## **CURRICULUM VITAE**

### Dr. KARTHIKEYAN S

Assistant Professor Department of Mathematics Loyola College Vettavalam-606 754.

Mobile: +91-9047218162

E-mail: skarthikeyan51990@gmail.com



# **Career Objective**

To serve a professionally managed organization which will be able to use my resources to the maximum extent in achieving the goals of the organization and treat me as an asset of the organization while also contributing to my career and self-development.

### **Academic Credentials:**

Examination Passed (with Major)	University / Institution	Year of passing / Awarded	•	
Ph.D. [Mathematics]	Thiruvalluvar University, Vellore.	August 2020	gust 2020 Highly Commended	
M.Phil. [Mathematics]	Thiruvalluvar University, Vellore.	October 2016	82% (I- class)	
B.Ed. [Mathematics]	Ranga Chinnammal College of Education, Gingee-Alampoondi.	May 2013	74% (I- class)	
M.Sc. [Mathematics]	Thiruvalluvar University PG Extention Centre, Villupuram-605602.	April 2015	74% (I- class)	
B.Sc. [Mathematics]	Arignar Anna Govt. Arts College, Villupuram-605602.	July 2012	63.65% (I- class)	
Higher Secondary	Govt. Higher Secondary School-Anniyur.	March 2009	68.92% (I- class)	
SSLC	Govt. Higher Secondary School-Old Karuvatchi.	March 2007	82.60% (I- class)	

## **Details of Ph.D. Degree:**

Month and Year of Ph.D. Degree Awarded: August 2020

Title of the Thesis: "Heat and Mass Transfer Investigation of some Magnetohydrodynamic Flows".

## **Details of M.Phil. Degree:**

Month and Year of M.Phil. Degree Awarded: October 2016

Title of the Dissertation: "Cross Diffusion Effects on Chemically Reacting Radiative Micro-Polar Fluid Flow past a Stretching/Shrinking Sheet".

#### **Areas of Interest:**

- > Fluid Dynamics
- Ordinary and Partial Differential equations
- Numerical Analysis
- ➤ Computational Fluid Dynamics
- ➤ Heat and Mass Transfer in MHD flows

## **Teaching Experience:**

<b>Positions held</b>	Name of the Institutions	Duration		Years of Experience
		From	То	-
Assist. Prof.	Loyola College, Vettavalam	01.09.2020	Till Date	3 Years

#### Papers Presented in National/International Conferences:

- [1] Presented a paper entitled "Dual Solutions of Heat and Mass Transfer in MHD Radiative Casson Fluid Flow with Dufour Effect and Chemical Reaction", in the National Conference on Mathematical Sciences and Its Applications NCMSA-2018 organized by PG & Research Department of Mathematics, Thiruvalluvar University College of Arts and Science, Tirupattur on 22<sup>nd</sup> March 2018.
- [2] Presented a paper entitled "Hall Current Effect on Chemically Reacting MHD Casson Fluid Flow with Dufour Effect and Thermal Radiation", in the National Conference on Discrete Mathematics and Its Applications (NCDMA-2018) organized by the Department of Mathematics, Sacred Heart College (Autonomous), Tirupattur during 9<sup>th</sup> and 10<sup>th</sup> February 2018.
- [3] Presented a paper entitled "Cross Diffusion Effects on Chemically Reacting Radiative Micropolar Fluid Flow Past a Stretching/Shrinking Sheet" in the one day National Conference on Pure and Applied Mathematics organized by Department of Mathematics, SAS, VIT University, Vellore on 12<sup>nd</sup> March 2016.

#### Participated on International/National Conferences/Workshop:

- [1] Participated in the one day National Conference on "Recent Trends in Applied Mathematics (RTAM 2023)" jointly organized by PG & Research Department of Mathematics & Internal Quality Assurance Cell, K.M.G. College of Arts and Science, Gudiyattam, Vellore held on 15<sup>th</sup> September 2023.
- [2] Participated in the one day National Conference on "Contemporary Mathematics and It's Applications" organized by the Department of Mathematics, Loyola College, Vettavalam held on 17<sup>th</sup> March 2023.

