

Faculty Profile

1. Name : **Dr. S. Muthukumar**
2. Designation : Assistant Professor
3. Date of Joining : 04.07.2006
4. Nature of Association : Regular
5. E mail : muthukumar@ksrct.ac.in
6. Mobile no. : +91 9788285608
7. **Academic Qualifications:**



Course	Name of the Institution / University	Year of Passing	% of Marks	Class
Ph.D. (Mathematics)	Periyar University, Salem	July - 2020	--	--
SET (Mathematical Sciences)	Mother Teresa Women's University, Kodaikkanal	February - 2016	--	--
M.Phil. (Mathematics)	Jamal Mohammed College, Trichy, / Bahrathidasan University, Trichy	September - 2006	D++	First with Distinction
M.Sc. (Mathematics)	Muthayammal College of Arts and Science, Rasipuram / Periyar University, Salem	April - 2005	72.15	First
B.Sc. (Mathematics)	Aringar Anna Govt. Arts College, Namakkal / Periyar University, Salem	May - 2003	70.3	First
H.S.C.	Govt. Hr. Sec. School, Kozhikkalnatham, Tiruchengode, Namakkal.	April - 2000	76	First
S.S.L.C.	Govt. Hr. Sec. School, Kozhikkalnatham, Tiruchengode, Namakkal.	May - 1998	82	First

8. Teaching Experience

- **Assistant Professor**, K.S.Rangasamy College of Technology, Tiruchengode, from 01.07.2010 to till date.
- **Lecturer**, K.S.Rangasamy College of Technology, Tiruchengode, from 04.07.2006 to 30.06.2010.

9. Projects

M.Phil:

- **Title:** A study on Transversal Theory in Matroids

Ph.D.:

- **Title:** Numerical Investigation on Magneto-Convection of Nanofluid in a Porous Cavity

10. Publications

International Journals

1. S. Sureshkumar, **S. Muthukumar**, Deog Hee Doh, and Eswari Prem. "Effects of magnetic field inclination on tilted square cavity filled with a nanofluid saturated porous medium." *International Journal of Ambient Energy*". 2018; <https://doi.org/10.1080/01430750.2018.1537935>: Vol. 42, Issue 4, 403-415, **(WoS)**.
2. **S. Muthukumar**, S. Sureshkumar, Ali J. Chamkha, M. Muthamilselvan and Eswari Prem. "Combined MHD convection and thermal radiation of nanofluid in a lid-driven porous enclosure with irregular thermal source on vertical sidewalls", *Journal of Thermal Analysis and Calorimetry*, <https://doi.org/10.1007/s10973-019-08204-w>, 2019; Vol. 138(1), 583 - 596. **(SCI), Impact Factor: 2.731**
3. **S. Muthukumar**, Eswari Prem and S. Sureshkumar. "Mixed convective heat transfer in a rectangular nanofluid filled cavity with inclined magnetic field", *International Journal of Mechanical and Production Engineering Research and Development*. 2019; Vol. 9, Issue 5, Oct 2019, 1179–1190. **(Scopus)**.
4. S. Sureshkumar, **S. Muthukumar**, M. Muthamilselvan, D.H. Doh, C.R. Cho and Eswari Prem. "MHD convection of nanofluid in porous medium influenced by slanted Lorentz force", *The European Physical Journal Special Topics*, <https://doi.org/10.1140/epjst/e2019-900085-0>, 2020; Vol. 229, 331-346. **(SCI), Impact Factor: 1.66**.
5. S. Sureshkumar, **S. Muthukumar***, K. Balasundaram "Nanofluid MHD combined convection in a porous chamber with various thermal sources", *International Journal of Modern Physics C*, DOI: 10.1142/S0129183121500583, 2021, Vol. 32, Issue: 5, 2150058 (22) **(SCI), Impact Factor: 1.176**.
6. **Subramanian Muthukumar**, Selvaraj Sureshkumar, Arthanari Malleswaran, Murugan Muthamilselvan and Eswari Prem, "Effects of uniform or non-uniform heating at bottom wall on MHD mixed convection in a porous cavity saturated by nanofluid", *International Journal of Nonlinear Sciences and Numerical Simulation*, <https://doi.org/10.1515/ijnsns-2017-0258>, 2021. **(SCIE), Impact Factor: 1.467**.
7. **S. Muthukumar**, S. Sureshkumar, Shreen El-Sapa & Ali J. Chamkha, "Impacts of uniform and sinusoidal heating in a nanofluid saturated porous chamber influenced by the thermal radiation and the magnetic field", *Numerical Heat Transfer, Part A: Applications*, <https://doi.org/10.1080/10407782.2022.2137072>, 2022. **(SCI), Impact Factor: 2.569**

