering, (BSMEICTE-2016),*** 22 – 24 December, 2016, Dhaka, Bangladesh.
15. Md. Abul Kalam Azad, **Salma Parvin**, Dr. Md. Mustafa Kamal Chowdhury, Effects of Hartmann Number on Combined Convection in a Channel with Cavity Using Cu-Water Nanofluid, ***The 7th BSME International Conference on Thermal Engineering, (BSMEICTE-2016),*** 22 – 24 December, 2016, Dhaka, Bangladesh.
16. Md. Sajid Ahmed, **Salma Parvin**, Dr. Md. Mustafa Kamal Chowdhury, Effect of Obstacle

Size on a Turbulent Flow over a Backward Facing Step, ***The 7th BSME International Conference on Thermal Engineering, (BSMEICTE-2016),*** 22 – 24 December, 2016, Dhaka, Bangladesh.

17. **Salma Parvin,** Md. Sajid Ahmed, Raju Chowdhury, Effect of Solar Irradiation and Mass Flow Rate on Forced Convective Heat Transfer through a Nanofluid-Based Direct Absorption Solar Collector, **The 7th BSME International Conference on Thermal Engineering, (BSMEICTE-2016),** 22 – 24 December, 2016, Dhaka, Bangladesh.
18. Raju Chowdhury, **Salma Parvin**, Md. Abdul Hakim Khan, Double-diffusive Natural Convection of Cu-Water Nanofluid in a Window Shaped Cavity Containing Multiple Obstacles with a Heater on Bottom Wall, **The 7th BSME International Conference on Thermal Engineering, (BSMEICTE-2016),** 22 – 24 December, 2016, Dhaka, Bangladesh.
19. Raju Chowdhury, **Salma Parvin**, Md. Abdul Hakim Khan, Numerical Study of Double-diffusive Natural Convection in a Window Shaped Cavity Containing Multiple Obstacles Filled with Nanofluid, *10th International Conference on Marine Technology, MARTEC 2016*, 9-10 December 2016, Venue: BUET, Dhaka, Bangladesh.
20. Afroza Akter and **Salma Parvin**, Effect of Magnetic Field on Natural Convection flow in a Prism Shaped Cavity Filled with Nanofluid, *10th International Conference on Marine Technology, MARTEC 2016*, 9-10 December 2016, Venue: BUET, Dhaka, Bangladesh.
21. **Salma Parvin**and Ayesha Siddiqua, Heatline Analysis For MHD Mixed Convection Flow of Nanofluid Within a Driven Cavity Containing a Heat Generating Block, *11th International Conference on Mechanical Engineering, ICME 2015*BUET, Dhaka, 18-20 December, 2015.
22. Raju Chowdhury, **Salma Parvin**, Md. Abdul Hakim Khan, Natural Convective Heat and Mass Transfer in a Porous Triangular Enclosure Filled with Nanofluid in Presence of Heat Generation, *11th International Conference on Mechanical Engineering, ICME 2015*BUET, Dhaka, 18-20 December, 2015.
23. **Salma Parvin** and Ayesha Siddiqua, Effect of Reynold's number for mixed convection flow of nanofluid in a double lid driven cavity with a heat generating obstacle., 19th *International Mathematics Conference*- 2015, BRAC University, Dhaka, 18-20 December, 2015.
24. Raju Chowdhury*, **Salma Parvin**, Md. Abdul Hakim Khan, Numerical Simulation of Double Diffusive Natural Convection in a Triangular Enclosure Filled with Nanofluid Saturated Porous Medium with Magnetic Field, 19th *International Mathematics Conference*-2015, BRAC University, Dhaka, 18-20 December, 2015.
25. **Salma Parvin**, Rehena Nasrin and Raju Chowdhury, Natural convection in a nanofluid filled prismatic cavity with non-isothermal bottom wall, *International Conference on Mechanical, Industrial and Materials Engineering 2015 (ICMIME2015)* RUET, Rajshahi, Bangladesh, 11-13 December, 2015.
26. R. Chowdhury, **S. Parvin,** M. A. H. Khan, Double Diffusive Natural Convection in a Porous Wavy Triangular Enclosure Filled with Nanofluid in Presence of Magnetic Field, *International Conference on Mechanical, Industrial and Materials Engineering 2015 (ICMIME2015)* RUET, Rajshahi, Bangladesh, 11-13 December, 2015.
27. Rehena Nasrin, **Salma Parvin** and M.A. Alim, 3D Finite Element Analysis for Heat Transfer

