CURRICULUM VITAE

Name	Dr. J. AMALORPAVA JERLINE
Designation	Assistant Professor
Qualification	M. Sc., M. Phil., Ph.D., M. A. (Tamil), PGDCA, with SET
Address	No: 96, Krishnamoorthy Nagar, Tiruchirappalli-620 021
e-mail id	jermaths@gmail.com
Area of Specialization	Graph Theory and Algebra
Google Scholar ID	https://scholar.google.co.in/citations?user=l1-Rz3cAAAAJ&hl=en

Working Experience:

1. Worked as an Assistant Professor in Arul Anandar College (Autonomous), Karumathur, Madurai, from 16.06.2008 to 28.08.2008.
2. Worked as an Assistant Professor in Holy Cross College (Autonomous), Tiruchirappalli, from 01.09.2008 to 30.05.2018.
3. Working as an Assistant Professor in St. Joseph's College (Autonomous), Tiruchirappalli, since 18.06.2018.

Academic Profile:

Ph. D.

College Name and Address : St. Joseph's College(Autonomous), Tiruchirappalli-620 002.

Year : January 2018

Title of the thesis : "**Harmonic and Zagreb Indices of Graphs**"

SET

Year of Passing : February 2016

University : Mother Teresa Women's University, Kodaikanal-624 101.

M. Phil

Qualifying Exam	:	M. Phil., Mathematics
Qualifying Marks in Percentage	:	97.06% (**Gold Medal**)
College Name and Address	:	St. Joseph's College (Autonomous),
		Tiruchirappalli-620 002.
Year of Passing	:	September 2008

Post Graduate:

Qualifying Exam	:	M.Sc., Mathematics
Qualifying Marks in Percentage	:	93.79% (**Silver Medal**)
College Name and Address	:	St. Joseph's College (Autonomous),
		Tiruchirappalli-620 002
Year of Passing	:	April 2008

Under Graduate:

Qualifying Exam	:	B.Sc., Mathematics
Qualifying Marks in Percentage	:	96.29% (**Gold Medal and University IV Rank**)
College Name and Address	:	Holy Cross College(Autonomous),
		Tiruchirappalli-620 002
Year of Passing	:	June 2005

Technical Qualification:

- PGDCA
- MATLAB
- LaTeX
- Type Writing in English

Publication Details:

1. Harmonic Index of Product Graphs, Proceedings of National Conference on Analysis and Applied Mathematics, (2014) 85-90, ISBN: 978-93-84743-06-2.
2. Colouring of Digraph, Proceedings of National Conference on Analysis and Applied Mathematics, (2014)91-94, ISBN: 978-93-84743-06-2.
3. The second and third minimum harmonic index of trees, Proceedings of National Conference on Discrete Mathematics, (2015)6-11.
4. Uniquely Colourable Digraph, Proceedings of National Conference on Discrete Mathematics, (2015)1-5.
5. On harmonic index and diameter of unicyclic graphs, Iranian Journal of Mathematical Sciences and Informatics, 11(1) (2016), 115-122.
6. The first and the second Zagreb indices of the generalized Mycielskian of graph, Electronics Notes in Discrete Mathematics, 53 (2016) 239-358.
7. On a conjecture of Harmonic Index and Diameter of Graphs, Kragujevac Journal of Mathematics, 40(1) (2016), 73-78.
8. Dichromatic Polynomial of Product Digraphs, Electronic Notes in Discrete Mathematics, 53 (2016) 165-172.
9. First Modified Zagreb Indices of Unicyclic Graphs with a given number of pendant vertices, International Journal of Mathematical Archive, 7(4) (2016), 151-153.
10. Modified and Multiplicative Zagreb Indices on Graph Operations, Journal of Computer and Mathematical Sciences, 7(4) (2016), 225-232.
11. Harmonic Index of Bridge and Chain Graphs, International Journal of Mathematics and its Applications, 5 (1-C) (2017), 275-284.
12. Harmonic index of graphs with more than one cut –vertex, Ars Combinatoria 135 (2017) 283-298.
13. Modified Zagreb Index of Some Chemical Structure Trees, International Journal of Mathematics and its Applications, 5 (1-C) (2017), 285-290.
14. Modified Zagreb Indices of Bridge Graphs, International Journal of Mathematical Archive, 8(3) (2017), 86-91.
15. F-Index of Generalized Mycielskian of Graphs, International Journal of Recent Scientific Research, 10(6) (2019), 33076-33081.

