




# Bharathiar University

State University | "A++" Grade by NAAC | 26<sup>th</sup> Rank in MoE-NIRF  
Maruthamalai Road, Coimbatore, Tamil Nadu - 641 046.

<b>Dr S SARAVANAN FNASC</b> Professor and Head Department of Mathematics Bharathiar University  <b>E-mail:</b> sshravan@buc.edu.in <b>Phone:</b> 4222428411 <b>Office Number:</b> 0422-2428411	
<b>Research Area</b> <ul style="list-style-type: none"><li>• Mathematical Modelling</li><li>• Differential Equations</li><li>• Fluid Dynamics</li></ul>	<b>Courses Teaching</b> <ul style="list-style-type: none"><li>• Real Analysis</li><li>• Measure Theory</li><li>• Complex Analysis</li><li>• Ordinary Differential Equations</li><li>• Partial Differential Equations</li><li>• Distribution Theory</li><li>• Mathematical Methods</li><li>• Mechanics</li><li>• Fluid Dynamics</li><li>• Numerical Methods</li><li>• Computer Programming (ForTran, C &amp; C++)</li><li>• Applied Mathematics (I &amp; II)</li></ul>
<b>Research Experience:</b>	<b>Teaching Experience:</b>
<b>Research Credentials</b> (as on – Source: Google scholar) H-index: 1121                      Citations: 19                      i10-index: 33	
<b>Publications</b> International Journals: 10	
<b>Career</b> <b>At Bharathiar University</b> <ol style="list-style-type: none"><li><b>1. Designation : Professor and Head</b> Period : July 2016 - Till Date</li><li><b>2. Designation : Professor</b> Period : February 2015 - Till Date</li><li><b>3. Designation : Reader</b> Period : February 2009 - January 2015</li><li><b>4. Designation : Lecturer</b> Period : August 2001 - May 2002</li><li><b>5. Designation : Lecturer</b> Period : April 2005 - January 2009</li></ol>	
<b>Education</b> <b>Ph. D.</b> Subject : Mathematics Institution : Bharathiar University Affiliated University : Bharathiar University Year of Award : March 2002	



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**Dr S SARAVANAN FNASC , Professor and Head , Department of Mathematics**

## M. Phil.

Subject : Mathematics

Institution : Bharathiar University

Affiliated University : Bharathiar University

Year of Award : October 1998

## M. Sc.

Subject : Mathematics

Institution : Sri Ramakrishna Mission Vidyalaya College of Arts and Science

Affiliated University : Bharathiar University

Year of Award : May 1996

## B. Sc.

Subject : Mathematics

Institution : Sri Ramakrishna Mission Vidyalaya Arts College (Autonomous)

Affiliated University : Bharathiar University

Year of Award : May 1994

## Projects

## Research Guidance

**National Level Institutional Responsibilities**  
Ongoing - 1 completed -  
**Head - Dept. of Mathematics**

Period :Jul 2016 to Till date

Nature of Responsibility :

**Chairman - BoS in Mathematics (PG)**

Period :Feb 2017 to Till date

Nature of Responsibility :

**Coordinator - UGC SAP DRS (Phase III)**

Period :Feb 2017 - Mar 2021

Nature of Responsibility :

**Coordinator - DST FIST (Level 2)**

Period :Dec 2022 to Till date

Nature of Responsibility :

## Publications

### International Journals - 10

#### 10. Onset of thermal turbulence in Cattaneo-type convection inside a heater mounted enclosure

Phys. Fluids, 37, 074190 (January 2025)

with R Muthumeena

#### 9. Thermovibrational convection in a nanofluid saturated porous medium

Eur. J. Mech. - B/Fluids, 90, 64-72 (January 2021)

with M Kousalya

#### 8. Lyapunov stability of plane parallel porous convection with heat generation

Meccanica, 53, 497-501 (January 2018)

with M Meenasaranya

#### 7. Floquet instability of gravity modulated salt fingering in a porous medium

Ind. Engng. Chem. Res., 56, 2851-2864 (January 2017)

with S Keerthana



**6. Thermorheological effect on thermal nonequilibrium porous convection with heat generation**

Int. J. Engng. Sci., 74, 55-64 (January 2014)  
with V P M Senthilnayagi

**5. Coupled thermal radiation and natural convection heat transfer in a cavity with a heated plate inside**

Int. J. Heat Fluid Flow, 40, 54-64 (January 2013)  
with C Sivaraj

**4. Onset of thermovibrational filtration convection: Departure from thermal equilibrium**

Phys. Rev. E, 84, 026307 (January 2011)  
with T Sivakumar

**3. Global stability of centrifugal filtration convection**

J. Math. Anal. Appl., 367, 116-128 (January 2010)  
with D Brindha

**2. Thermal stability of a nonuniformly heat generating annular fluid layer**

Int. J. Heat Mass Transfer, 49, 269-280 (January 2006)  
with P Kandaswamy

**1. Natural convection in low Prandtl number fluids with a vertical magnetic field**

Trans. ASME - J. Heat Transfer, 122, 602-605 (January 2000)  
with P Kandaswamy

**Projects**

**Ongoing - 1**

1. Transition to turbulence in passive cooling systems DST – SERB 21.28 Lakhs (February 2023 - February 2026)