



## Dr.R.Rajeswari

Assistant Professor

PG & Research Department of Mathematics

A.P.C.Mahalaxmi College for Women, Thoothukudi

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**Date of Appointment** : 01 July, 2011

**Education** : M.Sc., M.Phil., SET., Ph.D.,

**Specialization** : Algebraic Graph Theory

### Education & Credentials

Degree	College / University	Specialization	Year
<b>Ph.D</b>	Manonmaniam Sundaranar University, Tirunelveli	Algebraic Graph Theory	2018
<b>SET</b>	Mother Teresa University, Kodaikanal	Mathematics	2017
<b>M.Phil</b>	A.P.C.Mahalaxmi College for Women, Thoothukudi	Gamma Near rings	2010
<b>M.Sc</b>	V.O.Chidambaram College, Thoothukudi	Mathematics	2009
<b>B.Sc</b>	V.O.Chidambaram College, Thoothukudi	Mathematics	2007

## Research Guidance Offered

- A) Research Experience : 8 years
- B) Title of Thesis : A study on graphs from Gamma Near rings
- C) No.of Students (M.Phil. Level) Guided : 5 Students

## Online Course Registered

1. Matrix Analysis with Applications – 8 weeks Course – Swayam NPTEL (ongoing)

## Proposal for organizing Seminar (Partial Financial Assistance)

- Topic : Sustaining Environmental Health through fruitful utilization of Natural Resources (Alumnae Association) on 20.09.19
- Position : Coordinator
- Status : Proposal submitted
- Funding Agency : TANSHE

## Student Project Proposal

- Topic : A study on Stress Management skills among the undergraduate women students in Thoothukudi
- Position : Guide
- Status : Proposal submitted
- Amount : Rs.10,000/-
- Funding Agency : TANSHE

## Conferences / Seminars / Workshops Attended

### International Level

1. Three Day Workshop on “Algebraic Graph Theory and Mathematics Curriculum enrichment” in Manonmaniam Sundaranar University, Tirunelveli from 22<sup>nd</sup> to 24<sup>th</sup> Jan 2014.
2. Workshop on “Improving skills on publishing in Reviewed and Indexed journals” in Manonmaniam Sundaranar University, Tirunelveli on 28.03.14.

3. Seminar on “International Year of Mathematics for the Planet earth 2013” in St.Mary’s College (Autonomous), Thoothukudi from 17.07.14 to 18.07.14.
4. Conference on Recent Advancements in information Technology, Science & Engineering at A.P.C.Mahalaxmi College for Women, Thoothukudi on 14.12.17.
5. Conference on “Applications of Mathematics” in St.Mary’s College (Autonomous), Thoothukudi on 11.01.18.
6. Conference on “Recent Trends in Multi – Disciplinary Research” at V.O.Chidambaram College from 19.04.2018 to 20.04.2018.
7. Conference on “Recent Trends in Multi – Disciplinary Research” at A.P.C.Mahalaxmi College for Women, Thoothukudi from 20.12.2018 to 21.12.2018.

## **National Level**

1. Conference on “Modern Trends in Pure and Applied Mathematics” at Sri Kaleeswari College, Sivakasi on 17.09.11.
2. Seminar on “Recent Trends in Mathematics” at A.P.C.Mahalaxmi College for Women, Thoothukudi, from 12.10.11 to 13.10.11.
3. Conference on “Fuzzy optimization and Graph Theory with applications” at Mepco Schlenk Engineering College, Sivakasi from 23.02.12 to 24.02.12.
4. Seminar on “Graph Theory and Topology” at V.O.Chidambaram College, Thoothukudi on 02.04.12.
5. Seminar on “Emerging Trends in Graph Theory and Fuzzy Mathematics” at A.P.C.Mahalaxmi College for Women, Thoothukudi on 06.09.13.
6. Arumugam Endowment one day Seminar on “Graph Theory” at Manonmaniam Sundaranar University, Tirunelveli on 02.12.14.
7. Conference on “Advances in Fuzzy Algebra, Fuzzy Topology and Fuzzy Graphs at A.P.C.Mahalaxmi College for Women, Thoothukudi from 22.01.15 to 23.01.15.