16. F-Coindex of Generalized Mycieldkian of Graphs, International Journal of Research in Advent Technology, 7(4) (2019), 243-249.

17. First and Second Modified Zagreb Indices of Product Graphs, INFAKARA RESEARCH, 9 (2020), 279-293.

18. Results on Uniquely Colourable Digraphs, Discrete Mathematics, Algorithms and Applications, 13(6) (2021), 2150071(11 pages)

Reviewer Detail:

1. ARS Combinatoria
2. Jouranl of Applied Mathematics and Computing
3. Journal of the International Mathematical Virtual Institute
4. Journal of Physics: Conference Series
5. Bulletin of the International Mathematical Virtual Institute

Research Guidance:

S. No.	Degree (M.Phil/ Ph.D.)	Scholar Name	Registration Number	Title of the Work	Degree Awarded Date and year
1	M. Phil.	Mugundan K	18MMA127	Harmonic index and Diameter of Graphs	06.09.2019
2	M. Phil.	Maheswari R	18MMA136	A study on 3 dimensional matrix	06.09.2019
3	M. Phil.	Vaidegi S	19MMA106	Split and Power Domination Number of Graphs	07.11.2020

Paper Presentation Details:

1. Harmonic Index of Product Graphs, National Conference on Analysis and Applied Mathematics, NIT, Tiruchirappalli, 27-28 November 2014.

2. The second and third minimum harmonic index of trees, National Conference on Discrete Mathematics, St. Joseph's College (Autonomous), Tiruchirappalli, 9-10 January 2015.

3. The first and the second Zagreb indices of the generalized Mycielskian of graph, International Conference on Discrete Mathematics, AMRITA University, Coimbatore, 16-19 December 2015.

4. Modified Zagreb Indices of Bridge Graphs, National Conference on Advances in Applied Mathematical Sciences, Cauvery College for Women, Tiruchirappalli, 12-13 August 2016.

5. F-Index of Generalized Mycielskian of Graphs, International Conference on Discrete Mathematics, St. Josephs' College (Autonomous), Tiruchirappalli, 07-09 January 2019.

Conference/Seminar Attended

1. National Conference on Graph Theory Generalizations and Applications held at SASTRA University, Thanjavur, 20-21 August 2012.

2. National Seminar on Applications in Graph Theory held at Seethalakshmi Ramaswami College, Tiruchirappalli, 18-19 December 2012.

3. National Conference on Graph Theory and Operations Research held at Holy Cross College (Autonomous) Tiruchirappalli, 03-04 March 2014.

4. National Conference on Mathematical Sciences and Applications held at St. Joseph's College (Autonomous) Tiruchirappalli, 04-05 March 2014.

5. National Conference on Analysis and Applied Mathematics held at National Institute of Technology, Tiruchirappalli, 27-28 November 2014.

6. National conference on Discrete Mathematics held at St. Joseph's College (Autonomous) Tiruchirappalli, 9-10 January 2015.

7. International Conference on Graph theory and its Applications held at AMRITA School of Engineering, Amrita Vishwa Vidhyapeetham University, Coimbatore, 16-19 December 2015.

8. National Conference on Advances in Applied Mathematical Sciences held at Cauvery College for Women, Tiruchirappalli, 12-13 August 2016.

9. International Conference on Discrete Mathematics held at St. Joseph's College (Autonomous) Tiruchirappalli, 7-9 January 2019.

10. International Conference on Mathematical Sciences and Applications held at St. Joseph's College (Autonomous) Tiruchirappalli, 09-11 March 2022.

11. National Conference on Recent Developments in Pure and Applied Mathematics held at St. Joseph's College (Autonomous) Tiruchirappalli, 27-28 February 2024.

