



Name : Dr.P.JAYALAKSHMI

Qualification : M.Sc.,M.Phil.,PGDCA.,Ph.D.,

Designation :Associate Professor of Mathematics

Date of Joining :16.09.2008(Aided),3.12.2007(SF)

Years Of Experience 14

No.of M.Phil :2(Completed)

No. of Ph.D :2(Pursuing)

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Publications :National/International(Scopus/Web of Science):1/9(Scopus -2)

## **JOURNAL PUBLICATION**

- Dr.S.Vimala and P.Jayalakshmi , “Some results on random walk in fuzzy graph” , Proceedings of International Conference on’International Conference on Mathematics and Computation - 2015 ‘ at Jamal Muhamed College , Trichy, ISSN : 0973 – 0303.
- P.Jayalakshmi and Dr.S.Vimala, “ Representation of fuzzy adjacent matrices via fuzzy graphs” ,Canadian Journal of Pure and applied Sciences, Vol. 10 , No.2 3927-3932, June 2016, ISSN:1920-3853(Online) , 1715-9997(Print).
- Dr.S.Vimala and P.Jayalakshmi, On spectra and bounds of fuzzy graph, International Journal of Advanced Research(2016), Vol.4, Issue 7 , 825-832, ISSN :2320-5407.
- Dr.S.Vimala and P.Jayalakshmi,Fuzzy walk on fuzzy graph, Middle east journal

of Scientific research 25(3),489-492,2017,ISSN:1990-9233.

- Dr.S.Vimala and P.Jayalakshmi ,Relation between fuzzyadjacent matrix and diagonal degree matrix of fuzzy graph, GVG Mindscape,volume 2,Issue 1,June 2017,ISSN :2324-502
- P.Jayalakshmi and N.Ramya Priya, Trivial fuzzy topology of the set of fuzzy graphs ,International journal of Innovative Science and research technology,Volume 2,Issue 10,490-495,ISSN:2456-2165.
- P.Jayalakshmi and N.Ramya Priya, Homeomorphism of fuzzy topological graph ,International journal of Mathematics and its applications,Volume 5,Issue 4-F(2017),915-922,ISSN:2347-1557.
- P.Jayalakshmi and Dr.S.Vimala, “ Random walk on fuzzy graph” ,IAETSD Journal for Advanced research in applied Sciences, Vol. 5 , Issue 3, March 2018, ISSN:2394-8442.
- P.Jayalakshmi,”Fuzzy walk and its distance on fuzzy graph”,Advances in Mathematics:Scientific Journal 9(2020),no.5,3029-3039,ISSN :1857-8365(printed),1857-8438(electronic)
- Dr.P.Jayalakshmi,”Classification of states of Random walk on fuzzy graphs”,Journal of Xidian University,volume 15,Issue 2,2021.

### **BOOK PUBLICATION**

- Published a book on “Computer Networks”, Scientific International Publishing House, ISBN No:978-93-92992-83-4.

### **Resource Person**

- Resource Person for the Skill Based Development Programme on the Foundations of Mathematics jointly organized by the Department of Computer Science with Data Analytics and Department of Computer Science with AI & ML at NGM College , Pollachi on 23.8.2022.
- Resource Person for the online webinar in the topic “Fuzzy Grzphs and Relations” at Sree Saraswathy Thyagaraja College, Pollachi on 24.10.2020.

### **Presented Papers**

- ❖ Presented a paper on “Role of Fuzzy Adjacent Matrix in Fuzzy walk of a fuzzy graph” in the Young Scientist Conference at Kolkata during November 5-8,2019.
- ❖ Presented a paper on “Homeomorphism in fuzzy graph” at Mother Teresa Women’s University,Kodaikanal in the One day National Conference on Mathematical Applications in Algebraic Graph theory,Optimization Techniqueand Network

theory(NCMA2018) on 02.02.2018.

- ❖ Presented a paper on "Fuzzy walk on fuzzy graph" at Arul Anandar College, Madurai in the UGC sponsored national seminar in recent advances in Mathematics on 13.2.17.
- ❖ Presented a paper on "Random walk and fuzzy differential Equations" in the National seminar entitled "Recent trends on Differential Equations" conducted by Arulmigu Palaniandavar Arts college For Women, Palani on 23.9.2015.
- ❖ Presented a paper on "Some results on random walk in fuzzy graph" in the International conference on "Mathematics and Computation-ICOMAC 2015" conducted by Jamal Muhamed College, Trichy on 22.1.2015, 23.1.2015.
- ❖ Presented a paper on "Fuzzy Medical Image Segmentation" in the state level seminar entitled "Fuzzy and its Applications" conducted by Arulmigu Palaniandavar Arts college For Women, Palani on 20.2.2014.
- ❖ Presented a paper on "Non-Linear fuzzy goal programming approach " in the National seminar on "Operations Research and its Applications" conducted by Arulmigu Palaniandavar Arts college For Women, Palani on 10.1.2011.
- ❖ Presented a paper on "Job shop Scheduling Problem" in National Seminar on "Colloquium on Mathematics Scenario -2008" conducted by PSGR Krishnammal College For Women, Coimbatore on 12.1.2008

