

Dr. GAYATHRI M. S

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1. EDUCATION:

- a. Ph.D (Fluid Mechanics)
Bangalore University, Bangalore,(2008).
- b. M.Sc. (Mathematics)
Central College Campus,
Bangalore University, Bangalore, (1999), (FIRST RANK).
- c. B.Sc. (Physics, Chemistry, Mathematics)
Government College, Chinthamani,
Bangalore University, Bangalore, (1997), (FIRST CLASS).

2. PROFESSIONAL HISTORY:

- a. Assistant Professor
Department of Mathematics
B. M. S. College of Engineering,
Bangalore-560 019.
Period: - 12/04/2007 till date
- b. Research Assistant
UGC-CAS in fluid Mechanics,
Department of Mathematics,
Central College Campus,
Bangalore University, Bangalore,
Period: - 1/01/2002 – 11/04/2007
- c. Lecturer
Department of Mathematics,
Pragathi College of Science and Management Studies,
Chintamani-563125
Period:- 10/09/1999 – 31/12/2001.

3. TITLE OF Ph.D THESIS:

“ Thermal Instability of slightly conducting liquid layer in a transverse electric field with or without magnetic field“

4. PUBLICATIONS:

1. N.Rudraiah, M.Venkatachalappa and M.S.Gayathri., “*Effect of Oscillatory Electric Field on the Control of Electroconvection in Mushy Layer Made up of Nanosized Dendrites*”, in the proceedings of the workshop on Modelling of Nano and Smart Materials, pp 147-159, 2003.
2. N.Rudraiah, M.Venkatachalappa and M.S.Gayathri., “*Combined Effects of Unsteady Electric Field and Uniform Magnetic Field on Electro-convection In a Poorly Conducting Liquid Layer*” in the proceedings of the International Symposium on “Recent Advances in Fluid Mechanics, pp 296-304, 2004.
3. M.S.Gayathri., “*Combined effect of unsteady electric field and uniform magnetic field on Magneto-electroconvection in a poorly conducting Plasma*” in the proceedings of Third International Conference on super strong Fields in Plasmas, pp 575-583, 2005.
4. M.S.Gayathri, M.Venkatachalappa and N.Rudraiah, “*Oscillatory electro convection in a poorly conducting fluid saturated porous layer in the presence of modulation electric field*”, in the proceedings of International Conference on Frontiers in Fluid Mechanics (ICFFM-06), pp 697-711, 2006.
5. M.S.Gayathri and N.Rudraiah., “*Effect of thermal modulation on the onset of electrothermoconvection in a dielectric fluid saturated porous medium*” in the international journal of Heat Transfer ‘ASME’, Vol.131, No.10, pp-101009(1-7), october 2009.
6. Gayathri M. S., Chandra Shekara G., Sujatha N., “Onset of electrothermoconvection in a dielectric fluid saturated porous medium in a modulated electric field” in the international Conference on Computational Heat and Mass Transfer, Procedia Engineering 127 (2015) 838 – 845, December 2015.
7. M.S. Gayathri., P.A. Dinesh., B.V. Rangaraju., B. Rushi Kumar., “The onset of magneto-electroconvection In a dielectric fluid saturated porous Medium” in the international journal of Special Topics & Reviews in Porous Media, Vol 9, issue 2, pp-****, April 2018.

5. PAPERS PUBLISHED IN CONFERENCES:

1. Presented the paper entitled “*Effect of Oscillatory Electric Field on the Control of Electro-convection in Mushy Layer Made up of Nanosized Dentriles*” in the workshop on “*Modelling of Nano and Smart Materials*” at UGC-CAS in Fluid Mechanics, Department of Mathematics, Bangalore, during March 28-29, 2003.
2. Presented the paper entitled “*Combined Effects of Unsteady Electric Field and Uniform Magnetic Field on Electro-convection In a Poorly Conducting Liquid Layer*” at Gulbarga University, Gulbarga, during February 24-26, 2005.
3. Presented the paper entitled “*Combined effect of unsteady electric field and uniform*

magnetic field on Magneto-electroconvection in a Poorly conducting Plasma” in the “Third International Conference on Superstrong Fields in Plasma” held at Varenna, Italy during September 19-24, 2005.

4. Presented the paper entitled “*Combined effects of thermal modulation, uniform electric and magnetic fields on the onset of magneto-electroconvection in a dielectric fluid saturated porous medium*” in the National Conference on Mathematics and its Applications held at Adichunchanagiri Institute of Technology, Chikkamagaluru, Karnataka, during 22-23, December, 2015.

