Dr.JOSEPH PARAMASIVAM M

Assistant Professor, Department of Mathematics, Bishop Heber College, Tiruchirappalli - 17. E-mail: sivambhcedu@gmail.com

Phone: 9787393616

Web: http://bhc.edu.in/maths/

Qualification

Degree	Branch	Institution / University	Year of Passing
BCS	Theology	Senate Of Serampore College (University)	2019
Ph.D.	Mathematics	Bharathidasan University	2013
M.Phil	Mathematics	Bishop Heber College	2007
M.Sc.	Mathematics	Bishop Heber College	2006
B.Sc.	Mathematics	St.Josephs College	2004

Ph.D. Details

Title of Thesis	Area of Specialization

Numerical Solutions to Singularly Perturbed Boundary value problems for Systems of Differential Equations of

Research Centre

Dr. S. Valarmathi

Research Centre

Bishop Heber College, Trichy

Numerical Anal<mark>ys</mark>is for Sin<mark>gu</mark>lar Perturbation Problems, Boundary Layer Theory, **C**omputational Fluid Dynamics

> Year of Award September 2013

Cleared NET / SET : Details Year of Passing

Additional Qualification

Name of Course	Place of Study	Date	Duration	
Virtual Value Added Course on ADOLESCENT COUNSELLING	Bishop Heber College	July 2021	30 hours	j

Work Experience

Name of Institution	Address of Institution	Designation	From	То	
Bishop Heber College	Vayalur road, Puthur,	Assistant Professor	15/06/2006	Till Date	
	Trichy - 17				J

Teaching / Research Experience

U.G.: 15 **P.G.**: 15 **M.Phil**. 12 **Ph.D**. 8

Research Guidance

U.G.: 07 **P.G.**: 32 **M.Phil.**: 9 Students **Ph.D.**: 5 Students

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6.	Conferences / Workshops / Seminars Organised	1
7.	Research Projects	1
8.	Resource Person	41
9.	Consultancy	0
10.	Awards Recieved	0
11.	Patent	0
12.	Extension Activities Undertaken	0
13.	Professional Membership	0
14.	M.Phil. / Ph.D. Produced	8 / 4

