



**Name** : Mrs.K.Sharmilaa  
**Designation** : Assistant professor  
**Department** : Mathematics  
**Qualification** : MSc. MPhil., (Ph.D.)  
**Experience** : Teaching - 17 Years  
**Research** : 9  
**Area of Specialization(s)**: FLUID DYNAMICS  
**Email (Official ID)** : sharmilaak@psgrkcw.ac.in

#### AcademicQualifications

Degree	Branch	Institution/UniversityName	Year of Graduation
Ph.D.	Mathematics	PSGR Krishnammal College for Women, Coimbatore	Submitted
M.Phil.	Mathematics	PSGR Krishnammal College for Women, Coimbatore	2008
M. Sc.	Mathematics	PSGR Krishnammal College for Women, Coimbatore	2007
B.Sc.	Mathematics	Nirmala College for Women, Coimbatore	2005

#### Additional Qualifications

Completed 130 - Certification of Coursera courses

#### ResearchGuidance

Programme	No. of Scholars	
	Completed	Pursuing
M.Phil.	12	-

## Research Publications

- Dufour effect on MHD free convection flow of non-Newtonian fluid through a vertical porous plate with radiation absorption and chemical reaction, K. Sharmilaa, S.Jothimani, International Journal of Advanced Science and Technology, Year 2020, Pages 400-413
- Power-3 Heronian Mean Labeling of Graphs, M.Kaaviya Shree, K.Sharmilaa, International Journal of Engineering and Advanced Technology, Volume Volume-9, Year 2020, Pages 1359-1361
- Some New Results On Power-3 Heronian Mean Graphs, M.Kaaviya Shree, K.Sharmilaa, Journal of Xidian University, Volume 14, Year 2020, Pages 373-389
- Skolem Minkowski-4 Mean Labeling of Graphs, M.Kaaviya Shree, K.Sharmilaa, International Research Journal of Engineering and Technology, Volume 7, Year 2020, Pages 823-825
- Steady MHD mixed convective flow in presence of inclined magnetic field and thermal radiation with effects of chemical reaction and sores embedded in a porous medium, K. Sharmilaa, K. Kannathal, International Research Journal of Engineering and Technology, Year 2018, Pages 2395-1990
- Soret Effect on Radiative Effect Flow and Heat Transfer over a Vertically Oscillating Porous Flat Plate Embedded in Porous Medium with Oscillating Surface Temperature, Sharmilaa.K, Subhanandhini.V, International Journal for Research in Applied Science & Engineering Technology, Year 2017, Pages 2321-9653
- Dufour effect on radiative effect flow and heat transfer over a vertically oscillating porous flat plate embedded in porous medium with oscillating surface temperature, Sharmilaa.K, Subhanandhini.V, Sowmiya. S, International Research Journal of Engineering and Technology, Year 2017, Pages 2395 -0056
- Unsteady Magnetohydrodynamic Stokes Flow of Viscous Fluid with Radiative Heat Transfer Unsteady Magnetohydrodynamic Stokes Flow of Viscous Fluid with Radiative Heat Transfer, K.Sharmilaa, C.Gayathri, IOSR Journal of Mathematics (IOSR-JM) – International Organisation of Scientific Research, Year 2015, Pages e-ISSN: 2278-5728, p-ISSN: 2319-765X
- Dufour Effects on Unsteady MHD Free Convection and Mass Transfer Flow Past Through a Porous Medium in a Slip Regime with Heat Source/Sink, K.Sharmilaa, S.Kaleeswari, International Journal of Scientific Engineering and Applied Science, Year 2015, Pages 2395-3470
- Effects on Unsteady MHD Free Convection and Mass Transfer Flow Past Through a Porous Medium in a Slip Regime with Chemical Reaction, K.Sharmilaa, K.Sivaranjani, International Journal of Scientific Engineering and Applied Science, Year 2015, Pages 2321-9653.
- “A study on Bayes theorem using python”, Computational Mathematics & Artificial Intelligence” in international conference proceedings, Jan 2025.