Faculty Induction Programme/ Refresher Programme Attended:

1. Faculty Induction Programme, UGC HRDC, Bharathidasan University, Tiruchirappalli, 06 September 2021 to 05 October 2021.
2. Online Refresher Course: Recent Development in Mathematics and Statistics, UGC HRDC, Madurai Kamaraj University, Madurai, 10-23 August 2022.
3. Online Refresher Course in Mathematics, UGC HRDC, Bharathidasan University, Tiruchirappalli 26 October 2023 to 08 November 2023.

Workshop/Training Programme Attended:

1. Four day Workshop on e-Content Development, held at Holy Cross College, Tiruchirappalli, 29 April 2013 to 02 May 2013
2. Two day Induction Programme into Jesuit Education organized by Higher Education Commission, Jesuit Madurai Province held at St. Joseph's College, Trichy, 11-12 June 2018.
3. Short Time Training Programme on Graph Theory and its Applications held at SRM University, Kattankulathur, Chennai, 03-04 November 2017.
4. Two Day Intercollegiate Training Programme in Soft Skill Modules held at St. Joseph's College (Autonomous), Tiruchirappalli, 20-21 September 2019.
5. Online workshop on Mathematical Sciences For CSIR-UGC NET Aspirants, St. Mary's College, Thoothukudi, 19-23 May 2020.
6. Writing Research Project Proposal, Quality of Research Article, Training for Online Teaching and Evaluation, St. Josephs College, Tiruchirappalli 06-07 August 2020.
7. Online Workshop on MATLAB, Bharathiar University, Coimbatore, 10-17 March 2021.
8. In Service Teacher Training Programme - Mathematical Sciences, Tamil Nadu State Council for Higher Education held at Thanthai Priyar Arts and Science College, Tiruchirappalli 05-06 May 2022.

Faculty Development Programme Attended:

1. Online Faculty Development Programme in The Data Science Using R And Geo Gebra, Jamal Mohamed College, Tiruchirappalli, 11-14 May 2020.
2. Online Faculty Development Programme on Fuzzy Sets and Systems, Patrician College of Arts and Science, Chennai, 16 May 2020.

3. Two Days Online Faculty Development Programme on Google Apps, Christ College of Science and Management, Karnataka, 29-30 May 2020.

4. Faculty Development Programme on Pure and Applied Mathematics, Jamal Mohammed College, Tiruchirappalli, 11-17 June 2020.

5. Five Day International Online Faculty Development Programme on Soft Skills for Capacity Building, St. Josephs College, Tiruchirappalli, 22-26 February 2021.

6. One Week Online Faculty Development Programme On LATEX, Auxilium College of Arts and Science for Women, Pudukkottai, 07-12 June 2021.

7. Faculty Development Programme on LOCF - A Reformative Roadmap Towards Excellence, Internal Quality Assurance Cell, St. Joseph's College, Tiruchirappalli, 20 February 2023

8. Faculty Development Programme in Mathematics, St. Josephs College, Tiruchirappalli, 11 March 2023.

9. Faculty Development Programme on Patents and Consultancy, Internal Quality Assurance Cell, St. Joseph's College, Tiruchirappalli, 20 November 2023.

10. Hi Impact Faculty Development Programme, Joseph's Hub for Languages, St. Joseph's College, Tiruchirappalli, 06-24 May 2024.

Webinar Attended:

1. Documentation Using LATEX, Arasu College of Arts and Science, Karur, 04 May 2020.

2. Classroom English, Arasu Women's College (Arts and Science & B. Ed) Karur, 04 May 2020

3. Documentation of Graph Using LATEX, C Abdul Hakeem College of Engineering and Technology, Vellore, 13 May 2020.

4. Webinar Series on Latex, VIT University, Chennai, 18-22 May 2020.

5. Domination In Graph Theory and Applications, Devaswom Board College, Thalayolaparambu, Kerala, 23 May 2020.

6. Current Research in Fuzzy Mathematics, Sri Pushpam College, Thanjavur, 24 May 2020.

7. Automated E-Certificate for Online Webinar Using Google Forms, MAM College of Engineering And Technology, Tiruchirappalli, 26 May 2020.