6. CONFERENCES/WORKSHOPS ATTENDED:

1. Second DST-SERC School on Mathematical Modelling of Atmospheric Pollution held during May 20 to June 22, 2002, organized by UGC-CAS in Fluid Mechanics, Department of Mathematics, Bangalore-560 001.
2. International Conference on the Frontiers of Plasma Physics and Technology held during December 9-14, 2002 organized by National Research Institute for Applied Mathematics (NRIAM), Bangalore and UGC-CAS in Fluid Mechanics, Department of Mathematics, Bangalore University, Bangalore.
3. “90th Session Indian Science Congress” held at Jnana Bharathi Campus, Bangalore University, Bangalore on January 3-7, 2003.
4. Workshop on Modelling of Nano and Smart Materials organized by UGC-CAS in Fluid Mechanics, Department of Mathematics, Bangalore University, Bangalore, conducted on March 28-29, 2003.
5. Third DST-SERC School on Mathematical Modelling of Atmospheric Pollution held during 1st to 30th December, 2003, organized by UGC-CAS in Fluid Mechanics, Department of Mathematics, Bangalore - 560 001.
6. International Symposium on Advances in Fluid Mechanics held at UGC- CAS in Fluid Mechanics, Dept. of Mathematics, Bangalore University, Bangalore dated June 21-22, 2004.
7. Two days symposium on Advances in Fluid Mechanics organized by UGC-CAS in Fluid Mechanics, Dept. of Mathematics, Bangalore University, Bangalore, During December 9-10, 2004.
8. International Conference on Advances in Applied Mathematics held at Gulbarga University, Gulbarga, on February 24-26, 2005.
9. Convection Workshop held at Jawaharlal Nehru Centre for advanced Scientific Research, Bangalore, on March 1-2, 2005.
10. Fourth Third DST-SERC School on Mathematical Modelling of Ground water Quality and Pollution during May 2-30, 2005, organized by UGC-CAS in Fluid Mechanics, Department of Mathematics, Bangalore - 560001.

11. One day workshop on “Mathematical Neuroscience-An Introduction” organized by Nonlinear Studies Group, Department of Mathematics, Indian Institute of Science, Bangalore on July 27, 2005.
12. Third International Conference on Superstrong Fields in Plasma during September 19-24, 2005, held at Varenna, Italy.
13. Attended a Two Day Symposium on “Recent Advances in Fluid Mechanics” organized by UGC- CAS in Fluid Mechanics, Department of Mathematics, Central College Campus, Bangalore University, Bangalore during November 29-30, 2005.
14. A Winter school on Introduction to Partial Differential Equations held at Indian Institute of Science, Bangalore, during December 19-23, 2005.
15. A Two Day National Conference on “Applied Mathematics” organized by Department of Mathematics, Gulbarga University, and Gulbarga during February 7-8, 2006.
16. One Day State level Conference on “Trends in Materials processing in science, engineering and Technology” organized by Siddaganga Institute of Technology, Tumkur on April 1st 2006.
17. International Conference on “Frontiers in Fluid Mechanics” organized by UGC-CAS in Fluid Mechanics, Department of Mathematics, Central College Campus, Bangalore University, Bangalore during October 26-28, 2006.
18. Training School on “Computational Fluid Dynamics with Thrust on Atmospheric Sciences” Organized by UGC-CAS in Fluid Mechanics, Department of Mathematics, Central College Campus, Bangalore University, Bangalore during Oct 26-Nov 9, 2006 .
19. One day workshop on “nano material and technology-a perspective” sponsored by Technical Education Quality Improvement Program (TEQIP), Department of Mechanical Engineering, University Visvesvaraya College of Engineering, Bangalore University, Bangalore held on 15th March 2007.
20. “A national symposium on Recent trends in Fluid Mechanics” Organized by UGC-CAS in Fluid Mechanics, Department of Mathematics, Bangalore University, Bangalore on January 7 -8, 2008.
21. A short term course on “Instructional design and delivery system” organized by the department of Instrumentation, BMSCE, Bangalore during February 16- 21, 2009.
22. A short term course on “Biomedical System and Control” organized by the department of Medical Electronics, BMSCE, Bangalore during March 25-31, 2009.
23. An “International conference on frontiers in fluid mechanics-2009” organized by UGC-Centre for advanced studies in fluid mechanics, Dept. of Mathematics, Bangalore University, Bangalore during August 31- september 2, 2009.
24. An “International conference on Mathematical modeling and nonlinear equations” organized by B.N.M. Institute of technology, Bangalore during January 20-22, 2010.