- Heat and mass transfer on a couette flow through porous medium with fine dust, International journal of applied Mathematics, 1309-1342, Sep 2025.
- Thermo diffusion effect on heat and mass transfer couette flow through porous medium with fine dust, International journal of engineering research and science and technology, 2319-5991, Oct 2025.

### **Refresher/Short Term Course**

- Participated in the Science Academie's Refresher Course on "Theoretical and Computational Fluid dynamics "conducted by PSGR Krishnammal College for Women during 27<sup>th</sup> August – 8<sup>th</sup> September 2012.
- Science Academies Refresher course on Differential Equations and Their Applications PSGR Krishnammal College for women, Coimbatore.11.09.2017 to 23.09.2017.

### **Acted as a Resource Person**

- Karpagam University, Coimbatore
- VLB College of Arts and College, Coimbatore
- RVS College of Arts and Science, Coimbatore.

### **Paper Presentation & Presentations in Conference**

- Participated and presented a paper in the "Three Dimensional fluctuating Couette flow through porous medium with rotation", Jan 2009 at Bharathiar University, Coimbatore.
- Participated and presented Paper in National Level conference under the topic "Application in Transportation Problem" Conducted by Dr. NGP Arts and Science College during 25<sup>th</sup> September 2013.
- Participated and presented Paper in "Effect of non-magnetic field in MHD free convection flow of non-Newtonian fluid through a vertical porous plate" in the "International web conference on mathematics for materials science, signals, images and structured data" [icmmsis'20] organised by department of mathematics, Bannari Amman institute of technology, sathyamangalam, Tamil nadu, India from 23 to 24 July 2020
- Participated and presented Paper in the International virtual conference on reconceptualizing in mathematical sciences & English language/literature jointly organized by the department of mathematics and English of Hindusthan college of Engineering and Technology, Coimbatore from 28.08.2020 to 29.08.2020
- Participated and presented a paper on "Unsteady free convection of non-Newtonian fluid through a vertical porous plate",in the International Conference on Contemporary Research on Mathematics and Computer Sciences, organized by Department of Mathematics & Computer Science,Shri Ram Murti Samak College Engineering and Technology, Bareilly,UP,India,on 29<sup>th</sup> & 30 April 2022.

- Participated and presented a paper “On Neutrosophic E-Suora open sets & Neutrosophic E-Supra continuity”, in the Two Days international conference on pure and applied Mathematics, organized by Department of mathematics, RVS college of Arts & Science, Sulur, Coimbatore on 01<sup>st</sup> & 02<sup>nd</sup> February 2024.
- Participated and presented a paper in an “Algebraic approach for the Antimagic labelling of complete Graphs”, in the international conference on emerging trends in mathematics and statistics, organized by PG & Research department of mathematics, Sri Ramakrishna college of Arts & Science, Coimbatore on 23<sup>rd</sup> February 2024.
- Participated and Presented a paper in International Conference on Current Advances in Pure and Applied Mathematics on the topic “Comprehensive Analysis on Three Dimensional Couette Flow through porous media with Heat Transfer”, organised by the Department of Mathematics, Thriuneveli Dhashina Mara Sangam College, held on Sep 18<sup>th</sup> and 19<sup>th</sup> 2025.
- Participated in online seminar titled “Discrete Mathematics: Theory and Applications in Computing” organised by Dr. M.G.R Educational and Research Institute, Chennai. On 12<sup>th</sup> Sep 2025.

### **Participation in Workshop**

- Participated in the Science Academie’s Lecture Workshop on Differential Equations and their Applications conducted by PSGR Krishnammal College for Women during 21<sup>st</sup> – 23<sup>rd</sup> December 2011.
- Participated in the Hands on workshop “Virtual Lab-A Learner Perspective” in association with Value Virtual Labs-Amrita Virtual Lab organized by HICAS-Nodal Centre of Value Virtual Labs on 13.13.2024.
- Participated in the IP Awareness Training program under NiPAM held on 11<sup>th</sup> DEC 2025.
- Participated in the workshop on “Curriculum Design and Assessment Methods” on 11.02.26 organised by IQAC with TLC of PSGRKCW, Coimbatore.

