

## STAFF PROFILE



Name: **Dr. S. V. Padmavathi**

Designation: Associate Professor & Coordinator, IQAC

Department: Mathematics

Qualifications:

Academic: M.Sc., M.Phil., Ph.D.,

Additional: CSIR-UGC – JRF- NET

Experience (in years): Teaching: 16 years 8 months Research: 21 years.

Area of Specialization: Graph Theory, Analysis, Algebra

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### Research Guidance:

Programme	No. of Scholars	
	Completed	Pursuing
Ph. D.		5( 1-submitted )
M. Phil.	45	

### Research Publications:

	International	National
Total Number of Publications	2	11

### List of International Publications:

- i). **S.V.Padmavathi** and V.Swaminathan, The  $l_1$ - Convexity number of a graph, International Journal of Mathematics and Soft Computing, Vol.5, No.2(2015), 09-14. (Impact factor: 0.5714)
- ii). **S.V.Padmavathi**, The Inverse Convexity Number of a Graph, International Journal of Multidisciplinary Educational Research, Vol. 10, Issue 2 (2021) ,158-162 (Impact factor :6.51)

### List of National Publications:

- i). **S.V.Padmavathi**, Relation Between Convexity Number and Independence Number of a Graph, Annals of Pure and Applied Mathematics, Vol. 9, No. 1 (2015), 9-12. (Impact factor : 1.0285 )
- ii). **S.V.Padmavathi**, The Convexity Number of a Signed Graph, Indian Journal of Natural Sciences, Vol. 5, Issue 28 (2015) , 3401-3405. (Impact factor : 1.233 )
- iii). **S.V.Padmavathi**, The weak (monophonic) convexity number of a graph, JXAT JOURNAL, Vol. 8 Issue 1 , 542-557, January 2021. (Impact factor: 3.7 )

- iv). **S.V.Padmavathi**, Convexity Number of Neighborhood Highly Irregular Graphs,  
Journal of Interdisciplinary Cycle Research, Vol. 13, Issue 2 (2021) ,462-467 (Impact factor: 6.2 ).
- v). **S.V.Padmavathi**, Product Convexity and Weak Convexity in Graphs,  
Journal of Applied Science and Computations, Vol. 8, Issue 2 (2021) ,32-45 (Impact factor: 5.8 )
- vi). **S.V.Padmavathi**, Weak Convex Domination in Hypercubes,SNC Journal of Academic Research  
in Humanities and Sciences, Vol. 8, Issue 1 (2021) ,50-53.
- vii). **S.V.Padmavathi**, Centrality with respect to weak convex sets in Graphs,  
Journal of Interdisciplinary Cycle Research, Vol. 13, Issue 2 (2021) ,884-898( Impact factor : 6.2 )
- viii). **S.V.Padmavathi**, Structural strong domination of Graphs, IOSR Journal of  
Mathematics, Vol. 17, Issue 1 (2021) ,04-06 .
- ix). **S.V.Padmavathi** and J.Sabari Manju, Independent Semitotal Domination In Graphs,  
Journal of Information and Optimization Sciences, Vol. 45. No.1 (2024), 145-156.
- x). J.Sabari Manju and **S.V.Padmavathi** , Independent Semitotal Domination of some  
special Graphs, Indian Journal of Natural Sciences Vol. 13, Issue 76 (2023) pp 53665-53671.
- xi). **S.V.Padmavathi** and J.Sabari Manju, Independent Semitotal Domination Excellent Graphs,  
International Journal of Mathematics for Industry ( Accepted).

### **Chapters in Books:**

- i) **S.V.Padmavathi**, The m-Convexity Number of a Graph, Contemporary Research Trends in  
Mathematics, ISBN: 978-93-94428-82-9, Multi Spectrum Publication, 2023.
- ii) **S.V.Padmavathi**, Local Isolate Domination in Graphs, Futuristic Trends in Contemporary  
Mathematics and Applications, ISBN: 978-93-6252-646-5, IIP Series, May 2024.