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- International level Conference on "Scientific and Technological Advancements for Reliable and Sustainable future (STARS 2022)" sponsored by Deanery of Academics and all the Science Departments at Bishop Heber College organized by Deanery of Academics and all the Science Departments at Bishop Heber College at Tiruchirappalli during 16/11/2022 to 18/11/2022.
- College level Seminar on "Faculty Development Programme on Student Mental Health" sponsored by Internal Quality Assurance Cell and Deanery of Academics of Bishop Heber College organized by Internal Quality Assurance Cell and Deanery of Academics of Bishop Heber College at Tiruchirappalli during 15/07/2022 to 15/07/2022.
- 3. College level Workshop on "*Mathematics in Machine Learning*" sponsored by Bishop Heber College organized by Bishop Heber College at Tiruchirappalli during 19/03/2021 to 20/03/2021.
- 4. College level Workshop on "*E-content Development*" sponsored by Deanery of Academics, Bishop Heber College organized by Deanery of Academics, Bishop Heber College at Tiruchirappalli during 27/10/2020 to 02/11/2020.
- 5. College level Workshop on "Two Day Student Workshop- IGNITE 2019" sponsored by DBT-STAR College Scheme organized by Bishop Heber College Tiruchirappalli at Tiruchirappalli during 24/06/2019 to 25/06/2019.
- 6. International level Conference on "*Applied Mathematics & Bio-inspired Computations*" sponsored by DST-FIST organized by Bishop Heber College at Tiruchirappalli during 10/01/2019 to 11/01/2019.
- College level Orientation on "Hands-on Training on e-content Development" sponsored by Deanery of Research and Development & Internal Quality Assurance Cell organized by at Bishop Heber College, Tiruchirappalli during 12/07/2018 to 12/07/2018.
- 8. National level Conference on "National Conference on Recent Trends in Applied Mathematics" sponsored by PG & Research Department of Mathematics organized by PG & Research Department of Mathematics at Bishop Heber College, Tiruchirappalli during 02/03/2018 to 01/01/1900.
- 9. National level Seminar on "Meeting of Colleges & Universities of the Anglican Communion (CUAC) India Chapter" sponsored by Bishop Heber College, Tiruchirappalli organized by Bishop Heber College, Tiruchirappalli at Bishop Heber College, Tiruchirappalli during 16/02/2018 to 01/01/1900.
- 10. -1 level Orientation on "Human Values Development Programme" sponsored by All India Association for Christian Higher Education, New Delhi organized by All India Association for Christian Higher Education, New Delhi at Poondi during 12/09/2016 to 13/09/2016.
- 11. College level Orientation on "*Faculty Development Programme*" sponsored by Internal Quality Assurance Cell, Bishop Heber College organized by Internal Quality Assurance Cell, Bishop Heber College at Tiruchirappalli during 27/10/2015 to 27/10/2015.
- 12. National level Workshop on "Two Day National Workshop on R Programming" sponsored by PG & Research Department of Mathematics, Nehru Memorial College organized by PG & Research Department of Mathematics, Nehru Memorial College at Tiruchirappalli during 25/09/2015 to 26/09/2015.
- National level Conference on "National Conference on Frontiers in Analysis and Differential Equations" sponsored by Department of Mathematics, Bharathidasan University organized by Department of Mathematics, Bharathidasan University at Tiruchirappalli during 19/12/2012 to 20/12/2012.
- 14. College level Orientation on "Capacity Building Programme" sponsored by Internal Quality Assurance Cell, Bishop Heber College organized by Internal Quality Assurance Cell, Bishop Heber College at Tiruchirappalli during 25/02/2012 to 25/02/2012.
- 15. International level Conference on "Heber International Conference on Applications of Mathematics and statistics" sponsored by PG & Research Department of Mathematics, Bishop Heber College organized by PG & Research Department of Mathematics, Bishop Heber College at Tiruchirappalli during 05/01/2012 to 07/01/2012.

- 16. -1 level Workshop on "Workshop on Examination Reforms and Evaluation" sponsored by Internal Quality Assurance Cell, Bishop Heber College organized by Internal Quality Assurance Cell, Bishop Heber College at Tiruchirappalli during 18/03/2011 to 19/03/2011.
- -1 level Workshop on "Workshop on Stochastic Differential Equations" sponsored by PG & Research Department of Mathematics, Bishop Heber College organized by PG & Research Department of Mathematics, Bishop Heber College at Tiruchirappalli during 23/01/2009 to 24/01/2009.
- -1 level Workshop on "Workshop on Advanced Fluid Dynamics (High Viscous Fluids)" sponsored by Department of Chemical Engineering, National Institute of Technology organized by Department of Chemical Engineering, National Institute of Technology at Tiruchirappalli during 04/01/2008 to 05/01/2008.
- ^{19.} -1 level Workshop on "*Workshop on Computational Fluid Dynamics*" sponsored by organized by at during 17/09/2007 to 18/09/2007.
- 20. College level Workshop on "5. Workshop on Exam Reforms in Question Paper Setting" sponsored by Department of Mathematics, Bishop Heber College organized by Department of Mathematics, Bishop Heber College at Tiruchirappalli during 03/07/2007 to 03/08/2007.
- 21. National level Seminar on "National Seminar on Modern Trends in Mathematics with Relevance to Other Disciplines" sponsored by Department of Mathematics, Bishop Heber College organized by Department of Mathematics, Bishop Heber College at Tiruchirappalli during 06/03/2006 to 07/03/2006.
- 22. National level Conference on "A Brain-storming Session on Product Graphs and Applications" sponsored by Ministry of Science and Technology, Government of India organized by PG & Research Department of Mathematics, Bishop Heber College at Tiruchirappalli during 21/02/2004 to 22/02/2004.
- 23. University level Workshop on **"3. Workshop on High Performance Computing"** sponsored by Bharathidasan University at during 01/01/1900 to 01/01/1900.
- 24. College level Seminar on "A training programme on MATLAB" sponsored by University Grants Commission, India organized by Department of Mathematics, Bishop Heber College at Tiruchirappalli during 01/01/1900 to 01/01/1900.