8. Conference on “Discrete Mathematics and its Applications” at Manonmaniam Sundaranar University, Tirunelveli on 16.07.15.
9. Seminar on “Mathematics and its application scenario in 21<sup>st</sup> century” at A.P.C.Mahalaxmi College for Women, Thoothukudi on 28.02.17.
10. Conference on “Demonetization and Cashless Economy” at A.P.C.Mahalaxmi College for Women, Thoothukudi on 02.03.17.
11. Seminar on “Recent Trends in Topology” at V.O.Chidambaram College, Thoothukudi on 24.03.17.
12. Seminar on “Discussions, Interactions and Literature on Gender Studies – DIALOGS 2017” at A.P.C.Mahalaxmi College for Women, Thoothukudi on 06.07.17.
13. Seminar on Graph Theory and its Applications at Sadakathullah Appa College (Autonomous), Rahmath Nagar, Tirunelveli on 14.09.17.
14. First two endowment lectures of Prof. T.Tamizh Chelvam at Manonmaniam Sundaranar University on 20.08.2019.

## **State Level**

1. Seminar on “Recent Developments in Algebra and Graph Theory” at A.P.C.Mahalaxmi College for Women, Thoothukudi on 30.09.15.
2. Workshop on NET Training Programme at A.P.C.Mahalaxmi College for Women, Thoothukudi on 22.12.17.
3. Workshop on Scholarly writing and Publishing Research Papers at V.O.Chidambaram College at 02.02.2019.
4. Faculty Development Programme on “Role of faculty in institutional development” at V.O.Chidambaram College, Thoothukudi on 17.08.19

## Papers Presented in Conferences / Seminars

### International Level

1. **A Note on SG – algebras** in a Conference on “Recent Advancements in information Technology, Science & Engineering” at A.P.C.Mahalaxmi College for Women, Thoothukudi on 14.12.17.
2. **Anti-fuzzy ideals in Boolean like semi rings** in a Conference on “Recent Advancements in information Technology, Science & Engineering” at A.P.C.Mahalaxmi College for Women, Thoothukudi on 14.12.17.
3. **On Intuitionistic fuzzy bi – ideals in Boolean like semi rings** in a Conference on “Recent Trends in Multi-Disciplinary Research” at V.O.Chidambaram College, Thoothukudi from 19.04.18 to 20.04.18.
4. **On Intuitionistic fuzzy ideals in Boolean like semi rings** in a Conference on “Recent Trends in Multi-Disciplinary Research” at V.O.Chidambaram College, Thoothukudi from 19.04.18 to 20.04.18.
8. **On fuzzy ideal based fuzzy zero divisor graphs on gamma near rings** in a Conference on “Recent Trends in Multi – Disciplinary Research” at A.P.C.Mahalaxmi College for Women, Thoothukudi from 20.12.2018 to 21.12.2018.
9. **Structure in the zero – divisor graph of a non – commutative gamma near rings** in a Conference on “Recent Trends in Multi – Disciplinary Research” at A.P.C.Mahalaxmi College for Women, Thoothukudi from 20.12.2018 to 21.12.2018.
10. **C – prime anti fuzzy bi – ideals in gamma near rings** in a Conference on “Recent Trends in Multi – Disciplinary Research” at A.P.C.Mahalaxmi College for Women, Thoothukudi from 20.12.2018 to 21.12.2018.
11. **Interval valued fuzzy ideals in Boolean like Semi rings** in a Conference on “Recent Trends in Multi – Disciplinary Research” at A.P.C.Mahalaxmi College for Women, Thoothukudi from 20.12.2018 to 21.12.2018.
12. **Interval valued anti fuzzy ideals in Boolean like semi rings** in a Conference on “Recent Trends in Multi – Disciplinary Research” at A.P.C.Mahalaxmi College for Women, Thoothukudi from 20.12.2018 to 21.12.2018.(received Best Paper award)