### **Participation in Faculty Development Programme**

- Participated in the “Faculty Development Program” held during 11<sup>th</sup> August, 2012 at KonguNadu Arts and Science College, Coimbatore.
- Two Week International FDP on "Research Perspectives in Mathematics and its Applications" organized by the Department of Mathematics, Sathyabama Institute of Science and Technology, Chennai, from July 4 to July 16, 2022.
- One Week International Faculty Development Programme on "Mathematics in Real, Applied and Computational Domains" organized by the Department of Mathematics, School of Science and Humanities, Sathyabama Institute of Science and Technology, Chennai, from 3 to 8 July, 2023.
- Faculty development program on “Altmertics for Research Evaluation organized by General library

and Department of Economics, PSGR Krishnammal College for Women, Coimbatore on May 21<sup>st</sup> 2021.

- Participated in the “7 DAYS NATIONAL LEVEL FDP ON PYTHON” organized by Star International Foundation for Research and Education on 19.03.2024 to 25.03.2024.
- Participated in the “Five Days Faculty Development Programme” on “Exploring Real-world Applications in Mathematics” organized by the Department of Mathematics, School of Basic Sciences, Vels Institute of Science, Technology and Advanced Studies (VISTAS) from 22.04.2024 to 26.04.2024.
- Participated in the One-week Faculty Development Program on Transforming Innovations into Reality for Future science and Engineering (TIRFSE 2K24) during November 4 - 8, 2024, organized by Department of Applied Sciences & Humanities, Haldia Institute of Technology, Haldia, IN in association with Indian JSPS (Japan Society for the Promotion of Science) Alumni Association (IJAA) & Department of Physics, Mohanlal Sukhadia University, Udaipur, India.
- Participated in a 5-DAY ONLINE FACULTY DEVELOPMENT PROGRAMME ON “ADAPTING TO AI DRIVEN INDUSTRY” organized by P. G. Department of Computer Science, RAJAPALAYAM RAJUS’ COLLEGE in association with ECRIO INC, USA from 09-09-2024 to 13-09-2024
- Participated in the FIVE DAY International Virtual Faculty development program on” Hybrid Education for Pedagogical Success”, organized by, Department of Computer Science, Saveetha college of Liberal Arts and Science from 9<sup>th</sup> JAN to 13<sup>th</sup> JAN 2024.
- Participated in the National Level Virtual Faculty Development Programme on” Tech-Driven Research: Leveraging AI, IoT and Collaboration for Academic Excellence “organised by the Consortium of Higher Educational Institutions for Research and Development (CHIRD) from September 2 - 7, 2024.
- Participated in the “5 day FDP on Strategies and Techniques to Enhance Teaching Learning process” from 7<sup>th</sup> to 11<sup>th</sup> April 2025 at Nagarjuna Degree college by Department of Commerce.
- Participated in the One Week National Level FDP titled Interdisciplinary Research Collaboration and innovative teaching methods for Mathematics held on 24.12.25 to 30.12.25 organized by DIGI Skill Development center and Training Institute, Mumbai.
- Participated in the International Level Online FDP “Next generation Research: integration Mathematics with Artificial Intelligence” organized by Department of mathematics, School of Engineering, Presidency University, Bengaluru, Karnataka, India, held on 17<sup>th</sup> -22<sup>nd</sup> Dec 2025.

### **Membership in Professional Bodies**

- Board of Studies Member 2008 till date
- Indian Science Congress Association Member

### **Contribution**

- Acting as a Coordinator for NAAC- Criteria 4
- Acting as a Spoken Tutorial Coordinator
- Acted as an Amrita V-Lab Nodal Center Coordinator
- Acted as a NET/SET Coordinator
- Acted as a staff club Coordinator