in a Solar Collector: Effect of Solar Irradiation, *International Conference on Mechanical, Industrial and Materials Engineering 2015 (ICMIME2015)* RUET, Rajshahi, Bangladesh, 11-13 December, 2015.

28. **S. Parvin**, R. Chowdhury, M. A. H. Khan & M. A. Alim, "Performance of Nanofluid in free convective heat transfer inside a cavity with non-isothermal boundary conditions", *The 3rd International Conference on Mechanical Engineering and Renewable Energy (ICMERE-2015)*, CUET, Chittagong, Bangladesh, 26-29 November 2015.
29. R. Chowdhury, **S. Parvin**& M. A. H. Khan, "Heat generation effect on natural convection flow in a rhombic shape cavity containing a rectangular block", *The 3rd International Conference on Mechanical Engineering and Renewable Energy (ICMERE-2015)*, CUET, Chittagong, Bangladesh, 26-29 November 2015.
30. **Salma Parvin**, Rehena Nasrin and M.A. Alim, Effect of chemical reaction on heat and mass transfer in a parallel plate reactor channel with heated cylinders, *Fourth International Conference on Chemical Engineering* (ICChE-2014)**,** BUET, Dhaka, Bangladesh, 29-30 December 2014.
31. Rehena Nasrin, **Salma Parvin** and M.A. Alim, 3D heat transfer through a solar collector utilizing various nanofluids, *Fourth International Conference on Chemical Engineering* (ICChE-2014), BUET, Dhaka, Bangladesh, 29-30 December 2014.
32. **Salma Parvin**, Rehena Nasrin and M.A. Alim, Finite element analysis of convective heat and mass transfer flow through a channel with heat sources and chemical reaction effect,*3rd International Conference on Mechanical, Industrial & Energy Engineering* (ICMIEE-2014), KUET, Khulna, Bangladesh, 25-26 December, 2014.
33. Rehena Nasrin, **Salma Parvin** and M.A. Alim, Effect of Prandtl number on 3D heat transfer through a solar collector, *3rd International Conference on Mechanical, Industrial & Energy Engineering* (ICMIEE-2014), KUET, Khulna, Bangladesh, 25-26 December, 2014.
34. **Salma Parvin**, Rehena Nasrin and M.A. Alim, Effect of thermal Grashof number on heat and mass transfer in a parallel plate reactor channel with heated cylinders, *6th BSME ICTE Conference*, IUT, Dhaka, Bangladesh, 19-21 December, 2014.
35. Rehena Nasrin, **Salma Parvin** and M.A. Alim, Study of 3D heat transfer through a solar collector: effect of solid volume fraction, *6th BSME ICTE Conference*, IUT, Dhaka, Bangladesh, 19-21 December, 2014.
36. R. Chowdhury, **S. Parvin**, M. A. H. Khan, MHD effect on free convection flow in porous media filled equilateral triangular cavity with heat generation, *6th BSME ICTE Conference*, IUT, Dhaka, Bangladesh, 19-21 December, 2014.
37. **Salma Parvin,** M.A. Alim and N.F. Hossain, Heat Transfer and Entropy Generation by NanofluidDue to Natural Convection in an L-shaped Cavity, *International congress of women Mathematicians (ICWM-2014)*, Seoul, Korea, 12& 14 August, 2014.
38. **Salma Parvin,** M.A. Alim and N.F. Hossain, Natural Convection Cooling and Entropy Generation by Different Nanofluids in an Odd-shaped Cavity, *International congress of Mathematicians (ICM-2014)*, Seoul, Korea, 13-21 August, 2014.
39. **Salma Parvin**, Rehena Nasrin and M.A. Alim, Heat transfer performance of nanofluid in

acomplicated cavity due to Prandtl number variation, *10th International Conference on Mechanical Engineering* (ICME 2013), BUET, Dhaka, 20-21 June, 2014.