Research Papers Presented

1. "First Order Parameter Uniform Convergence for a Linear Parabolic Singularly Perturbed Initial Value Problem with Robin Initial Condition" in the International conference on Heber International Conference on Applied Mathematics (HICAM-2021) sponsored by , organized by PG and Research Department of Mathematics, Bishop Heber College at Tiruchiraoppalli during 19/04/2021 to 01/01/1900.

- 1. "Second order parameter uniform convergence of a finite element method for a system of 'n' partially singularly perturbed delay differential equations of reaction diffusion type," published in Turkish Journal of Computer and Mathematics Education (PEER REVIEW) Vol. 12, Issup 146 [at 149 5449 5449 544] Issin 48 @ Is
- 2. "Parameter-Uniform Convergence of A Finite Element Method For A Partially Singularly Perturbed Linear Reaction-Diffusion System" published in International Journal of Aquatic Science (PEER REVIEW) Vol. 12, Issue No. 2, May 2021 ISSN: 2008-8019.
- 3. "A System of Two Singularly Perturbed Initial Value Problems with Discontinuous Source Terms and Robin Initial Conditions" published in Wesleyan Journal of Research (PEER REVIEW) Vol. 14, Issue No. 1(X), March 2021 ISSN: 0975-1386.
- 4. "A Parameter Uniform Numerical Method for a Singularly Perturbed Initial Value Problem with Discontinuous Source Term and Robin Initial Condition" published in Kala Sarovar (PEER REVIEW) Vol. 24, Issue No. 2, March 2021 ISSN: 0975-4520.
- 5. "A Parameter Uniform Numerical Method for a system of n Singularly Perturbed Robin type Initial Value Problems with Discontinuous Source Terms" published in Compliance Engineering Journal (PEER REVIEW) Vol. 12, Issue No. 3, March 2021 ISSN: 0898-3577.
- 6. "A New Approach for solving Fuzzy Assignment Problems using Singularly Perturbed Differential Equations of Reaction-Diffusion Type" published in Wesleyan Journal of Research (PEER REVIEW) Vol. 14, Issue No. 1(XVIII), March 2021 ISSN: 0975-1386.
- 7. "Parameter Uniform Convergence for a System of Two Partially Singularly Perturbed Initial Value Problems with Robin Initial Conditions" published in Wesleyan Journal of Research (PEER REVIEW) Vol. 14, Issue No. 1(XVIII), March 2021 ISSN: 0975-1386.
- 8. "A parameter uniform convergence for a system of two singularly perturbed initial value problems with different perturbation parameters and Robin initial conditions" published in Malaya Journal of Mathematik (PEER REVIEW) Vol. 9, Issue No. 1, February 2021 ISSN: 2321-5666.

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- 9. "Second order parameter uniform convergence of a finite element method for a system of 'n' singularly perturbed delay differential equation" published in International Journal of Aquatic Science (PEER REVIEW) Vol. 12, Issue No. 2, February 2021 ISSN: 2008-8019.

 Impact factor, Scopus Index Web of Science, h index, Citation index
- 10. "Parameter--uniform convergence for a finite difference method for a singularly perturbed linear reaction-diffusion system with discontinuous source terms" published in International Journal of Numerical Analysis and Modeling (PEER REVIEW) Vol. 11, Issue No. 2, January 2014 ISSN: ---.
- 11. "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 Modeling (PEER REVIEW) Vol. 10, Issue No. 1, January 2013 ISSN: ---.

- 12. "Second order parameter--uniform numerical method for a partially singularly perturbed linear system of reaction-diffusion type" published in Mathematical Communications (PEER REVIEW) Vol. 18, Issue No. 1, January 2013 ISSN: ----.
- 13. "Second order parameter--uniform convergence for a finite difference method for a singularly perturbed linear reaction-diffusion system" published in Mathematical Communications (PEER REVIEW) Vol. 15, Issue No. 2, January 2010 ISSN: ---.