13. **On intuitionistic fuzzy  $k$  bi – ideals of Boolean like semi rings** in a Conference on “Recent Trends in Multi – Disciplinary Research” at A.P.C.Mahalaxmi College for Women, Thoothukudi from 20.12.2018 to 21.12.2018.
14. **C – prime fuzzy bi – ideals in Boolean like semi rings** in a Conference on “Recent Trends in Multi – Disciplinary Research” at A.P.C.Mahalaxmi College for Women, Thoothukudi from 20.12.2018 to 21.12.2018.
15. **On Quasi weak commutative semi near rings** in a Conference on “Recent Trends in Multi – Disciplinary Research” at A.P.C.Mahalaxmi College for Women, Thoothukudi from 20.12.2018 to 21.12.2018.
16. **C – prime anti fuzzy bi – ideals in  $\Gamma$ -Near-Rings** in a Conference on “Recent Trends in Multi – Disciplinary Research” at A.P.C.Mahalaxmi College for Women, Thoothukudi from 20.12.2018 to 21.12.2018.

## National Level

1. **Fuzzy ideals in Boolean like Semi-rings** in a Seminar on “Emerging Trends in Graph Theory and Fuzzy Mathematics” at A.P.C.Mahalaxmi College for Women, Thoothukudi on 06.09.13.
2. **Fuzzy Bi -ideals in Boolean like Semi-rings** in a UGC sponsored Two Day Conference on “Advances in Fuzzy Algebra ,Fuzzy Topology and Fuzzy Graphs” at A.P.C.Mahalaxmi College for Women, Thoothukudi on 22.01.15 to 23.01.15.
3. **Fuzzy ideal based fuzzy zero – zero divisor graph on gamma near ring** in a Seminar on “Mathematics and its application scenario in 21<sup>st</sup> century” at A.P.C.Mahalaxmi College for Women, Thoothukudi on 28.02.17.
4. **Zero divisor graph of gamma near rings** in a Seminar on “Graph Theory and its Applications” at Sadakathullah Appa College (Autonomous), Rahmath Nagar, Tirunelveli on 14.09.17.
5. **C – Prime anti fuzzy bi – ideals in Boolean like Semi – rings** in a Conference on “Pure and Applied Mathematics” at Wavoo Wajitha Women’s Arts College, Kayalpattinam on 25.09.19.

6. **A new class of closed sets in Topological Spaces** in a Conference on “Pure and Applied Mathematics” at Wavoo Wajitha Women’s Arts College, Kayalpattinam on 25.09.19.
7. **Connected regular domination in zero – divisor graphs** in a Conference on “Pure and Applied Mathematics” at Wavoo Wajitha Women’s Arts College, Kayalpattinam on 25.09.19.

## Book Publications

1. **Eminent Mathematicians**, Charulatha Publications, ISBN – 13:978 – 93 – 89051 – 81 – 0

## Chapter Edited

1. **Woman emancipation in Primeval India – Reminiscing the Custom**, Let equality Flourish, Charulatha Publications, ISBN: 13: 978 – 93 – 89051 – 64 – 3.

## Paper Publications

1. **An ideal based zero divisor graph of gamma near ring** in International Journal of Mathematical Archives, Vol.4, No.12 (2013), 235-240, **ISSN: 2229 – 5046 IF : 4.908 (UGC Approved)**
2. **Fuzzy ideals in Boolean like Semi-rings** in Enrich, Vol.V (II), 60-66(2014), **ISSN : 2319 - 6394**.
3. **Fuzzy Bi -ideals in Boolean like Semi-rings** in Proceedings of the UGC sponsored Two Day National Conference on Advances in Fuzzy Algebra ,Fuzzy Topology and Fuzzy Graphs, January 2015,17 – 29, **ISSN: 2319 - 6394**.
4. **Zero divisor graph of gamma near rings** in Proceedings of National Seminar on Graph Theory and its Applications 2017, 38 – 47, **ISBN: 978-81-93-5198-1-3**.
5. **On the annihilator graph of a gamma near rings** in International Journal of Mathematical Archives Vol. 8, No.12 (2017), 153-156, **ISSN:2229 – 5046, IF : 7.543 (UGC Approved)**
6. **A Note on SG – algebras** in International journal of science, Engineering and Management, Vol 2 (12), December 2017,238 – 240, **ISSN: 2456 – 1304, IF : 2.7**.