40. Rehena Nasrin, **Salma Parvin** and M.A. Alim, Heat transfer by nanofluids through a flat plate solar collector,*10th International Conference on Mechanical Engineering* (ICME 2013), BUET, Dhaka, 20-21 June, 2014.
41. **Salma Parvin**, Rehena Nasrin and M.A. Alim, Non-Darcy forced convection through a channel attached to an open cavity with non-uniform heat flux using nanofluid, *The 2nd International Conference on Mechanical Engineering* & *Renewable Energy* (ICMERE 2013), CUET, Chittagong, 1-2, May 2014.
42. Rehena Nasrin, **Salma Parvin** and M.A. Alim, Buoyant flow of nanofluid for heat-mass transfer through a solar collector, *The 2nd International Conference on Mechanical Engineering* & *Renewable Energy* (ICMERE 2013), CUET, Chittagong, 1-2, May 2014.
43. **Salma Parvin**, Rehena Nasrin and M.A. Alim, Effect of solid volume fraction on forced convective flow of nanofluid through direct absorption solar collector, *18th International Mathematics Conference-2013*, IUB Campus, Bashundhara, Dhaka, Bangladesh, 20-22 March, 2014.
44. Rehena Nasrin, **Salma Parvin** and M.A. Alim, Prandtl number effect on assisted convective flow through a solar collector, *18th International Mathematics Conference-2013*, IUB Campus, Bashundhara, Dhaka, Bangladesh, 20-22 March, 2014.
45. **Salma Parvin**, Rehena Nasrin and M.A. Alim, Forced convection through nanofluid-based direct absorption solar collector, *15th Annual Paper Meet 2013 (APM 2013)*, IEB, Dhaka, Bangladesh, 07-08 February, 2014.
46. Rehena Nasrin, **Salma Parvin** and M.A. Alim, Assisted convective flow through nanofluid filled-flat plate solar collector: effect of solid volume fraction, *15th Annual Paper Meet 2013 (APM 2013)*, IEB, Dhaka, Bangladesh, 07-08 February, 2014.
47. Rehena Nasrin, **Salma Parvin** and M.A. Alim, Reynolds number effect on heat loss by riser pipe of a flat plate solar collector, *1st International Conference on Non Conventional Energy* (ICONCE 2014), JIS College of Engineering, Kalyani, West Bengal, India, 16-17 January, 2014.
48. **Salma Parvin,** Rehena Nasrin and M.A. Alim, Entropy Generation and Heat Transfer on Natural Convection in a Nanofluid filled Odd-shaped Enclosure, *4th Global Engineering, Science & Technology Conference*, BIAM, Bangladesh, Paper ID: 401, 27-29 December, 2013 (Website: gistconpro.com).
49. Rehena Nasrin, **Salma Parvin** and M.A. Alim, Influence of radiative heat flux inside a direct absorption solar collector using nanofluid, *4th Global Engineering, Science & Technology Conference*, BIAM, Bangladesh, Paper ID: 401, 27-28 December, 2013 (Website: gistconpro.com).
50. **Salma Parvin**, Rehena Nasrin**,** M.A. Alim and N.F. Hossain, Heat transfer and collector efficiency of a nanofluid-based direct Absorption solar collector: effect of nanoparticle size,*1st National Conference of the Bangladesh Crystallograhic Association*The Synet Bhaban, University of Dhaka, Dhaka, Bangladesh, , 5 December, 2013.