- [3] Attended in the One Day Workshop on "Submitting Swayam MOOC's & Swayam Prabha Proposals" conducted by the Human Resource Development Centre (HRDC), Thiruvalluvar University, Vellore on 20.01.2023.
- [4] Participated in the guest lecture on the "Fontan Hemodynamics Patient-Specific Phase Contrast Cardiac Magnetic Resonance Studies: A Computational Fluid Dynamics" Organized by Department of Mathematics, School of Advanced Sciences, VIT-AP University, Andhra Pradesh on 22, January 2022.
- [5] Participated in the Three day's workshop on "Advances in Applied Mathematics

  Computational Methods" Organized by Department of Mathematics, School of

  Advanced Sciences, VIT-AP University, Andhra Pradesh during 7-9, January 2022.
- [6] Participated in a Three-day Orientation Programme for the Newly Recruited Faculty for the academic year 2021-2022 on "Enhancing the Teaching-Learning Process" organized by Higher Education Commission, Jesuit Chennai Province, Loyola College Campus, Chennai between October 21-23, 2021.
- [7] Participated/Attended national webinar on "Growth of Stirling Numbers and its Applications" Organized by the Department of Mathematics with IQAC, St. Ann's College of Arts and Science, Tindivanam on 10<sup>th</sup> February 2021.
- [8] Participated in the webinar on "Mathematical Modeling Using Maple" (Online Mode) Conducted by Coimbatore Institute of Technology-Teaching Learning Centre, on 27<sup>th</sup> November 2020.
- [9] Participated in the National level webinar on "Fundamentals of Applied Mathematics" Organized by the Department of Mathematics, Selvamm Arts and Science College (Autonomous), Namakkal, Tamil Nadu held on 27<sup>th</sup> July 2020.
- [10] Participated in the one day seminar on "International Faculty Development

  Programme on Emerging Trends in Pure and Applied Mathematics" Organized

- by the Department of Science and Humanities (Mathematics), C. Abdul Hakeem College of Engineering and Technology, Melvisharam from 28<sup>th</sup> to 30<sup>th</sup> June 2020.
- [11] Participated in the one day seminar on "International Seminar on Recent Advancement in Mathematics (ISRAM-2019)" Organized by the Department of Mathematics, Thiruvalluvar University, Vellore held on 17<sup>th</sup> July 2019.
- [12] Participated in the International Conference on "Mathematical Modelling, Analysis and Computing (MMAC-2018)" Organized by the Department of Mathematics, Thiruvalluvar University, Vellore held during 13<sup>th</sup> -14<sup>th</sup> December 2018.
- [13] Participated in the Two day's workshop on "Mathematical Modelling and Scientific Computing" Organized by School of Advanced Sciences Department of Mathematics, VIT University, Vellore during April 9-10, 2018.
- [14] Participated in the Polar Lecture Series: Creating Awareness in Science Organized by Thiruvalluvar University Science Forum (TUSF), Vellore held on 4<sup>th</sup> April 2018.
- [15] Participated in the State Level Seminar on "Applications of Fuzzy Graph and Integral Transforms" Organized by PG & Research Department of Mathematics at Sun Arts and Science College, Tiruvannamalai on 6<sup>th</sup> March 2018.
- [16] Participated in the One day workshop on "Science Academie's Lecture Workshop on Emerging Trends in Mathematical Modeling in Fluid Dynamics" Organized by Department of Mathematics, Thiruvalluvar University, Vellore on 4<sup>th</sup> December 2017.
- [17] Participated in the one day seminar on "Matlab and its Applications" Organized by the Department of Mathematics, Thiruvalluvar University, Vellore held on 19<sup>th</sup> September 2016.

[18] Participated in the National Level Seminar on "Modern Techniques in Mathematical Sciences" Organized by PG & Research Department of Mathematics, Marudhar Kesari Jain College for Women, Vaniyambadi held on 24<sup>th</sup> February 2016.