### **Participation in Conference: 7**

#### **Participation in Seminar: 7**

- i) 28.05.2020- Recent Research Directions in Distance in Graphs-ANJAC College.
- ii) 11.06.2020- Role of IQAC in Maintaining Quality Standars in Higher Education- IQAC, Govt. Arts  
College for Women,Nilakottai
- iii) 17.06.2020- Construction of Mathematical Modeling in Epidemiology- Govt. Arts College for  
Women,Nilakottai
- iv) 25.06.2020- Recent Trends on Domination in Graphs- V.O.Chidambaram College, Thoothukudi
- v) 29.06.2020- Advances in Graph Theory- IQAC , Govt. College Daman
- vi) 01.07.2020- Webinar on Basic Graph Theory with GRIN- Rajalakshmi Engineering College
- vii) 08.07.2020- Graph Colouring Problems- V.O.Chidambaram College, Thoothukudi

**Participation in Orientation Programme/ Induction Programme/ Short term Courses:**

Sl.No.	Name of the Programme	Duration	Organised By
1.	Orientation Programme	05.05.2010 to 01.06.2010	UGC Academic Staff College, Madurai Kamaraj University
2.	Refresher Course in Mathematics	07.11.2013 to 27.11.2013	UGC Academic Staff College, Madurai Kamaraj University
3.	Refresher Course in Mathematics	02.11.2016 to 22.11.2016	UGC Academic Staff College, Madurai Kamaraj University
4.	Refresher Course in Mathematics	21.01.2020 to 03.02.2020	UGC Academic Staff College, Madurai Kamaraj University
5.	Refresher Course in “Advanced Research Methodology”	23.01.2023 to 06.02.2023	Teaching Learning Centre Ramanujan College, University of Delhi (Accredited Grade 'A++' by NAAC) in collaboration with Girraj Government College (Autonomous), Nizamabad, Telangana

**Participation in Faculty Development Programme: 4**

- i) 21.12.2018- IQAC- SN College
- ii) 17.08.2018- IQAC-SN College
- iii) 27.07.2020-IQAC-SN College
- iv) 30.07.2020 and 31.07.2020-Recent Trends in Graphs and Networks- MDT Hindu College Tirunelveli

**Conference/ Seminar/ Workshop Organized: 1**

- i) National level Webinar on Enhancing the concepts of Sequences- 20.07.2020.

**Invited Speaker/ Session Chair – Conference/ Seminar/ Workshop: 8**

- i) One day State Level A. Michaeiraj Endowment Lecture on Innovations in Discrete Mathematics- 27.02.2015- Ananda College- Devakottai
- ii) Chief Guest on One day State Level Intercollegiate Competitions, delivered a Lecture on Ramanujan Math Magic-12.09.2018- Mangayarkarasi College of Arts and Science for Women.
- iii) Guest Lecture on Recent trends in Mathematics- 13.01.2020-Senthamarai College of Arts and Science.
- iv) One Day Seminar on Mathematics in Day to Day Life -07.03.2020 –C.S.I. College of Arts and Science for Women

v) Mathematics Association Inauguration- Ramanujan's Math Magic and Graph Theory- 01.11.2021- Madonna Arts and Science College for Women.

vi) Lecture on Career Opportunities for Mathematics Students- 25.03.2022- Senthamarai College of Arts and Science.

vii) Jury in State Level ARTS and SCIENCE EXPO-2022 08.04.2022- E.M.G. Yadava Women's College.

viii) External Examiner in Ph.D. Public Viva-Voce for Ms. Radhika Das at National College on 19.09.2024.

**Other Co-curricular / Administrative Responsibilities:**

i) Executive Member- Internal Quality Assurance Cell (IQAC) – Since December 2019.

ii) Co-ordinator, IQAC- Since June 2024.

**Member in Board of Studies: 1**

i) E.M.G. Yadava Women's College- Subject Expert- Board of Studies-30.05.2023.