<table>
<tr><td>Name:
DR. D. PAUL</td><td colspan="4">  </td></tr>
<tr><td>Designation:</td><td colspan="4">Associate Professor</td></tr>
<tr><td>Qualification:</td><td colspan="4">M.Sc., M.Phil., Ph.D.</td></tr>
<tr><td>Area of specialization:</td><td colspan="4">Graph Theory, Theoretical Computer Science, Computational Chemistry, Mathematical Biology</td></tr>
<tr><td rowspan="2">Experience:</td><td colspan="2">Industrial Experience</td><td colspan="2">Teaching Experience</td></tr>
<tr><td colspan="2">Nil</td><td colspan="2">10 Years</td></tr>
<tr><td rowspan="2">Number of workshops / FDP attended:</td><td colspan="2">Number of Workshops</td><td colspan="2">Number of FDPs</td></tr>
<tr><td colspan="2">10</td><td colspan="2">15</td></tr>
<tr><td rowspan="3">Publications:</td><td colspan="2">Conference</td><td colspan="2">Journal</td></tr>
<tr><td>National</td><td>International</td><td>National</td><td>International</td></tr>
<tr><td>-</td><td>1</td><td>-</td><td>22</td></tr>
<tr><td>Professional Body Membership</td><td colspan="4">▪ Affiliated to “THE INDIAN SOCIETY FOR TECHNICAL EDUCATION (REGD)” LM128035 – Life member since 2019.
▪ IEEE MEMBERSHIP – Membership No. 98930653.</td></tr>
<tr><td>Staff Achievements</td><td colspan="4">▪ GOLD MEDALIST during my Undergraduate in Mathematics from Loyola College.
▪ STATE LEVEL PLAYER In Chess.
▪ Best Researcher Award in VIT University.
▪ Best Teachers Researcher Award in Sri Sairam Institute of Technology.
▪ Government Merit Certificate In NSS.</td></tr>
</table>

	▪ **Merit Certificate in Outreach.** ▪ **NPTEL DISCIPLINE STAR** ▪ **NPTEL top performing mentoring**

Educational Qualifications:

Category	Name of the Degree	Specialization	Year of Passing	Name of the University	% of Marks	Class obtained
UG	B.Sc.,	Mathematics	2009	Loyola College	84%	Gold Medalist
PG	M.Sc.,	Mathematics	2011	Loyola College	85%	First Class with Distinction
	M.Phil.,	Mathematics	2013	VIT University	90%	NA
Research	Ph.D.,	Graph Theory	2016	VIT University	90%	NA

Academic Experience:

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
Sri Sai Ram Engineering College	Associate Professor	01.07.2025	Till date	-	03	24
Sri Sairam Institute of Technology	Associate Professor	01.08.2022	30.06.2025	02	10	29
Sri Sairam Institute of Technology	Assistant Professor	02.07.2015	31.07.2022	07	0	29

Anna University Research Supervisor Ref no: 4170145

Journal Publications:

1. J. C. Fiona, **D. Paul**, M. Arockiaraj, P. Ali, C. I. A. Doss, "Topological Entropy Indices and Energy Prediction Modeling of Zeolite PWN" *Chemical papers* (2025). https://doi.org/10.1007/s11696-025-04454-1. **SPRINGER [Impact Factor: 2.5]**

2. **D. Paul**, M. Arockiaraj, D. A. Emilet, A. Berin Greeni, AR. Abul Kalaam, "Molecular Descriptor Characterization in Neuromuscular Drugs through QSPR analysis" Accepted in *Modern Physics Letters B.* **[Impact Factor: 1.8]**

3. **D. Paul**, M. Arockiaraj, P. Peter, J. Clement, "Structural analysis of bond information entropy and HOMO-LUMO gap in CLO and KFI zeolites" *Journal of Molecular Structure*, Volume 1328 (1–4):141276, 2025. **ELSEVIER [Impact Factor: 4.0]**

4. M. Arockiaraj, **D. Paul**, M. P. Rahul, J. Clement, S. Tigga and K Balasubramanian, "Topological and Entropy Indices in QSPR Studies of N-Carbophene Covalent Organic Frameworks", *BioNanoScience* 14 (3), 2762-2773, 2024. **SPRINGER [Impact Factor: 3.2]**

5. D. A. Emilet, **D. Paul**, R. Jayagopal, M. Arockiaraj, "Total Face Irregularity Strength of Certain Graphs", *Mathematical Problems in Engineering,* Volume 1, 5540959,1-7, 2024. [**SCOPUS]**

