

<b>Name:</b> <b>Dr. K. Saravana Sankar</b>	<b>Photo</b> 	
<b>Designation:</b>	<b>Assistant Professor</b>	
<b>Qualification:</b>	M.Sc., NET, SET, Ph.D.	
<b>Area of specialization:</b>	Numerical Analysis	
<b>Experience:</b>	<b>Industrial Experience</b>	<b>Teaching Experience</b>
		<b>1 year</b>
<b>Number of workshops / FDP attended:</b>	<b>Number of Workshops</b>	<b>Number of FDPs</b>
	<b>9</b>	<b>4</b>
<b>Publications:</b>	<b>Conference</b>	<b>Journal</b>
	<b>National</b> <b>International</b>	<b>National</b> <b>International</b>
	<b>2</b>	<b>4</b>
<b>Professional Body Membership</b>	1.IEEE Membership	
<b>Staff Achievements</b>		

### **Educational Qualifications:**

<b>Category</b>	<b>Name of the Degree</b>	<b>Specialization</b>	<b>Year of Passing</b>	<b>Name of the University</b>	<b>% of Marks / Grades obtained</b>	<b>Class obtained</b>
UG	B.Sc.	Mathematics	2012	Bharathidasan	8.55	I Class
PG	M.Sc.	Mathematics	2015	Bharathidasan	8.5	I Class
PhD		Mathematics	2020	Bharathidasan		

### **Academic Experience:**

<b>Name of the College</b>	<b>Designation</b>	<b>Joining Date</b>	<b>Relieving Date</b>	<b>Experience</b>		
				<b>Year s</b>	<b>Month s</b>	<b>Days</b>
Anna University	PDF	01.10.2021	13.09.2024	2	11	13
Sri Sairam Institute of Technology	Assistant Professor	18.09.2024	30.06.2025	0	9	13
Sri Sairam Engineering College	Assistant Professor	01.07.2025	-	0	3	10
<b>Total</b>				<b>4</b>	<b>0</b>	<b>6</b>

**Anna University Research Supervisor Ref no: NA**

**Workshops/Seminars attended:**

- **One day Symposium on Mathematical Analysis** organized jointly by Indian Statistical Institute (ISI), Chennai Centre, Ramanujan Mathematical Society (RMS) and National College held at National College, Tiruchirappalli on December 9, 2014.
- International Winter **Workshop on Differential Equations And Numerical Analysis** (DEANA) sponsored by National Board for Higher Mathematics (NBHM), Government of India and organized by the Department of Mathematics, Bishop Heber College, Tiruchirappalli during 5-7 January, 2015.
- **Workshop on Analysis and Geometry** organized by School of Mathematics and Computer Sciences, Central University of Tamil Nadu, Thiruvarur on 13<sup>th</sup> -14<sup>th</sup> February, 2015.
- **Outreach Programme in Mathematics** organized jointly by the Ramanujan Mathematical Society (RMS) and National College, Tiruchirappalli during 20-27 May, 2015.
- **Workshop on R Programming** organized jointly by the Department of Mathematics and Internal Quality Assurance Cell, Bishop Heber College, Tiruchirappalli on 2<sup>nd</sup> April , 2016.
- **State Level Workshop on Linear Algebra and Analysis** sponsored by University Grant Commission (UGC), Government of India and the Management of Ayya Nadar Janaki Ammal College and organized by Centre for Research and Post Graduate Studies in Mathematics, Ayya Nadar Janaki Ammal College, Sivakasi on December 15, 2016.
- **NATIONAL WORKSHOP ON MATLAB & LaTeX FOR BEGINNERS** organized by the Department of Mathematics, National Institute of Technology, Tiruchirappalli from 04-04-2022 to 08-04-2022.
- **Five Day Workshop on RECENT ADVANCES IN NUMERICAL AND STATISTICAL METHODS** organized by Department of Mathematics, College of Engineering Guindy, Anna University, Chennai from 06<sup>th</sup> March to 10<sup>th</sup> March 2023.
- **Three Days Hands-on Workshop on MATLAB and its Application to Engineering Mathematics Courses** organized by Centre for Faculty Development, College of Engineering Guindy, Anna University, Chennai from 08<sup>th</sup> August to 10<sup>th</sup> August 2024.

**FDP/STTP Attended:**

- **Faculty Development Programme on** “Linear Algebra and its Applications” conducted by the division of Mathematics, School of Advanced Sciences between 27<sup>th</sup> February and 03<sup>rd</sup> March, 2023 at Vellore Institute of Technology, Chennai.
- **Faculty Development Programme on** “Introduction to Abstract Group Theory” conducted by the NPTEL-AICTE.
- **Faculty Development Programme on** “Artificial Intelligence: Knowledge Representation And Reasoning” conducted by the NPTEL-AICTE.
- **Faculty Development Programme on** “Data Analytics with Python” conducted by the NPTEL-AICTE.

#### **Symposium Attended: Nil**

#### **Conference Attended:**

- **International Conference on Applications of Basic Sciences (ICABS)** organized by Bishop Heber College, Tiruchirappalli during 19-21 November, 2019.
- **National conference on Recent Developments in Pure and Applied Mathematics** organized by St. Joseph's College, Tiruchirappalli during 27-28 February, 2024.

#### **Completed / Ongoing Projects:**

#### **Patent:**

**Journal Publications:**

1. K.Saravana Sankar, John J.H.Miller, S.Valarmathi, A parameter uniform numerical method for a singularly perturbed two-parameter delay differential equation, *Applied Numerical Mathematics*, 145(2019), 90-110.
2. K.Saravana Sankar, John J.H.Miller, S.Valarmathi, A parameter uniform fitted mesh method for a weakly coupled system of two singularly perturbed convection-diffusion equations, *Mathematical Communications*, 24(2019), 193-210.
3. K.Saravana Sankar and L.Jones Tarcius Doss, On parameter uniform and layer resolving numerical method for a singularly perturbed model in aerodynamics, *Results in Control and Optimization* 10(2023), DOI:10.1016/j.rico.2023.100208.
4. K.Saravana Sankar and L.Jones Tarcius Doss, A fitted mesh method for a coupled semi-linear system of singularly perturbed initial value problems, *International Journal for Computational Methods in Engineering Science and Mechanics*, DOI:10.1080/15502287.2023.2186966.

**Books / Book Chapters:**

5. Saravana Sankar Kalaiselvan and John J H Miller and Valarmathi Sigamani, Fitted mesh methods for a class of weakly coupled system of singularly perturbed convection-diffusion equations, *Differential Equations and Applications*, Springer Proceedings in Mathematics & Statistics, 368(2021).
6. Valarmathi Sigamani and John J H Miller and Saravana Sankar Kalaiselvan, A parameter uniform fitted mesh method for a weakly coupled system of three partially singularly perturbed convection-diffusion equations, *Differential Equations and Applications*, Springer Proceedings in Mathematics & Statistics, 368(2021).

**Awards:**

- UGC-Dr. D. S. Kothari Post Doctoral Fellowship (October 2021-September 2024)
- UGC-NET Senior Research Fellowship (July 2018 – August 2019)
- UGC-NET Junior Research Fellowship (July 2016 – June 2018)

**Startup:****Webinar:****Resource Person:****Online Courses:**