Paper Presentations in International Conferences

1. **S. Muthukumar**, S. Sureshkumar, T. Kannan and Eswari Prem. "Combined convective heat transfer in a lid-driven rectangular porous enclosure filled with nanofluid", *International Conference on Discrete Mathematics and Data Sciences (ICDMDS'18)*, 28-29. Sep. 2018, organized by School of Humanities and Sciences and School of Computing, Sastra Deemed University, Thanjavur.
2. **S. Muthukumar**, S. Sureshkumar, Deog Hee Doh, and Eswari Prem., Impact of inclined magnetic field and aspect ratio on combined convective heat transfer of nanofluid in a lid-driven porous cavity, "*International Conference on Applications of Fluid Dynamics (ICAFD)*", 13-15. Dec. 2018, organized by Department of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Vellore.
3. **S.Muthukumar** and S. Sureshkumar. Nanofluid MHD combined convection in a porous enclosure with various thermal sources, "*2nd International Conference on Mathematical Modelling and Computational Methods in Science and Engineering (ICMMCMSE-2020)*", 22-24. Jan. 2020 organized by Ramanujan Centre for Higher Mathematics, Alagappa University, Karaikudi.
4. **S.Muthukumar** and S. Sureshkumar. MHD mixed convection in a nanofluid filled porous enclosure with asymmetrical heating wall, "*International Virtual Conference on Bridging Innovative Trends in Mathematics, Engineering & Technology (BITMET'20)*", 18 - 19 Dec. 2021 organized by **Department of Mathematics**, Bannari Amman Institute of Technology, Sathyamangalam.

11. Workshop / FDP / Conference / Summer Training Programmes

Academic

1. Attended a one week FDP on "*Instructional Design and Delivery*" at K.S.R. College of Engineering from 19.06.2006 to 24.06.2006.
2. Attended a two days short term course on "*Mathematical Aspects of Computer Science*" at K.S.Rangasamy College of Technology from 22.09.2006 to 23.09.2006.
3. Participated in the "*National Conference on Algebra, Graph Theory and their Applications*" at Manonmaniam Sundaranar University from 04.02.2009 to 06.02.2009.
4. Attended a two days CSIR sponsored workshop on "*Theoretical and Computational Fluid Dynamics*" at Erode Sengunthar Engineering College from 21.12.2018 to 22.12.2018.
5. Participated in AICTE sponsored Workshop on "*NBA Accreditation Process*" organized by Department of Mechatronics Engineering, Kongu Engineering College, Erode from 12.10.2022 to 14.02.2022.

National Service Scheme – Programme Officer for NSS Unit – II (2009-2016)

1. Attended ten days *“Training Program for NSS Program Officers”* at Training & Orientation Centre, Avinashilingam University, Coimbatore from 20.09.2010 to 29.09.2010.
2. Attended a *“One Day State Level Literacy Awareness Programme for NSS Programme Officers”* at Regional Center, Anna University Coimbatore on 03.09.2015.
3. Attended a *“One Day Training Programme for NSS Programme Officers”* at Regional Center, Anna University Coimbatore on 20.03.2015.
4. Attended a *“One Day Training Programme for NSS Programme Officers”* at Regional Center, Anna University Coimbatore on 28.03.2014.
5. Attended *“Training cum Workshop on Voluntary Blood Donation for Community Camp Organizers and Blood Donor Motivators”* at District Level at Govt. Mohan Kumarmangalam Medical College Hospital, Salem on 01.06.2013.
6. Conducted many programs like Blood donation camp, Eye checkup camp, Dental camp, Awareness program and tree plantation through NSS Unit inside and outside the college.
7. Conducted six one week Special Camps for NSS Volunteers at the villages Potlupalayam and Karumagoundampalayam from 2009 to 2015.

12. Membership in Professional Bodies

- **Life Member**, Indian Society of Technical Education (ISTE) – LM 54112.

13. Research Activities

- **Area of Expertise / Research Interests**
 - Computational Fluid Dynamics, Heat and Mass transfer
 - Anna University recognized supervisor (Ref No: 3870016)

14. Personal Details

Fathers Name : C. Subramanian
Date of Birth & Age : 05.06.1983 & 38 Years
Gender : Male
Marital Status : Married
Permanent Address : 7/52, Panduthakarankadu, Kasthuripatti (P.O.),
Sankari (Tk.), Salem - 637302.