7. **Anti-fuzzy ideals in Boolean like semi rings** in International journal of science, Engineering and Management, Vol 2 (12), December 2017, 6 – 9, **ISSN: 2456 – 1304,IF: 2.7.**
8. **On Intuitionistic fuzzy ideals in Boolean like semi rings** in International Journal of Recent Research Aspects, April 2018, 487-490, **ISSN: 2349 – 7688, IF: 1.235.**
9. **On Intuitionistic fuzzy bi - ideals in Boolean like semi rings** in International Journal of Recent Research Aspects, April 2018, 613 – 616, **ISSN: 2349 – 7688, IF: 1.235.**
10. **On fuzzy ideal based fuzzy zero divisor graphs on gamma near rings**, Journal of emerging Technologies and Innovative Research, Vol 6, Issue 2 February 2019, 354 – 359, **ISSN: 2349 – 5162, IF:5.87.**
11. **Structure in the zero – divisor graph of a non – commutative gamma near ring**, Journal of emerging Technologies and Innovative Research, Vol 6, Issue 2 February 2019, 360 – 364, **ISSN:2349 – 5162, IF:5.87.**
12. **Anti-fuzzy bi – ideals in Boolean like semi ring rings**, Journal of emerging Technologies and Innovative Research, Vol 6, Issue 2 February 2019, 1215 – 1219, **ISSN: 2349 – 5162, IF:5.87.**
13. **C – prime anti fuzzy bi – ideals in gamma near ring**, Journal of emerging Technologies and Innovative Research, Vol 6, Issue 2 February 2019, 443 – 447, **ISSN : 2349 – 5162, IF:5.87.**
14. **Interval valued fuzzy ideals in Boolean like Semi rings**, Journal of emerging Technologies and Innovative Research, Vol 6, Issue 2 February 2019, 772 – 777, **ISSN:2349 – 5162, IF:5.87.**
15. **Interval valued anti fuzzy ideals in Boolean like semi rings**”, Journal of emerging Technologies and Innovative Research, volume 6, Issue 2 February 2019, 718 – 723, **ISSN: 2349 – 5162, IF:5.87 (received Best Paper award).**
16. **On intuitionistic fuzzy k bi – ideals of Boolean like semi rings**, Journal of emerging Technologies and Innovative Research, volume 6, Issue 2 February 2019, 748 – 752, **ISSN: 2349 – 5162, IF:5.87.**



17. **C – prime fuzzy bi – ideals in Boolean like semi rings**, Journal of emerging Technologies and Innovative Research, volume 6, Issue 2 February 2019, 376 – 380, **ISSN:** 2349 – 5162, **IF:5.87**.
18. **On Quasi weak commutative semi near rings**, Journal of Science, Engineering and Management, Volume 4, Issue 1, January 2019, 21 – 23, **ISSN:**2456 – 1304, **IF:2.7**.
19. **Sum Cordial Zero Divisor Graphs** Proceedings on International Conference on Graph Theory and its applications, 2019, 47 – 52, **ISBN :** 978 – 81-938054 – 7 – 3.

## Total Teaching Experience

UG	:	9 years and 5 months
PG	:	9 years and 5 months
M. Phil	:	9 years and 5 months

## Remarkable Achievements

- Served as a Chair Person in an International Conference on Recent Trends in Multi-Disciplinary Research at A.P.C.Mahalaxmi College for Women, Thoothukudi on 20.12.2018 to 21.12.2018.
- Got Best Paper award for the Paper “Interval valued anti fuzzy ideals in Boolean like semi rings.
- Served as a Judge in Pencil Drawing Competition on Inter School Competition at A.P.C.Veerabahu Matriculation and Higher Secondary School, Thoothukudi on 05.11.19.
- Active Professional member of Institute for Engineering research and Publication from 20.11.2019 to 31.12.2020.

## Participation in College Committees

- In charge of Students’ Union Activity Committee (2015 – 2018)
- Member of Quiz Club (2011 – 2018)
- Member in Criterion VII
- Member in Career Guidance Cell(2018 – 2019)
- Member in Discipline Committee(2018 – 2019)

- Member in Placement Cell(2019 – till date)
- Editorial board member in **MATH QUEST** Department journal