51. Rehena Nasrin, **Salma Parvin** and M.A. Alim,Entropy generation by water-Cu nanofluid inside a tilted solar collector, *1st National Conference of the Bangladesh Crystallograhic Association*, The Synet Bhaban, University of Dhaka, Bangladesh, 5 December, 2013.
52. **Salma Parvin,** Rehena Nasrin and M.A. Alim, Conjugate effect of convection and conduction in a nanofluid–filled complicated cavity, *International Conference on Mechanical, Industrial and Materials Engineering* (ICMIME 2013), RUET, Rajshahi, 1-3 November, 2013.
53. Rehena Nasrin, **Salma Parvin** and M.A. Alim,Performance of nanofluid with different nanoparticles inside a solar collector, *International Conference on Mechanical, Industrial and Materials Engineering* (ICMIME 2013), RUET, Rajshahi, 1-3 November, 2013.
54. **Salma Parvin**, Rehena Nasrin,M.A. Alim and N. F. Hossain, Magnetic field effect on double diffusive free convection in a partially heated enclosure, *2nd International Conference on Rough Sets, Fuzzy Sets and Soft Computing* (ICRFSC12), Tripura University, India, January 17 – 19, 2013.
55. Rehena Nasrin, **Salma Parvin**, M.A. Alim and N.F. Hossain, Convective flow in a solar collector filled with nanofluid: effect of aspect ratio, *2nd International Conference on Rough Sets, Fuzzy Sets and Soft Computing* (ICRFSC12), Tripura University, India, January 17 – 19, 2013.
56. **Salma Parvin**, Rehena Nasrin**,** M.A. Alim and N. F. Hossain, Effect of nanoparticle volume fraction on non-darcy forced convection in a channel, *6th International Mechanical Engineering Conference & 14th Annual Paper Meet,* The Institute of Engineers, Bangladesh (IEB),28-29 September, 2012.
57. Rehena Nasrin, **Salma Parvin,** M.A. Alim and N. F. Hossain, Prandtl number effect on double diffusive free convection in a cavity filled with nanofluid, *6th International Mechanical Engineering Conference & 14th Annual Paper Meet*, The Institute of Engineers, Bangladesh (IEB),28-29 September, 2012.
58. **Salma Parvin,** Rehena Nasrin,M.A. Alim and N. F. Hossain, Double diffusive natural convection in a partially heated cavity using nanofluid, *Global Engineering, Science & Technology Conference,* BIAM, Bangladesh, Paper ID: 922, 28-29 December, 2012 (Website: gistconpro.com) **(best paper award).**
59. Rehena Nasrin, **Salma Parvin** and M.A. Alim, Convective flow phenomena inside a solar collector utilizing water-alumina nanofluid, *Global Engineering, Science & Technology Conference,* BIAM, Bangladesh, Paper ID: 512, 28-29 December, 2012 (Website: gistconpro.com).
60. **Salma Parvin,** Rehena Nasrin**,** M.A. Alim and N. F. Hossain, Double diffusive natural convective flow characteristics in a cavity, *5th BSME-International Conference on Thermal Engineering,*Islamic University of Technology (IUT), Dhaka, Bangladesh, 21-23 December, 2012.
61. Rehena Nasrin**, Salma Parvin** and M. A. Alim, Effect of Prandtl number on free convection in a solar collector filled with nanofluid, *5th BSME-International Conference on Thermal Engineering,* Islamic University of Technology (IUT),Dhaka, Bangladesh,21-23 December, 2012.

62. **Salma Parvin,** Rehena Nasrin,M.A. Alim and N. F. Hossain, Non-darcy forced convection inside a channel using nanofluid, *International Conference on Physics of Today* (ICPT-2012), BUET, Dhaka, 15-16 March, 2012.

63. Rehena Nasrin, **Salma Parvin,** M.A. Alim and N.F. Hossain, Natural convection on double diffusive flow in a cavity filled with water- Al_2O_3 nanofluid, *International Conference on Physics of Today* (ICPT-2012), BUET, Dhaka, 15-16 March, 2012.

64. **Salma Parvin**, Rehena Nasrin and N. F. Hossain, Influence of Prandtl number on mixed convection in a triangular wavy channel, *Third International Conference of Chemical Engineering* (ICChE-2011), pp. 206-210, BUET, Dhaka, 29-30 December, 2011.

65. Rehena Nasrin**, Salma Parvin** and M. A. Alim, Free and forced convection flow through an octagonal channel with a heat-generating hollow body, *Third International Conference of Chemical Engineering* (ICChE-2011), pp. 201-205, BUET, Dhaka, 29-30 December, 2011.