#### **List of Publications:**

- [1] N. Kanimozhi, R. Vijayaragavan and S. Karthikeyan. (2023). Multiple slip impacts on unsteady MHD micropolar fluid past a stretching sheet with non-Darcy porous medium and uneven heat source/sink, *Heat Transfer*, 1-23. (Scopus).
- [2] Ramesh Manogaran, Vijayaragavan Rajaram and **Karthikeyan Shanmugam.** (2023). Heat Transfer Analysis of MHD Casson Fluid Flow Over an Unsteady Vertical Permeable Porous Plate Under the Influence of Heat Source and Thermal Radiation with Hall Current Effect, *Indian Journal of Natural Sciences*,13(76), 52834-52847. (Web of Science).
- [3] Kanimozhi Natesan, Rajaram Vijayaragavan and **Karthikeyan Shanmugam.** (2022). Impacts of thermal radiation, viscous dissipation, ohmic heating, and diffusion-thermo effects on unsteady MHD free convective rotating flow of second-grade fluid with Hall and ion-slip currents, *Heat Transfer*, 1-27. (Scopus).
- [4] R Vijayaragavan, M Ramesh and S Karthikeyan. (2021). Heat and Mass Transfer Investigation on MHD Casson Fluid Flow past an Inclined Porous Plate in the Effects of Dufour and Chemical Reaction, *Journal of Xi'an University of Architecture & Technology*, **13**(6), 860-873. (Scopus-Impact Fact : 3.7)
- [5] R Vijayaragavan, N Kanimozhi and S Karthikeyan. (2021). Effects of Hall Current and Viscous dissipation on MHD Free Convective Casson Fluid over a

- semi-infinite aligned vertical plate, *Journal of Xi'an University of Architecture & Technology*, **13**(6), 737-751. (Scopus-Impact Fact : 3.7)
- [6] Vijayaragavan, R., Karthikeyan, S. and Premalatha, P. (2019). Heat and Mass Transfer on an Unsteady MHD mixed convective Casson fluid flow past a moving vertical porous plate with effects of the Dufour and Chemical reaction, International Journal of Mathematics Trends and Technology, 65 (2), 117-129. (UGC Approved-Impact Fact: 2.53)
- [7] Vijayaragavan, R., **Karthikeyan, S.** and Jothi, V. (2019). Heat and Mass Transfer on an Unsteady MHD flow of Jeffery fluid over a radiating aligned permeable moving plate embedded in a porous medium with influence of the Dufour effect and Heat source/sink, *Journal of Global Research in Mathematical Archives*, **6** (3), 5-23. (UGC Approved-Impact Fact: 0.53)
- [8] Vijayaragavan, R. and **Karthikeyan, S.** (2018). Heat and Mass Transfer in Magnetohydrodynamic Maxwell Fluid Flow through a Porous Medium over a stretching/shrinking sheet with Dufour and Soret Effects, *International Journal of Research and Analytical Review*, **5** (4), 389-406. (UGC Approved-Impact Fact: 5.75)
- [9] Vijayaragavan, R. and **Karthikeyan, S.** (2018). Dual Solutions of Heat and Mass Transfer in MHD Radiative Casson Fluid Flow with Dufour Effect and Chemical Reaction, *Journal of Emerging Technologies and Innovative Research*, **5**(11), 62-78. (UGC Approved-Impact Fact: 5.87)
- [10] Vijayaragavan, R., Karthikeyan, S. and Parthiban, S.(2018). Aligned Magnetic Field on Unsteady MHD Flow Past a Vertical Plate with Chemical Reaction and Dufour Effects", *Journal of Emerging Technologies and Innovative Research*, 5(11), 79-90. (UGC Approved-Impact Fact: 5.87)