8. Education Through Digital Learning- Challenges and Prospects, Sourashtra College, Madurai 26 May 2020.

9. Mathematical Documentation and Computation Using Online Tools, St. Mary's College, Thoothukudi, 28 -29 May 2020.

10. Developing MATLAB and Simulink Model, JCT College Of Engineering and Technology, Coimbatore, 29 May 2020.

11. Semi Graphs and Virus Graphs, Cauvery College for Women, Tiruchirappalli, 31 May 2020.

12. Spanning Trees and Colourings, The Quaide Milleth College for Men, Chennai, 15 June 2020.

13. Linear Algebra and Complex Analysis, Ayya Nadar Janaki Ammal College, Sivakasi 18,19 June 2020.

14. Complex Analysis, Urumu Dhanalakshmi College, Tiruchirappalli, 10 July 2020.

15. Applications of Various Division of Mathematics in Graph Theory, Holy Cross College, Tiruchirappalli, 25 July 2020.

16. College Level Modern Algebra, Vivekananda College, Kanyakumari, 27 July 2020.

17. Research Ethics, St. Joseph's College, Tiruchirappalli, 16 October 2020.

18. Research Grants and Funds, St. Joseph's College, Tiruchirappalli, 23 November 2020.

19. Tenets For Success in Professional Life, Sindhi College, Bengaluru, 26 May 2021.

20. Research Report Writing Using LATEX, Maharani Lakshmi Ammanni College for Women, Bangalore, 12 June 2021.

21. Open Educational Resources - Search Identify Repurpose and Create Your Own OER, St. Joseph's College, Tiruchirappalli, 25 September 2021.

22. Causes and Consequences of Kalinga War, Kamaraj College, Thoothukudi, 22 October 2021.

23. Preparing E-Contents for MOOC'S on SWAYAM, St. Joseph's College, Tiruchirappalli, 23 October 2021.

24. Hybrid Teaching and Learning, St. Joseph's College, Tiruchirappalli, 02 December 2021.

25. Nurturing Educational Leadership, St. Josephs College, Tiruchirappalli, 18 December 2021.

26. UGC-Sponsored Webinar on Educational Framework for Global Citizenship, UGC-HRDC, Bharathidasan University, Tiruchirappalli, 27 June 2022

27. UGC-Sponsored Webinar on Internationalization of Higher Education, UGC-HRDC, Bharathidasan University, Tiruchirappalli, 28 June 2022.

28. UGC-Sponsored Webinar on National Skills Qualification Framework, UGC-HRDC, Bharathidasan University, Tiruchirappalli, 30 June 2022.

29. IP Awareness Training Programme, National Intellectual Property Awareness Mission, 11 March 2024.

30. Orientation Programme for the Teaching Faculty, Internal Quality Assurance Cell, St. Joseph's College, Tiruchirappalli, 15 June 2024.

Programme Organized:

1. Radiant Living: Discovering happiness in every moment, Girls Student Welfare Committee of Department of Mathematics, on 15 March 2023.

2. Mathematics Alumni/ae Reunion 2023 held on12 February 2023.

3. Gender Sensitization, Girls Student Welfare Committee of Department of Mathematics, on 10 January 2024.

4. Mathematics Alumni/ae Reunion for UG 2018-2021 & PG 2019-2021 Batches on 17 February 2024.

5. Mathematics Alumni/ae Reunion for UG 2019-2022 & PG 2020-2022 Batches on 18 February 2024.

6. Mathematics Alumni/ae Reunion 2024 held on 24 February 2024.

7. B. Sc. Mathematics 1996-1999 Batch Alumni Reunion held on 20 July 2024.

8. B. Sc. Mathematics 1996-1999 Batch Alumni Interaction with students held on 20 July 2024.

Courses Conducted:

1. Value Added Course: LATEX for Beginners, 02-16 March 2020

2. Value Added Course: LATEX for Beginners, 24 February 2021 to 29 March 2021

Resource Person:

1. Carrer Guidance Programme organized by SHEPHERD Extension Department, St. Joseph's College, Tiruchirappalli at South Paganur, Tiruchrappalli on 15 October 2022.

2. Research Colloquium titled Research: Proposal to Thesis, organized by Department of Mathematics, Holy Cross College, Nagercoil on 06 October 2023.

e-Content Created:

1. Transportation Problem – Matrix Minima Method – Video in college website.