25. A workshop on “Introduction to Probability and Statistics for Applications in Engineering” organized by PES Institute of Technology, Bengaluru during June 8-11, 2010.
26. Faculty Development Program on “Advances in Numerical and Statistical Techniques for Engineers (ANSTE)” organized by Dept. of Mathematics, NIT Calicut during May 30-June 3, 2011.
27. Faculty Development Program on “Biostatistics-Statistical Analysis through Software Tools” organized by the Dept. of Bio-Technology, BMSCE, Bangalore during February 11-16, 2013.
28. A workshop on “ Japanese Management Techniques” organized by the Dept. of Industrial Engineering and Management, BMSCE, Bangalore during August 26-30,2013.
29. Faculty Development Program on “Biostatistics-Hands-on with SPSS and R Tools” organized by the Dept. of Medical Electronics, BMSCE, Bangalore during September 08-12, 2013.
30. Faculty Development Program on “Latex and Exel for Research – Hands on sessions” organized by the Dept. of Medical Electronics, BMSCE, Bangalore during October 02-07, 2013.
31. Four days training programme on MATLAB Fundamental and SIMULINK Modelling and Algorithm Development” BMSCE, Bangalore during 19-20 and 30th September and 1st October, 2013.
32. One week Faculty Development Program on “INTELLIGENT MACHINES & SYSTEMS” under TEQIP-II, organised by the department of Mechanical Engineering, BMSCE, Bangalore during 20-24 January 2014.
33. Two week ISTE main workshop on Fluid Mechanics organised by the department of Biotechnology, BMSCE, Bangalore during 20-30 May 2014.
34. One week Faculty Development Program on “ Linear Algebra and its applications” organized by the Department of Mathematics, BMS College of Engineering, during 16th –20th June 2014.
35. Two week international workshop on “Computational Fluid Dynamics” organized by the Department of Mathematics, BMS College of Engineering, during 23rd June–5th July 2014.
36. Two week workshop on “Spectral methods for solving systems of ODEs and PDEs” held at NIT Mizoram, Mizoram during 20-29 June 2016.
37. One week workshop on “Tools for the project Management and Evaluation” organized by the Department of Mathematics, BMS College fo Engineering, Bengaluru-560 019, during July 18-24, 2016.
38. Two week workshop on “Hydrodynamic Stability And Dynamo Theory” organized by the Department of Mathematics, National Institute of Technology, Warangal, during 9-20 December 2016.

39. One week Faculty Development Program on “Advanced Numerical Techniques for Engineers and Researchers(ANTER-2017)” organized by the Department of Mathematics, BMS College of Engineering, during 23 -28 January 2017.
40. MHRD sponsored Ten days GIAN course on “Pseudo-Spectral Methods and Their Applications In Solving System of Differential Equations” organized by the Department of Mathematics, BMS College of Engineering, during 15th -25th January, 2018.
41. AICTE sponsored Short term Course on “Applications of Computational Techniques in Engineering Using MATLAB” held at IIT Roorkee, during 03-07 June 2019.
42. Attended one day Python Workshop on June 22 2019 at BMS College of Engineering organized by ICT at IIT Bombay.

7. Conferences conducted :

1. A two week workshop on “Computational Fluid Dynamics” in the department of Mathematics, BMSCE, Bangalore during January 9-23, 2008.
2. Two week international workshop on “Computational Fluid Dynamics” in the Department of Mathematics, BMS College of Engineering, during 23rd June–5th July 2014.
3. One week Faculty Development Program on “Advanced Numerical Techniques for Engineers and Researchers(ANTER-2017)” organized by the Department of Mathematics, BMS College of Engineering, during 23 -28 January 2017.
4. MHRD sponsored Ten days GIAN course on “Pseudo-Spectral Methods and Their Applications In Solving System of Differential Equations” organized by the Department of Mathematics, BMS College of Engineering, during 15th -25th January, 2018.

8. Guest Lectures and Invited Talks:

1. Faculty Development Program on “Recent Advances in Basic Sciences” with Hands on Training on “Engineering Applications using Scilab” held on 10.01.2018 in the Department of Mathematics, Dayananda Sagar Academy of Technology and Management, Bengaluru.

9. Awards & Recognitions:

- (i) The recipient of Prof. C. N. Srinivas Iyengar Award.
- (ii) The recipient of Sri. Belegere Seetharama Sastry Award for securing the highest marks (**First Rank**) in M.Sc.(Mathematics), examination held during April-1999.

10. Membership & Fellowship of Professional Bodies:

- (i) BOS, Department of Mathematics, BMSCE, Bangalore-560 019.
- (ii) BOE, Department of Mathematics, BMSCE, Bangalore-560 019.
- (iii) ISTE – Life Member.

11. Visits abroad : To present a paper in “Third International Conference on Superstrong Fields in Plasma” during September 19-24, 2005, held at Varenna, Italy.

12. Subject Expert : Invited as a subject expert to conduct an interview for the post of Assistant Professor, Department of Mathematics, Dayananda Sagar Academy of Technology and Management, Bengaluru- 560 082, on 5th September, 2014.

13. Ph.D. Supervisor : Two Ph. D students.

| Name of the student | Date of Registration | Title of the Thesis | Status | University |
|---------------------|----------------------|--|---|------------|
| SREEGOWRAV K R | 22.10.2013 | Mathematical modeling of forced convection with reference to bio heat transfer | Final Thesis submitted on 1 st August, 2019. | VTU |
| RANGARAJU B V | 02.01.2015 | Onset of Electrothermoconvection in a Dielectric Fluid Saturated Porous Layer | Final viva completed on 09.09.2019 | VTU |