




# TAGORE ENGINEERING COLLEGE

(A Member of Tagore Group of Institutions Chennai)

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai

ACCREDITED BY IQAC-NAAC WITH 'A' GRADE

## FACULTYPROFILE

PERSONALDETAILS			
Name&Qualification	Dr. R. Jothiraj., M.Sc., B.Ed., M.Phil., Ph.D., PGDCA.		
Designation	Assistant Professor		
Department	Mathematics		
Total Teaching Experience	16		
Total Research Experience	8		
Total Industry Experience	-		
Area of Specialization	Graph Theory and Operation Research		
AICTE Faculty ID	1-37699243291		
Email ID	jothirajlvp@gmail.com		
EDUCATIONALDETAILS			
Degree	Branch/Specialization	University	Year
UG	Mathematics	Madurai Kamaraj University	2004
PG	Mathematics	Madurai Kamaraj University	2006
M.Phil	Mathematics	Madurai Kamaraj University	2007
Ph.D	Mathematics	Thiruvalluvar University	2021
RESEARCH/PUBLICATIONDETAILS			
<ul style="list-style-type: none"><li>R.Jothiraj and B.Chandralekha “An Efficient Connected Dominating Set Based Routing Scheme in Ad Hoc Wireless Networks”, <b>Indian Journal of Natural Sciences</b>,Volume 15, Issue 85, 2024, pp 7636- 7644.</li><li>R.Jothiraj and B.Chandralekha “On graphs with Equal Strong Triple Connected Dominator Chromatic Number and Strong Triple Connected Domination Numbers”, <b>Indian Journal of Natural Sciences</b>,Volume 14, Issue 82, 2024, pp 67371- 67376.</li><li>R.Jothiraj and B.Chandralekha “Paired Neighbor Connected Dominator Coloring Set in Graphs”, <b>Indian Journal of Natural Sciences</b>,Volume 14, Issue 79, 2023, pp 58202-</li></ul>			

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- R.Jothiraj and B.Chandralekha “ Triple Connected Dominator Coloring Sets using TUS and Backtracking Algorithm for MANET ”, **European Chemical Bulletin**, Volume 12, Issue7, 2023, pp 2157-2167.
- R.Jothiraj and B.Chandralekha “Mathematical Based Performance Comparison of TUS and Triple Connected Dominator Coloring Sets for MANET”, **European Chemical Bulletin**, Volume 12, Issue 4, 2023, pp 3191-3197.
- R.Jothiraj “A Strong Triple Connected Domination Set Based on Routing Scheme for MANET”, **Journal of Huazhong University of Science and Technology**, Volume 50 Issue 3, 2021, pp 1-11.
- R. Jothiraj, S. Jayakumar and P. Venugopal “Open Shop Scheduling in Circular Coloring and Dominator Coloring of Circular-Arc Graphs”, **International Journal of Pure and Applied Mathematics**, Volume 118 No. 10 2018, pp 185-193.
- R. Jothiraj, S. Jayakumar and P. Venugopal, (2018) “Cyclic Open Shop Scheduling in a Circular Coloring and Paired Neighbor Connected Dominator Coloring of Circular- Arc Graph” **Journal of Advanced Research in Dynamical & Control Systems**, Vol. 10, No. 5. pp 79-83.
- R. Jothiraj, S. Jayakumar and P. Venugopal “ Paired Neighbor Connected Dominator Coloring to Open Shop Scheduling ”, **International Journal of Pure and Applied Mathematics**, Volume 120 No. 8 2018, pp 31-39.
- R. Jothiraj, S. Jayakumar and P. Venugopal “Cyclic Open Shop Scheduling in a Paired Triple Connected Dominator Coloring of Circular-Arc Graph”, **Journal of Applied Science and Computations**, Volume 6 Issue 1, 2019, pp 675-680.
- R. Jothiraj, S. Jayakumar and P. Venugopal “Triple Connected Dominator Coloring to Cyclic Open Shop Scheduling of Unit Circular Arc Graph”, **International Journal of Research and Analytical Reviews**, Volume 6 Issue 1, 2019, pp 579-583.
- R. Jothiraj and A. Kathirvel, “A Mathematical Based Performance Comparison of TUS and Strong Triple Connected Domination Sets for MANET”, **International Journal on Recent Researches In Science, Engineering & Technology**, vol.4, Issue 2, Feb. 2016.