6. M. Arockiaraj, **D. Paul**, J. Clement, S. Tigga, K. Jacob & K. Balasubramanian, "Novel molecular hybrid geometric-harmonic-Zagreb degree-based descriptors and their efficacy in QSPR studies of polycyclic aromatic hydrocarbons", *SAR and QSAR in Environmental Research*, 34:7, 569-589, 2023. **TAYLOR & FRANCIS [Impact Factor: 3.681]**

7. J.B. Liu, M. Arockiaraj, **D. Paul**, J. Clement, X. Zhao and S. Tigga, "Degree Descriptors and Graph Entropy Quantities of Zeolite ACO". *Current Organic Synthesis*, 21 (3), 263-273. **[Impact Factor: 2.276]**

8. M. Arockiaraj, **D. Paul**, M. U. Ghani, S. Tigga and Y. M. Chu, "Entropy structural characterization of zeolites BCT and DFT with bond-wise scaled comparison". *Scientific Reports,* 13, 10874 (2023). **[Impact Factor: 4.997]**

9. **D. Paul,** M. Arockiaraj, K. Jacob and J. Clement, "Multiplicative versus scalar multiplicative degree-based descriptors in QSAR/QSPR studies and their comparative analysis in entropy measures" *The European Physical Journal Plus*, Volume 138, 323, 2023. **SPRINGER [Impact Factor: 3.4]**

10. K. Jacob, J. Clement, M. Arockiaraj**, D. Paul** and K Balasubramanian, "Topological characterization and entropy measures of tetragonal zeolite merlinoites" *Journal of Molecular Structure*, Volume 1277, 134786, 2023. **ELSEVIER [Impact Factor: 4.0]**

11. **D. Paul,** M. Arockiaraj, S. Tigga and K Balasubramanian, "Zeolite AST: Relativistic degree and distance based topological descriptors" *Computational and Theoretical Chemistry*, Volume 1218, 113933, 2022. **ELSEVIER [Impact Factor: 1.926]**

12. M. Arockiaraj**, D. Paul,** S. Klavžar, J. Clement, S. Tigga and K. Balasubramanian, "Relativistic distance based and bond additive topological descriptors of zeolite SAS materials and their doped structures with very heavy element" *Journal of Molecular Structure*, Volume 1250, 131798, 2021. **ELSEVIER [Impact Factor: 4.0]**

13. M. Arockiaraj, **D. Paul,** S. Klavžar, J. Clement, S. Tigga and K. Balasubramanian, "Relativistic distance based and bond additive topological descriptors of zeolite RHO materials" *Journal of Molecular Structure*, Volume 1250, 131798, 2021. **ELSEVIER [Impact Factor: 4.0]**

14. M. Arockiaraj, J. Clement, **D. Paul** and K. Balasubramanian, "Relativistic distance-based topological descriptors of Linde type A zeolites and their doped structures with very heavy elements" *Molecular Physics*, 2020. **TAYLOR & FRANCIS [Impact Factor: 1.937]**

15. M. Arockiaraj, J. Clement, **D. Paul** and K. Balasubramanian, "Quantitative structural descriptors of sodalite materials" *Journal of Molecular Structure*, Volume 122, 128766, 2020. **ELSEVIER [Impact Factor: 4.0]**

16. **D. Paul**, G. Vidya and I. Rajasingh, "Strong Chromatic Index of Circumscribed Peri- condensed Benzenoid Graphs" *TagaJounal of Graphic Technology*, Volume 14, 2274-2282, 2018.

17. **D. Paul**, G. Vidya and I. Rajasingh, "Strong Rainbow Coloring of Ladder-Like Networks" *TagaJounal of Graphic Technology*, Volume 14, 2283-2289, 2018.

18. **D. Paul**, "Wavelength Assignment Problem in Optical Grid Network" *International Journal of Pure and Applied Mathematics*, Volume 109 No. 9, 108-115, 2016. [**SCOPUS]**

19. I. Rajasingh, R. S. Rajan and **D. Paul**. "A New Approach to Compute Acyclic Chromatic Index of Certain Chemical Structures" *Iranian Journal of Mathematical Chemistry*, Volume 6, No. 1, pp. 45-55, 2015. **Thomson Reuters [Impact Factor: 1.38]**

20. **D. Paul**, I. Rajasingh and R. S. Rajan and. "Acyclic Edge-coloring of k-dimensional Regular Tesselations" *International Journal of Networking and Virtual Organisations*, Volume 10, No.34, pp. 27212-27219, 2015. [**SCOPUS]**

21. **D. Paul,** I. Rajasingh and R. S. Rajan "Tree Derived Architectures with Decycling Number equal to Cycle Packing Number", *Proceedia Computer Science,* Volume 57, 716-826, 2015. **Elsevier [SCOPUS] [Impact Factor: 1.26]**.