Books Published / Edited

* . Differential Equations and Numerical Analysis. : Springer, January 2015.

Conferences / Workshops / Seminars Organised

1. International level Conference Entitled "Defferential Equations and Numerical Analysis" at Bishop Heber College, Tiruchirappalli, sponsored by , during 01/01/1900 to 01/01/1900.

RESEARCH PROJECTS -

Minor project entitled "Numerical Solutions to Singularly Perturbed Boundary Value Problems for System of Semi-linear Differential Equations of Reaction-Diffusion Type" (PRINCIPAL INVESTIGATOR), Sponsored by University Grants Commission, during 01/01/2015 to Till Date [Ongoing].

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RESOURCE PERSON

- 1. College level Workshop on "RECENT TRENDS IN R PROGRAMMING" at Department of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Vellore, 05/12/2022.
- 2. College level Workshop on "Mathematics Behind Artificial Intelligence and Machine Learning" at Department of Mathematics, Meenaakshi Ramasamy Arts and Science College, Ariyalur, 20/10/2022.
- College level Workshop on "A Two Days Workshop on HANDS-ON TRAINING IN ADVANCED R-PROGRAMMING" at Department of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Vellore, 06/10/2022.
- **4.** College level Workshop on "In-Service Faculty Workshop on R Programming" at PG & Research Department of Mathematics, Holy Cross College, Tiruchirappalli, 13/07/2022.
- **5.** College level Workshop on "Data Analytics with R Programming" at Department of Commerce, Bishop Heber College, Tiruchirappalli, 18/02/2020.
- **6.** College level Invited Lectures on "Believe in Yourself" at NSS Special Camp Conducted by NSS Units of St. Joseph 's College, Tiruchirappalli Inampuliur, 09/02/2020.
- 7. College level Invited Lectures on "A Brainstorming Session on R Programming" at PG & Research Department of Mathematics, Thanthai Hans Roever College, Perambalur., 14/03/2019.
- **8.** College level Invited Lectures on "An Introduction to Dynamics" at PSGR Krishnammal College for Women, Peelamedu, Coimbatore., 12/02/2019.
- **9.** College level Invited Lectures on "Numerical Methods to Singular Perturbation Problems" at Department of Mathematics, Theivanai Ammal College for Women, Villupuram, 05/02/2019.
- **10.** College level Invited Lectures on "R Programming" at Department of Computer Science, Bishop Heber College, Tiruchirappalli, 30/01/2019.
- 11. College level Seminar on "MANUMAT 18 & Play with Graphs" at Department of Mathematics, Meenaakshi Ramasamy Arts and Science College, Ariyalur, 01/10/2018.
- **12.** College level Workshop on "MATLAB Programming for Numerical Analysis" at Department of Mathematics, Cauvery College for Women, Tiruchirappalli, 11/09/2018.
- **13.** College level Workshop on "MATLAB Programming" at Department of Mathematics, Urumu Dhanalakshmi College, Kattur, Tiruchirappalli, 03/09/2018.
- **14.** College level Invited Lectures on "Introduction to Singular Perturbation Problems" at Holy Cross College, Tiruchirappalli, 06/07/2018.
- **15.** State level Workshop on "SWMAT-R-LANGUAGE 2K18" at Sri Meenakshi Vidiyal Arts and Science College, Marungapuri, Tiruchirappalli, 23/02/2018.
- **16.** College level Invited Lectures on "Applications of Boundary Layer Theory" at Sri Saratha College of Arts and Science for Women, Perambalur, 09/02/2018.
- **17.** College level Workshop on "MATLAB" at Urumu Dhanalakshmi College, Kattur, Tiruchirappalli, 29/01/2018.
- **18.** College level Invited Lectures on "Scientific Documentation using LaTeX" at Holy Cross College, Tiruchirappalli, 19/01/2018.
- **19.** College level Invited Lectures on "Introduction to Boundary Layer Theory" at Imayam Arts & Science College, Thuraiyur, 04/01/2018.
- **20.** College level Workshop on "Geogebra and Scilab" at PSGR Krishnammal College for Women, Peelamedu, Coimbatore, 13/10/2017.
- **21.** College level Invited Lectures on "LaTeX Scientific Documentation" at Holy Cross College, Tiruchirappalli, 21/07/2017.
- **22.** State level Workshop on **"Workshop on R STAT 2K17"** at PG Department of Actuarial Science, Bishop Heber College, Tiruchirappalli, 20/02/2017.
- **23.** College level Invited Lectures on "Introduction to R Programming" at Department of Mathematics, Theivanai Ammal College for Women, Villupuram, 30/01/2017.

