

CURRICULUM VITAE

Mr. GIMNITZ SIMON S.

No. 7, Viswanatha Nagar,
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CAREER OBJECTIVE

Aim to associate with a progressive and growth-oriented organization that gives scope to utilize my educational knowledge with hard work and be a part of the institution that dynamically works towards the growth of organization and provides a platform to enhance my research skills.

EDUCATION PROFILE

- Ph.D.** Doctorate of Philosophy in Mathematics from SRM Institute of Science and Technology, Kattankulathur, Chennai (2025), (Thesis submitted).
- M.Sc.** Master of Science in Mathematics with CGPA of 7.5 from The American College (Autonomous), Madurai under Madurai Kamaraj University (2020).
- B.Sc.** Bachelor of Science in Mathematics with 74.95% from St. John's College, Tirunelveli under Manonmaniam Sundaranar University (2018).

RESEARCH PROFILE

Field of Research : Differential Equations, Lie Symmetry.

Research Title : Lie group analysis to some fractional differential equations

Research Description: My research explores nonlinear differential equations with fractional order. Lie symmetry is used to reduce complicated partial differential equations into simpler solvable ordinary differential equations under invariance. Further, we analyse our reduced model under various methods to obtain solutions. Furthermore, we derive conserved vectors using symmetries.

Research Interests : Differential Equations; Lie Symmetry Analysis; Conservation Laws.

PUBLICATIONS

1. **Simon, S. G.**, Bira, B., & Zeidan, D. (2023). Optimal systems, series solutions and conservation laws for a time fractional cancer tumor model. *Chaos, Solitons & Fractals*, 169, 113311, <https://doi.org/10.1016/j.chaos.2023.113311> (Q1; SCIE, IF: 5.3).
2. **Simon, S. G.**, & Bira, B. (2024). Classical and non-classical symmetries of time-fractional Navier–Stokes equation. *Indian Journal of Physics*, 98(7), 2475-2483, <https://doi.org/10.1007/s12648-023-03010-5> (Q3; SCIE, IF: 1.6).
3. **Simon, S. G.**, & Bira, B. (2024). Lie Symmetries With Exact Solution for Time-Fractional Foam Drainage Equation. *Mathematical Methods in the Applied Sciences*, <https://doi.org/10.1002/mma.10612> (Q1; SCIE, IF: 2.1).
4. **Simon, S. G.**, Bira, B., & Thambiayya, S. (2025). Optimal algebras and novel solutions of time-fractional (2+1 – D) European call option model. *Discrete Dynamics in Nature and Society*, (Accepted for publication) (Q3; SCIE, IF: 1.3).

Further, three of my research articles are communicated in reputed journals.

REVIEWING SERVICES

- Physica Scripta
- Fractals
- Partial Differential Equations in Applied Mathematics
- European Journal of Pure and Applied Mathematics

CONFERENCES

1. Presented a paper titled, “Invariant similarity transformations for time-fractional Navier-Stokes equation”, International Conference on Mathematical Modelling, Simulation and Nonlinear Dynamics (ICMMSND 2024) organized by Bharathiar University, Coimbatore on February 15-16, 2024.
2. Presented a paper titled, “Exact solution of fractional order Chagas virus model”, International Conference on Mathematical Analysis and Applications in Science and Engineering-ICMAS2SC’24, organized by School of Engineering of the Polytechnic of Porto, Portugal on June 20-22, 2024.

WORKSHOPS AND WEBINARS (SELECTED)

1. Faculty Development Programme on “Emerging Research Directions And Opportunities In Mathematics And Statistics” organized by Department of Mathematics (S&H), SRM Institute of Science and Technology, Kattankulathur, Chennai, during January 20-27, 2025.
2. Research Development Programme on “Applications Of Genomics In Diagnostics And Biopharmaceutical Research” organized by Department of Genetic Engineering, SRM Institute of Science and Technology, Kattankulathur, Chennai, on February 15, 2025.
3. One Day National Level Webinar on “Diophantine Equations and Special Numbers” organized by Department of Mathematics, Jairams Arts and Science College, Karur, on March 13, 2022.

TECHNICAL SKILLS

- MS-OFFICE
- Mathematical Software: Latex, Python, Maple and Matlab

WEB LINKS

ORCID : <https://orcid.org/0009-0000-4156-8856>

Scopus ID : <https://www.scopus.com/authid/detail.uri?authorId=58458756600>

Web of Science ID : <https://www.webofscience.com/wos/author/record/KAM-3262-2024>

Research Gate : <https://www.researchgate.net/profile/Gimnitz-Simon>

PERSONAL DETAILS

Date of Birth : 08th November, 1997

Gender : Male

Marital Status : Unmarried

Nationality : Indian

Linguistics : English, Tamil.

Temporary address : 15, Bharathiyar Street, Potheri, Chengalpattu – 603203.

REFERENCES

1. Dr. B. Bira, Assistant Professor,
Department of Mathematics,
SRM Institute of Science and Technology, Kattankulathur,
Chengalpattu – 603203, Tamil Nadu, India.
Email: birabibekananda@gmail.com
2. Dr. T. Raja Sekhar, Associate Professor,
Department of Mathematics,
Indian Institute of Technology Kharagpur,
Kharagpur – 721 302, West Bengal, India.
Email: trajasekhar@maths.iitkgp.ac.in

DECLARATION

I, Mr. GIMNITZ SIMON S declare that the particulars mentioned above are true to the best of my knowledge.

Place: Kattankulathur

Date: 04-03-2025

Yours faithfully,
GIMNITZ SIMON S