Name:S. Gokilamani

**Designation:** Assistant Professor

**Department:** Mathematics

Qualification: M.Sc., M. Phil., PGDCA., SET, (Ph. D.)

**Experience:** Teaching: 13.10 Years Industry:- Research: 8 Years

Area of Specialization(s): Graph Theory, Algebra

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# **Academic Qualifications**

Degree	Branch	Institution / University Name	Year of Graduation
Ph.D.	Mathematics	Vellalar College for Women, Erode	Pursuing
M.Phil.	Mathematics	P.S.G.R. Krishnammal College for Women, Coimbatore	2009
M. Sc.	Mathematics	P.S.G College of Arts and Science, Coimbatore.	2008
B. Sc.	Mathematicswith Computer Applications	Dr. N.G.P. Arts and Science College, Coimbatore	2006

# **Additional Qualifications**

Diploma / Vocational / Certification	Area of Specialization	Institution / University / Agency Name	Year
NPTEL Online Certificate	The Psychology of Language	Indian Institute of Technology, Guwahati	2022
NPTEL Online Certificate	Python for Data Science	IIT Madras	2022
NPTEL Online Certificate	Descriptive Statistics with R software	Indian Institute of Technology, Kanpur	2020
NPTEL Online Certificate	Advanced Graph Theory	Indian Institute of Technology, Madras	2018
NPTEL Online Certificate	Database Management System	Indian Institute of Technology, Kaharagpur	2018
NPTEL Online Certificate	Introduction to R Software	Indian Institute of Technology, Kanpur	2017
NPTEL Online Certificate	Graph Theory	Indian Institute of Technology, Madras	2017
SET	Mathematical Sciences	UGC	2017
Post Graduate Diploma	Computer Applications	Bharathiar University	2008

#### **Research Guidance**

Programme	No. of Scholars	
Trogramme	Completed	Pursuing
Ph. D.	-	-
M. Phil.	3	-

### **Research Publications (Indexed)**

- **Total Coloring of shadow, friendship and Jellyfish Graphs.** Stochastic Modelling and Applications, ISSN: 0972-3641, Vol. 26 No. 3 (January -June, Special Issue 2022 Part 11) (UGC CARE Approved)
- Balanced rank distribution labeling of ladder graphs, complete graphs and complete bipartite graphs, TWMS J. App. And Eng. Math. Vol. 11, Special Issue, 2021, pp-178-187(Web of Science, ESCI, SCOPUS)

#### Other Publications: International / National Journals

- Total coloring of Comb related graphs and umbrella graph, International Journal of Creative Research Thoughts, Volume 10, Issue 5, ISSN:2320-2882, May 2022 (UGC Approved)
- An advanced Method for solving fuzzy transportation problem with Minimum cost using Robust Ranking Techniques, International Journal of Science and Research, Volume.4, Issue 4, ISSN:2319-7094, April 2015 (UGC Approved).
- Friendship two-graphs in Route Mapping Technology, International Journal of Scientific Engineering and Research, Volume 2, Issue 9, ISSN:2347-3878, September 2014(UGC Approved)

#### **Presentations in Conference**

- Balanced rank distribution labeling of Cartesian Product of certain graphs, 18th Annual Conference of ADMA and Graph theory day, Vellalar College for Women, Erode, 9-Jun-2022 to 11-Jun-2022
- Balanced rank distribution labeling of Crown and Wheel Graphs, International conference on current scenario in pure and applied mathematics, Kongunadu Arts and Science College, Jan 29-30, 2021.
- Balanced rank distribution labeling of ladder graphs, complete graphs and complete bipartite graphs, International conference on graph theory and its applications (IGCTA-2019) sponsored by

