

## Dr.V.FRANKLIN

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### Qualification

Degree	Branch	Institution / University	Year of Passing
Ph.D	Mathematics	Bharathidasan University, Tamil Nadu, India	Sep 2014
B.Sc.,	Mathematics	Bishop Heber College, Tiruchirappalli, Tamil Nadu, India	
M.Sc.,	Mathematics	Bishop Heber College, Tiruchirappalli, Tamil Nadu, India	
M.Phil.,	Mathematics	Bishop Heber College, Tiruchirappalli, Tamil Nadu, India	

### Ph.D. Details

Title of Thesis		Area of Specialization	
Numerical methods to solve linear parabolic systems of singularly Perturbed differential equations of reaction-diffusion type		Numerical Methods & Analysis of Singular Perturbation Problems	
Research Supervisor	Research Centre	Year of Award	
Dr. S. Valarmathi	Department of Mathematics, Bishop Heber College	Sep 2014	

### Work Experience

Name of Institution	Address of Institution	Designation	From	To
Bishop Heber College	Bisho Heber College, Tiruchirappalli -620017 Tamil Nadu	Assistant Professor	23-8-2007	till date

#### Teaching / Research Experience

U.G. : 12      P.G. : 10      M.Phil. : 6      Ph.D. :

#### Research Guidance

U.G. :      P.G. : 10      M.Phil. :      Ph.D. :

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10.	<b>Awards Recieved</b>	<b>0</b>
11.	<b>Patent</b>	<b>0</b>
12.	<b>Extension Activities Undertaken</b>	<b>0</b>
13.	<b>Professional Membership</b>	<b>0</b>
14.	<b>M.Phil. / Ph.D. Produced</b>	<b>0 / 1</b>

1. International level Conference on **"2nd International Conference on Mathematical Modeling and Computational Methods in Science and Engineering (ICMMCMSE-2020)"** sponsored by Ramanujan Centre for Higher Mathematics organized by Alagappa University at Karaikudi, Tamil Nadu during 22/01/2020 to 24/01/2020.
2. International level Conference on **"International winter workshop on differential equations and numerical analysis"** sponsored by UGC & NBHM organized by Department of Mathematics, Bishop Heber College at Bishop Heber College during 05/01/2015 to 07/01/2015.
3. State level Workshop on **"Workshop on High Performance Computing"** sponsored by Centre for Nonlinear Dynamics, School of Physics, Bharathidasan University organized by Centre for Nonlinear Dynamics, School of Physics, Bharathidasan University at Bharathidasan University during 23/08/2010 to 27/08/2010.
4. National level Workshop on **"Advanced Training School in Mathematics for Lecturers on Functional Analysis."** sponsored by National Board for Higher Mathematics organized by Bhaskaracharya Pratishthana, Pune at Pune during 03/11/2008 to 15/11/2008.
5. State level Workshop on **"UGC sponsored Faculty Development Programme- Training on MATLAB"** sponsored by UGC organized by Department of Mathematics, Bishop Heber College at Department of Mathematics, Bishop Heber College during 25/10/2007 to 26/10/2007.

### Research Papers Presented

- 3

1. **" Numerical method for a boundary value problem for a linear singularly perturbed parabolic delay differential equation of reaction-diffusion type with discontinuous source term"** in the International conference on *2nd International Conference on Mathematical Modeling and Computational Methods in Science and Engineering* sponsored by , organized by Ramanujan Centre for Higher Mathematics Alagappa University at Karaikudi 630003 Tamilnadu during 22/01/2020 to 24/01/2020.
2. **"Numerical method for a singularly perturbed boundary value problem for a linear parabolic second order delay differential equations"** in the International conference on *International winter workshop on differential equations and numerical analysis* sponsored by UGC & NBHM, organized by at Bishop Heber College, Tiruchirappalli 6200017 during 03/01/2015 to 05/01/2015.
3. **"Second order convergence of the numerical solutions of a singularly perturbed linear parabolic system"** in the National conference on *National Conference on Frontiers in Applied Sciences and Computer Technology (FACT 12)*, sponsored by , organized by National Institute of Technology, Trichy at during 06/12/2012 to 07/12/2012.

## Publication in Journals

- 6

1. **"Parameter uniform numerical method for a singularly perturbed boundary value problem for a linear system of parabolic second order delay differential equations"** published in Malaya Journal of Matematik (PEER REVIEW) Vol. 7, Issue No. 2, January 2019 ISSN : ---.
2. **"1. S.Parthiban, S.Valarmathi and V.Franklin, Crank-Nicolson Scheme for solving a system of partial differential equations of parabolic type"** published in Crank-Nicolson Scheme for solving a system of partial differential equations of parabolic type, Malaya Journal of Matematik (PEER REVIEW) Vol. S(2), Issue No. , January 2015 ISSN : ---.
3. **"Crank- Nicolson scheme for solving a system of singularly perturbed partial differential equations of parabolic type,"** published in Malaya Journal of Matematik (PEER REVIEW) Vol. , Issue No. , January 2015 ISSN : ---.
4. **"A numerical method to solve singularly perturbed linear parabolic second order delay differential equation of reaction-diffusion type"** published in Malaya Journal of Matematik (PEER REVIEW) Vol. , Issue No. 2, January 2015 ISSN : ---.
5. **"Second order parameter – uniform convergence for a finite difference method for a partially singularly perturbed linear parabolic system"** published in Mathematical Communications (PEER REVIEW) Vol. Vol 19, Issue No. 3, January 2014 ISSN : ---.
6. **"Second order parameter-uniform convergence for a finite difference method for a singularly perturbed linear parabolic system"** published in International Journal of Numerical Analysis and Modelling (PEER REVIEW) Vol. 10., Issue No. 1, January 2013 ISSN : 1705-5105.

## Publication in Books

- 2

1. **Convergence of the Crank-Nicolson Method for a Singularly Perturbed Parabolic Reaction-Diffusion System.** *Differential Equations and Numerical Analysis.* :Springer, January 1900.
2. **Numerical method for a singularly perturbed boundary value problem for a linear parabolic second order delay differential equations.** *Differential Equations and Numerical Analysis.* :Springer, January 1900.

## Conferences / Workshops / Seminars Organised

- 1

1. International level Workshop Entitled **"The International Winter Workshop on Differential Equations And Numerical Analysis – DEANA 2015"** at Tiruchirappalli 620017, sponsored by UGC&NBHM, during 05/01/2015 to 07/01/2015.

## RESEARCH PROJECTS

- 1

1. Minor project entitled **"Numerical methods for solving singularly perturbed differential Equations arising in Financial Mathematics"** (PRINCIPAL INVESTIGATOR), Sponsored by UGC, during 01/01/1900 to Till Date [Ongoing].



**Signature of Staff**  
**(V.FRANKLIN)**