- [11] Vijayaragavan, R., Karthikeyan, S. and Pownkumar, N. (2018). Unsteady Free Convection Flow in MHD Polar Fluid Flow with Dufour and Chemical Reaction Effects Past a Semi-Infinite Vertical Plate, *Journal of Emerging Technologies and Innovative Research*, **5**(11), 30-46. (UGC Approved-Impact Fact: 5.87)
- [12] Vijayaragavan, R., Karthikeyan, S. and Sumithra, A.(2018). Perturbation Analysis of MHD Casson Flow of a Visco-Elastic Fluid Past an Infinite Vertical Porous Plate with Thermal Radiation and Chemical Reaction Effects, *Journal of Emerging Technologies and Innovative Research*, **5**(11), 1-17. (UGC Approved-Impact Fact: 5.87)
- [13] Vijayaragavan, R., Karthikeyan, S. and Elayaraja, R.(2018). Heat and Mass Transfer on Inclined Magnetic Field MHD Polar Fluid Flow Over an Infinite Horizontal Plate with Dufour Effect and Heat Source/Sink, *Journal of Emerging Technologies and Innovative Research*, **5**(11), 47-61. (UGC Approved-Impact Fact: 5.87)
- [14] Vijayaragavan, R. and Karthikeyan, S. (2018). Hall Current Effect on Chemically Reacting MHD Casson Fluid Flow with Dufour Effect and Thermal Radiation, *Asian Journal of Applied Science and Technology*, **2**(2), 228-245. (UGC Approved-Impact Fact: 2.985).
- [15] Vijayaragavan, R. and **Karthikeyan, S.** (2018). Influence of Magnetic Induction on Chemically Reacting Radiative Flow over a Vertical Porous Plate, *IOSR Journal of Engineering*, **8**(2), 32-49. (UGC Approved-Impact Fact: 6.645).
- [16] Vijayaragavan, R. and **Karthikeyan**, S. (2017). Heat and Mass Transfer in Radiative Fluid Flow Caused by a Vertical Plate with Variable Magnetic Field Effect, *Advances in Physics Theories and Applications*, 67, 6-23. (Impact Fact: 7.17)

- [17] Vijayaragavan, R. and **Karthikeyan, S.** (2017). Joule heating and thermal radiation effects on chemically reacting Casson fluid past a vertical plate with variable magnetic field, *Research Journal of Engineering and Technology*, **8**(4), 1-12. (UGC Approved Impact Fact: 7.87).
- [18] Vijayaragavan, R. Sandeep, N. and **Karthikeyan, S.** (2016). Cross diffusion effects on chemically reacting radiative Micro polar fluid flow past a stretching / shrinking sheet, *Global Journal of Pure and Applied Mathematics*, **12**(3), 370-376.

## **Personal Strengths:**

- Quick learner
- > Positive attitude
- Hardworking
- Open to new ideas
- ➤ Good listener and learner

### **Personal Skills:**

- ➤ Good communication skills.
- > Good command over Matlab Programming.

#### **Technical Skills:**

- ➤ Operating systems: DOS, Windows 95, 98, 2000, Windows XP.
- ➤ Packages: Microsoft Word, Microsoft Excel, Math Type, Matlab, C++

#### **References:**

# Prof. R. Vijayaragavan

**Professor** 

Dept. of Mathematics Department of Mathematics

Thiruvalluvar University

Vellore-632 115

Tamil Nadu, India.

Mob: +91-9942557234

E-mail:

rvijayaraagavantvu@gmail.com

# Dr. N. Sandeep

**Assistant Professor** 

Central University of

Karnataka

Kadaganchi-585367

Mob: +91-8220636617

E-mail:

nsreddy.dr@gmail.com

# Prof. V. Sugunamma

**Associate Professor** 

Dept. of Mathematics

Sri Venkateswara University

Tirupati-517502

Andhra Pradesh, India.

Mob: +91-9491152154

E-mail: <u>vsugunar@gmail.com</u>

## **Personal Profile:**

Name : S. KARTHIKEYAN

Father's Name : N. SHANMUGAM

Date of Birth : 03.05.1990

**Marital status** : Unmarried

Languages known : Tamil and English

**Nationality** : Indian (Hindu)

**Address** : No. 2/54, Kulathu Street,

Sirulapattu, Thirunavalur (Post),

Ulundur Pettai (Taluk),

Kallakurichi (District) - 607 204.

# **Declaration:**

I hereby declare that the information furnished above is true to the best of my knowledge.

Place: Vettavalam Faithfully

**Date: 16.10.2023** (S. KARTHIKEYAN)