#### **PARTICIPATION IN SEMINAR/CONFERENCE/WORKSHOP/ WEBINAR (National/International Level)**

- Science Academies sponsored Lecture Workshop on "Applications of Differential Equations in engineering- 2024 organised by Department of Mathematics , PSNA College of Engineering and Technology, Dindigul on 04.03.2024 & 5.03.2024
- National Intellectual Property Awareness Mission organized by Intellectual Property Office, India on 02.08.22.
- Two-day Awareness Workshop on Improving Research & Performance Outcomes at Elsevier's Zoom Webinar, on 31.08. 2021.
- National webinar on "Mathematics look from ant to aeroplane "conducted by PG and Research Department of Mathematics, Kamaraj College, Thoothukudi on 26.8.2021.
- One Day Online National Webinar entitled "The Importance of Data Visualization" organized by Guru Angad Dev Teaching Learning Centre, SGTB

Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) of Ministry of Education on 10.08. 2021.

- State-Level Webinar on “Graphs from Algebraic Structures and its Applications” organised by the Department of Mathematics (Aided), Sadakathullah Appa College (Autonomous), Tirunelveli on 22.06.2021.
- Online National Conference on Mathematical Analysis and Computing (NCMAC-2021) organized by Department of Mathematics, Sree Sevugan Annamalai College, Devakottai, Sivagangai, on 28 .05.2021.
- IIE’s Online Webinar on “Digital Marketing 101” on 17.05.2021
- Ten Days Online Training programme on “Python Programming “ conducted by Digital Career and Entrepreneurship Hub of Department of Computer Applications, MHRD BU RUSA Phase II BEICH, Bharathiar University, Coimbatore From 15.02. 2021 to 26.02. 2021.
- Thirty Days Online Training programme on “Introduction to Industry 4.0” conducted by Digital Career and Entrepreneurship Hub of Department of Computer Applications, MHRD BU RUSA Phase II BEICH, Bharathiar University during 23.12. 2020 to 10.02. 2021.
- The Instructional School for teachers(Funded by National Center for Mathematics) on “Differential Equations-Theory , Methods and Applications held at Bharathiar University,Coimbatore from November 18-30,2019.
- The CSIR sponsored two day National Workshop on “Recent Scientific and technological Advancements of Mathematical Approaches in Inventive Science and Engineering” at P.A. College of Engineering and Technology on 13.06.2019& 14.06.2019.
- The NPTEL workshop at Saraswathi Thyagaraja College, Pollachi on 17.4.2015.
- Indian Women and Mathematics Teachers Training Programme- IWMTTP 2014 at Vellalar College For Women on 20.11.14 – 23.11.2014.
- National Level workshop on “Internal Quality Assurance System – A tool for Measuring Excellence” in IQAC-Sri GVG Visalakshi College For Women on 6.2.2012, 7.2.2012.
- Workshop on “**SMART GURUZ**” in K2 HCL on 17.7.10 – 19.7.10.
- Workshop on “**Effective Classroom Communication and teaching skills for**

**College Teachers” in Christ University, Bangalore on 12.11.09 ,13.11.09.**

- International Seminar on **Dynamical Systems at Gandhigram Rural University, Gandhigram on 16.2.2008.**