- **24.** College level Invited Lectures on "Introduction to MatLab" at Department of Mathematics (Shift II), Holy Cross College, Tiruchirappalli, 19/01/2017.
- **25.** College level Workshop on "LaTeX Typesetting Tools" at Department of Mathematics, Ganesar College of Arts & Science, Melasivapuri, Pudukkottai, 01/01/2017.
- **26.** College level Workshop on "Algebra using Geogebra" at Department of Mathematics, PSGR Krishnammal College for Women, Peelamedu, Coimbatore, 14/10/2016.
- **27.** College level Invited Lectures on "Introduction to Mathematical softwares" at Department of Mathematics, Imayam Arts & Science College, Thuraiyur, 13/10/2016.
- **28.** College level Invited Lectures on "Boundary Layer Theory" at Department of Mathematics, National College, Tiruchirappalli, 03/10/2016.
- **29.** College level Invited Lectures on "Introduction to Differential Equations" at Department of Mathematics, Selvam Arts and Science College, Namakkal, 24/09/2016.
- **30.** College level Invited Lectures on "Numerical Analysis for Differential Equations" at Department of Mathematics, Chidambaram Pillai College for Women, Tiruchirappalli, 03/09/2016.
- **31.** College level Workshop on "? Workshop on R Programming" at PG & Research Department of Mathematics & Internal Quality Assurance Cell, Bishop Heber College, Tiruchirappalli, 02/04/2016.
- **32.** State level Workshop on "Recent Trends in Mathematical Software" at Department of Mathematics, Bharathiar University Arts and Science College, Gudalur, The Nilgiris, 01/10/2015.
- **33.** College level Invited Lectures on "Differential Equations and its Applications" at Department of Mathematics (Shift II), Holy Cross College, Tiruchirappalli, 31/07/2015.
- **34.** College level Workshop on "Hands on Training Programme on Matlab" at Department of Mathematics, PSGR Krishnammal College for Women, Peelamedu, Coimbatore, 24/03/2015.
- **35.** College level Workshop on "LaTeX Training Programme" at Department of Mathematics, Periyar E. V. R. College, Tiruchirappalli, 13/03/2015.
- **36.** College level Invited Lectures on "Impact of Analysis and Number Theory" at Department of Mathematics, Theivanai Ammal College for Women, Villupuram, 27/08/2014.
- **37.** College level Workshop on "Workshop on LaTeX" at Department of Mathematics, Nehru Memorial College, Puthanampatti, Tiruchirappalli, 18/07/2014.
- **38.** College level Workshop on "LaTeX" at The Department of Mathematics, Nehru Memorial College, Puthanampatti, Tiruchirappalli, 18/07/2014.
- **39.** College level Workshop on "LaTeX Programming" at Department of Mathematics, PSGR Krishnammal College for Women, Peelamedu, Coimbatore, 29/01/2014.
- **40.** College level Workshop on "Workshop on LaTeX Programming" at Department of Mathematics, PSGR Krishnammal College for Women, Peelamedu, Coimbatore, 29/01/2014.

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41. College level Seminar on "Young Student Scientist Programme" at Bishop Heber College, Tiruchirappalli, 01/05/2008.