## CONFERENCE PROCEEDINGS

- R. Jothiraj, “An Efficient Connected Dominating Set Based Routing Scheme in Ad Hoc Wireless Networks ”, International Conference on Recent Trends in Mathematics, Statistics, and Engineering (ICRTMSE 2023) organized by School of Technology Management and Engineering SVKM's NMIMS (Deemed-to-be University) Indore, Madhya Pradesh, India, 22-23 December 2023.
- R. Jothiraj, “Multi-Processor Cyclic Open Shop Scheduling Using Circular Coloring and Domination Number of Circular-Arc Graph ”, International Conference on Mathematical Modeling, Analysis and Computing -2023, Holy Cross Arts and Science College For Women, Tirupattur, 21<sup>st</sup> & 22<sup>nd</sup> October 2023.
- R. Jothiraj, “Multi-Processor Cyclic Open Shop Scheduling Problem using Coloring and Domination techniques of Circular-Arc Graphs”, 7<sup>th</sup> International conference on Recent Advances in Science, Engineering and Management (ICRASEM - 2022), pp. 175, Tagore Engineering College, 25<sup>th</sup> January 2023. **ISBN : 978-81-943033-7-4.**

- R. Jothiraj, “Paired neighbor connected dominator Coloring set in Graphs”, 7<sup>th</sup> International conference on Recent Advances in Science, Engineering and Management (ICRASEM - 2022), pp. 179, Tagore Engineering College, 25<sup>th</sup> January 2023. **ISBN : 978-81-943033-7-4.**
- R. Jothiraj “Triple Connected Dominator Coloring for some Standard Graphs”, Virtual International Conference on Discrete Mathematics and Combinatorics (ICDMC 2021), Poornaprajna College and Postgraduate Centre, Udupi during 22-23 July 2021.
- R. Jothiraj, “Triple Connected Dominator Coloring for some Special Graphs”, International Conference on Mathematical Computer Engineering (ICMCE 2020), Vol.1, pp.49, VIT University, Chennai, during 21–22, February 2020. **ISBN : 978-93-81899-37-3.**
- R. Jothiraj, S. Jayakumar and P. Venugopal, “Cyclic Open Shop Scheduling in a Paired Triple Connected Dominator Coloring of Circular Arc Graph”, National Conference on EMERGING TRENDS IN MATHEMATICS SCIENCES (NCETMS2018), Vol.1, pp.25, S.A. Engineering College, Chennai, 20 December 2018.
- R. Jothiraj, S. Jayakumar and P. Venugopal, “Triple Connected Dominator Coloring to Cyclic Open Shop Scheduling of Circular- Arc Graph”, International Conference on Mathematical Computer Engineering (ICMCE 2018), Vol.1, pp.104, VIT University, Chennai, during 23-24 November 2018. **ISBN : 978-93-81899-94-6**
- R. Jothiraj, S. Jayakumar and P. Venugopal, “Triple Connected Dominator Coloring in Graphs” in the National Conference on Emerging Trends in Mathematics & Applications in Engineering and Technology (NCETMAET-2018), organized by Hindustan institute of technology and science, Chennai, during 22-23 March 2018.
- R. Jothiraj, S. Jayakumar and P. Venugopal, “ Open Shop Scheduling in a Circular Coloring and Dominator Coloring in a Circular Arc Graphs”, National Conference on EMERGING TRENDS IN MATHEMATICS SCIENCES (NCETMS2017), Vol.1, pp.36, S.A. Engineering College, Chennai, 22 December 2017.
- R. Jothiraj, S. Jayakumar and P. Venugopal, “Paired Neighbor Connected Dominator Coloring to Open Shop Scheduling”, International Conference on Mathematical Computer Engineering (ICMCE 2017), Vol.1, pp.85, VIT University, Chennai, during 3-4 November 2017. **ISBN:978- 93- 81899-83-0**
- R. Jothiraj and Dr. A.Kathirvel, “A Mathematical Based Performance Comparison of TUS and Strong TripleConnected Domination Sets for MANET”, International Conference on Mathematical Computer Engineering (ICMCE 2015), Vol.1, pp.12, VIT University, Chennai, during 14-15, December 2015. **ISBN: 978- 93- 81899-64-9**

Scientific Reviewer	
<ul style="list-style-type: none"> <li>Asian Research Journal of Mathematics (ARJOM).</li> <li>International Journal of Research and Innovation in Applied Science (IJRIAS)</li> <li>Asian Journal of Research in Computer Science(AJRCOS)</li> </ul>	
Books/ChaptersPublished	
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FundReceived	

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PatentApplied/ Published/Granted		
<div>Indian Patent Published</div> 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