### **FACULTY DEVELOPMENT PROGRAMME**

- 7 DAYS NATIONAL LEVEL FDP ON PYTHON ” organized by Star International Foundation for Research and Education on 19.03.2024 to 25.03.2024.
- Online International Faculty Development Programme on “Introduction to Digital Humanities” jointly organized by Scottish Church College, Kolkata, India and interdisciplinary Research Platform of Digital Humanities Indian Institute of Technology, Jodhpur from 19.8.2023-15.09.2023.
- “Teacher’s Enrichment Workshop – Linear Algebra , Differential Equations and Applications “ hosted by Department of Mathematics , BITS – Pilani , Hyderabad Campus from 9.1.2023 – 14.1.2023.
- Participated as a Summer Research Fellow under the supervision of Prof. Anand Srivastava , Indian Institute of Science , Bengaluru during May – June 2023.
- Participated in Summer Faculty Research Fellow Programme( SFRFP) - 2022 under Faculty mentor Prof. S. Chandra Sekhara Rao, Department of Mathematics , Indian Institute of Technology, Delhi from 15.6.22 – 29.7.22.
- Participated in one week FACULTY DEVELOPMENT PROGRAMME ON “DATA ANALYTICS & MATHEMATICAL SOFTWARE TOOLS” organized by Teaching Learning Centre, Ramanujan College, University of Delhi during 25.2.22 – 03.03.22 .
- Participated in ONLINE TWO - WEEK INTERDISCIPLINARY REFRESHER COURSE/FACULTY DEVELOPMENT PROGRAMME “Research Methodology” organized by Teaching Learning Centre, Ramanujan College, University of Delhi from 20 .07.2021 – 03.08.2021.
- Participated in the three days Faculty Development Programme “Digital Tools For Active Teaching, Evaluation and Research” organized by the Department of Chemistry in SRI GVG VISALAKSHI COLLEGE FOR WOMEN, from

28.06.2021 to 30.06.2021.

- Participated in the Online International Faculty Development Programme on “Recent Trends in Mathematics” organized by PG and Research Department of Mathematics, V.O.Chidambaram College , Thoothukudi from 21.06.2021- 25.06.2021.
- Participated in Faculty Development Program on Data Science organized by E & ICT Academy, IIT Kanpur (A Joint Initiative of MeitY & IIT Kanpur) from 19.04. 2021 to 30.04. 2021.
- Participated in Two Days FDP on “Stress Management conducted by ICT Academy, at Sri GVG Visalakshi College for Women on 28.12.2018 &29.12.2019.
- Faculty development Programme in Global Business Foundation Skills in the Infosys Campus, Mysore on 4.5.2015- 12.5.2015.

#### **Courses:**

- ❖ Participated in the Online Refresher Course in Mathematics and Statistics conducted by UGC - HRDC Bharathiar University from 08.09.2021 to 21.09.2021
- ❖ Participated in the Refresher Course in Mathematics entitled “ Teaching,Research and Applications in Mathematics and Statistics” conducted by UGC - HRDC Madurai Kamaraj University from 20.01.2020 to 03.02.2020.
- ❖ Participated in the Refresher Course in Mathematics entitled “ Applied Mathematics and Statistics – Batch XXXI” conducted by University of Madras from 13.11.15 to 03.12.15.
- ❖ Participated in Orientation course for NSS Programme Officers conducted by Avinasilingam (Institute of Home Science and Higher education for Women)University,Coimbatore from 9.12.14 to 15.12.14.
- ❖ Participated in the Refresher Course in Mathematics entitled “ Advances in Analysis and Algebra” conducted by Madurai Kamaraj University from 7.11.13 to 27.11.13.
- ❖ Participated in the **Orientation Course at ASC Bharathiar University,Coimbatore** from 7.5.2010 to 3.6.2010.

#### **NPTEL/Swayam Course**

- ❖ Completed NPTEL Online Certification eight weeks course in Numerical Methods , July to September 2023.

### **Other Activities:**

- ❖ Member of Board of studies for Sri G.V.G. Visalakshi College upto till date
- ❖ NSS Programme officer from 2011 to 2014.
- ❖ Co-opted member in NSS for one year.
- ❖ Co-opted member of Environmental Club for One Year.
- ❖ Member of Women's Studies Center for Three Years.
- ❖ Co-opted member of Indian Culture and Women's Studies club for one year.
- ❖ Member of extension activities for six years(2008-2014)
- ❖ Co-opted member of Placement cell for three years.
- ❖ Member of admission committee for Five years.
- ❖ Co-opted member in Science club for one year.
- ❖ Member of examination committee for two years.
- ❖ Member of Library committee.
- ❖ Member of Remedial coaching for SC/ST students for four years.
- ❖ Member of college union during 2015-2016.
- ❖ Member of IQAC during 2017-2018.
- ❖ Placement coordinator during 2016-2017
- ❖ Member of Examination Committee in the year 2019-2020
- ❖ Member of Research cell in 2019-2021
- ❖ Member of e-content and MOOC's development Cell during 2020 – 2021.
- ❖ DBT Co-ordinator of Mathematics Department for 2021 – 2022.
- ❖ Member of IPR Cell in 2021-2022.
- ❖ Member of Entrepreneurial Development Cell and Skill Development Center in 2021-2023.
- ❖ Member of Examination Committee for 2022-2023(Odd Semester).
- ❖ Member of Research Cell for 2023-2024
- ❖ Convener of Alumnae Association for 2023-2024.