66. **Salma Parvin**, Rehena Nasrin and N. F. Hossain, Reynolds number effect on combined convection in a channel with a heat-generating tube, *17th Mathematics Conference* (17th MC-2011), Jahangirnagar University, Dhaka, 22-24 December, 2011.

67. Rehena Nasrin, **Salma Parvin** and M. A. Alim**,** Natural convective flow and heat transfer of water - Cu nanofluid in a trapezoidal enclosure, *17th Mathematics Conference* (17th MC-2011), Jahangirnagar University, Dhaka, 22-24 December, 2011.

68. **Salma Parvin**, Rehena Nasrin and N. F. Hossain, Effect of thermofluid parameters on combined convection in a triangular wavy channel, *9th International Conference of Mechanical Engineering* (ICME-2011), Paper ID - FL 003, BUET, Dhaka, 18-20 December, 2011.

69. Rehena Nasrinand **Salma Parvin**, Prandtl number effect on mixed convection in an octagonal channel with a heat-generating hollow obstacle, *9th International Conference of Mechanical Engineering* (ICME-2011), Paper ID - TH 035, BUET, Dhaka, 18-20 December, 2011.

70. **Salma Parvin** and N. F. Hossain, (2011), Joule Heating Effect on MHD Combined Convection in a Lid-driven Cavity Heated from Wavy Bottom Surface, *3rd CUTSE International Conference* 2011, Curtin University, Sarawak Campus, Malaysia, pp. 011-017, 8-9 November, 2011 (**best paper award**).

71. **Salma Parvin**, M. A. Alim and N. F. Hossain, Effect of Sinusoidal Corrugated Bottom Surface on Mixed Convection in a Lid-driven Cavity with Internal Heat Generation, Proc. of International Conference on Modelling, Simulation and Applied Optimization (ICMSAO), 19-21 April, 2011, Kuala Lumpur, Malaysia, Paper No. 109-50632.

72. **S. Parvin** and M. M. Rahman. (2010), Numerical Study on Mixed Convection in a Ventilated Cavity in presence of a Heat-Generating Solid Circular Block. *13ACFM (Asian Congress of Fluid Mechanics)*, ISBN: 978-984-33-2214-2, IUT, Dhaka, Bangladesh, 17-21 December 2010, pp. 434-437.

73. R. Nasrin and **S. Parvin**, Numerical study of MHD free convection flow in an enclosure with a heated tube, *13ACFM (Asian Congress of Fluid Mechanics)*, ISBN: 978-984-33-2214-2, IUT, Dhaka, Bangladesh, 17-21 December, pp.379-382, 2010.

74. **S. Parvin** and R. Nasrin, Effect of diameter of heated block with MHD free convection flow in a cavity, *MARTEC* (*International Conference on Marine Technology)*, ISSN: 2220-3117, BUET, Dhaka, Bangladesh, 11-12 December, pp. 209-213, 2010.
75. Rehena Nasrin and **Salma Parvin**, Effect of Reynolds number on MHD mixed convection in a lid-driven cavity with sinusoidal wavy bottom surface, *13th Annual Paper Meet*, *Mechanical Division*, *IEB*, Dhaka, Bangladesh, Paper No.- MED 18, pp.23 in the book of Souvenir, 25th Sepember, 2010.
76. R. Nasrin, **S. Parvin** and M. A. Alim, Numerical study of variable viscosity and thermal conductivity with Conduction and Joule Heating on MHD Free Convection, Proceedings of the *16th Mathematics Conference*, Paper No. 16MC09-110. pp. 76 in the book of Abstract, BUET, Dhaka, Bangladesh, 17-19 December, 2009.

Dissertations:

1. **Salma Parvin**, "Numerical Investigation of Magnetohydrodynamic Effect on Fluid Flow and Heat Transfer in Cavities", **Ph. D**. Thesis, Bangladesh University of Engineering and Technology, Bangladesh, 2012.
2. **Salma Parvin**, "A Study of In-Medium nucleon-Nucleon Cross- Section", **M. Phil.** Thesis, Bangladesh University of Engineering and Technology, 2005.

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