22. I. Rajasingh, R. S. Rajan and **D. Paul**. "Acyclic Edge-coloring of Hypertree and Shuffle hypertree" *International Journal of Pure and Applied Mathematics*, Volume 101 No. 5, 623-629, 2015. **[SCOPUS]**

23. **D. Paul** and I. Rajasingh." Acyclic Edge-coloring of Sierpinski-like graphs" *International Journal of Pure and Applied Mathematics*, Volume 87, No. 6, pp. 855-862, 2013. **[SCOPUS]**

Patent:

- **D. Paul** published a patent titled "**Device for Dynamic Graph Theory Analysis and Visualization**" Certificate of Registration for a UK Design with design number 6358543 and grant date 19 April 2024.
- **D. Paul** published a patent titled "**Early detection of heart disease in type 2 diabetes patients using Machine Learning and Big Data Analysis**" The Patent Office Journal No. 17/2024 with application no: 202441031893 A and publication date 26/04/2024.

Courses Completed:

1. **Completed all 8 Models in NITTTR** (National initiative for Technical Teachers Training) conducted by **AICTE (**All India Council for Technical Education**).**
    - **Module 1:** Orientation Towards Technical Education and Curriculum Aspects
    - **Module 2:** Professional Ethics and Sustainability
    - **Module 3:** Communication Skills, Modes and Knowledge Dissemination
    - **Module 4:** Instructional Planning and Delivery
    - **Module 5:** Technology Enabled learning and Life-long self-Learning
    - **Module 6:** Students Assessment and Evaluation
    - **Module 7:** Creative Problem solving, innovation and Meaningful R&D

- **Module 8:** Institutional management and Administrative Procedures.

2. **NPTEL Certified Courses**

- Advanced R Programming for Data Analytics in Business
- Data Analytics with Python
- Artificial Intelligence: Knowledge Representation and Reasoning
- Learning Analytics Tools
- Probability for Computer Science
- Python for Data Science
- Data Analytics for Python
- Introduction to Machine Learning
- Advanced Graph theory
- Discrete Mathematics

Conference Attended:

S.No	Conference	Date	Institution
1.	**International Conference on Mathematical Computer Engineering**	3rd and 4th November 2017	VIT University, Chennai.
2.	**International Conference on Mathematical Computer Engineering**	16th and 17th December 2016	VIT University, Chennai.
3.	**International Conference on Mathematical Computer Engineering**	14th and 15th December 2015	VIT University, Chennai.
4.	**National Conference on Information Technology**	21st March 2015	SSN College of Engineering, Chennai.
5.	**International Conference on Recent trends in Computing**	12th and 13th March 2015	SRM University, Ghaziabad.
6.	**National Conference in Emerging Trends in Advanced Mathematics**	6th and 7th February 2015	Jyoti Nivas College, Bangalore.
7.	**National Conference on Mathematics and Computer Applications**	12th and 13th January 2015	Women's Christian College, Chennai.
8.	**National Conference on Mathematics and Computer Applications**	15th March 2014	Women's Christian College, Chennai.
9.	**International Conference on Mathematical Computer Engineering**	29th and 30th November 2013	VIT University, Chennai.
10.	**National Conference on Mathematical Sciences and Applications**	14th & 15thMarch 2013	Karunya University, Coimbatore.

Subjects Handled:

- Matrices and Calculus
- Transform and Partial Differential Equations
- Discrete Mathematics
- Probability and Queuing Theory
- Probability and Statistics
- Probability and Random Process
- Statistics and Numerical Methods
- Statistics and Linear Algebra
- Linear Algebra and Its Applications
- Probability and Statistical Modelling
- Graph Theory and its Applications
- Numerical Methods
- Optimization Techniques
- Statistics For Management
- Business Optimization Methods

Computer and Technical Skills:

- R-Programming
- MATLAB
- MATHEMATICA
- C programming
- Latex
- SPSS
- MS Office

Research and Academic Contributions:

- Doctoral Committee members for PhD students
- Reviewer in International Reputed Journals
- NBA Coordinator for Department and NAAC criterion in charge.
- External Academic Auditor for Anna University Affiliated Colleges
- Website In charge for the department.
- Designed curriculum for B.Tech., M.B.A & M.Phil.,
- Class teacher and Group Counselor for teachers and students
- Examination Scrutiny Board Member for Autonomous Institutions
- Examiner for evaluation of internal and external papers
- Designed and framed question papers for various University Examinations.

****