- SERB and SSN Trust, Department of Mathematics, SSN college of Engineering, Chennai, 20-Nov-19 and 21-Nov-2019.
- Balanced Rank Distribution Labeling of Graphs, National seminar on Arising Developments in Graph theory (NSADGT-2018), PSGR Krishnammal college for Women, Coimbatore, 12-Dec-18.
- A Study on planar digraphs without large acyclic sets, National seminar on Recent Developments in Pure and Applied Mathematics, Department of Mathematics, Karpagam University, Coimbatore, 15-Sep 17.
- A Property of eigen vectors of non-negative symmetric matrices and its applications to graph theory, National Level Conference on Optimization techniques and applications sponsored by Tamil Nadu State council for Science and Technology, Bharathidasan College of Arts and Science, Erode, 17 & 18-Aug-17
- Vertex-Edge coloring techniques with applications, National Conference on Current Scenario in the Applications of Mathematical Sciences, Vellalar College for Women, Erode, 9- Feb -17.
- Graph theory and its applications, National Conference on Recent Advances in Mathematics and its Applications in Science and Engineering(NCRMA-2017), Dr. N. G. P. Institute of Technology, Coimbatore, 3-Feb-17
- Using PDE for aerodynamics of lifting surface in non-uniform motion, National Conference, KG College of Arts and Science, Coimbatore, 20- Feb-16.
- Windmill and friendship two graph in route mapping technology, International Conference on Fuzzy Queuing theory and its Applications, Bharathidasan College of Arts & Science, Erode, 3-Sep-16
- **Precoloring Extension (Prext) for interval graphs**, National Conference on Emerging Trends in Pure and applied Mathematics, Dr. N.G.P. Arts and Science College, Coimbatore, 14-Sep-15 & 15-Sep-15.
- Applications of graph theory, International Conference, Dr. N.G.P. Arts and Science College, Coimbatore, 11-Aug-14 & 12-Aug-14
- On the chromatic number of a random five-regular graph, National Level Conference, Kongu Arts and Science College,25-Jan-14.
- Queuing theory and its application at railway ticket window, National Conference, Dr. N.G.P. Arts and Science College, Coimbatore, 25-Sep-13.
- Edge chromatic number and its applications, National Level Conference, PSGR Krishnamal College for women, 23-Aug-13 & 24-Aug-13.
- Applications of Non-Linear Programming Problems, State level seminar, Dr. N.G.P. Arts and Science College, Coimbatore, 17-Feb-12.
- Preparing teachers to teach mathematics with technology, State Level Conference, Dr. N.G.P.
   Arts and Science College, Coimbatore, 09-Dec-11.

- Colorings of Interval Graphs, State Level Seminar, Dr. N.G.P. Arts and Science College, Coimbatore, 05-Mar-10.
- Color class domination in graphs, International Seminar, PSGR Krishnammal College for Women, Coimbatore, 18-Dec-08 & 19- Dec-08.

### **Participation in Conference**

#### International:

- International Conference on Recent Trends in Theoretical and Computational Mathematics (Virtual Mode), P.S.G.R. Krishnammal College for Women, 25-Feb-2022
- Five day International Conference on Recent Trends in Mathematics and Its Applications to Graphs,
   Networks and Petri Nets, Jawaharlal Nehru University, New Delhi, 20-Jul-2020 to 24-Jul-2020
- International Symposium on Neoteric Notion in Algebra, Nandha Arts and Science College, Erode. 21-Sep-16.

#### National:

- Conference on Emerging trends in topology and applications of Analysis Kongu ASC, Erode, 10-Feb-17.
- Conference on Principals Associations, Dr. N.G.P. Arts and Science College, Coimbatore, 01-Aug-15.

### **Participation in Seminars**

- One day seminar on Applications of Differential equations, Coimbatore Institute of Technology, CBE, 12-Mar-2021.
- Some Recent Research Directions in Graph Theory, Ayya Nadar Janaki Ammal College, Sivakasi. 9-Mar-17 to 10-Mar-18.

### **Participation in Workshop**

- One day workshop on Outcome Based Education (OBE), Dr, N.G.P. ASC in association with IPSR solutions Limited, 04-Mar-2023.
- One day workshop on Role of Mathematics in Society, Coimbatore Institute of Technology, CBE, 15-Mar-2021.
- Webinar on Introduction to MATLAB, Gobi Arts and Science College, Erode, 26-Jun-2020.
- Revised Assessment & Accreditation Framework of NAAC, Sri Ramakrishna Mission Vidyalaya College of Arts and Science, 27-Oct-18.
- UGC Sap Sponsored National Workshop on Graph Coloring & Algebraic Graph Theory, Pondicherry University, Puducherry, 06-Mar-18 to 10-Mar-18.

- DBT Sponsored Two Day Workshop on Discrete Mathematics and its Applications, Vellalar College for Women, Erode, 21-Feb-18 to 22-Feb-18.
- Scilab- An Open Source Tool Equivalent to Matlab, Dr.N.G.P Arts and Science College, Coimbatore, 23-Sep-17.
- Data Analytics using R Software, Bannari Amman Institute of Technology, Sathyamangalam, 14-Jul-17 to 15-Jul-17.

# **Participation in Faculty Development Programme**

- FDP Course on Psychology of Language, Indian Institute of Technology, Guwahati, Oct-Nov 2022.
- Two week online International Faculty Development Programme on Current Trends in Applications of Mathematics, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Chennai, 21-Sep-2022 to 04-Oct-2022.
- Seven Days National level FDP on Teaching and Learning Process in Higher Education Institutions, IOT Academy, 6-Sep-20222 to 14-sep-2022.
- 2 days FDP on Plagiarism in Academic Research & Author Identifiers, Indian Institute of Management and Commerce, 11-Apr-2022 to 12-Apr-2022.
- FDP course on Python for Data Science, Indian Institute of Technology, Madras, Jan-Feb 2022.
- 10 days FIP online short-term course on Biostatistics and R Programming, Rathinavel Subramaniam College of Arts and Science, Coimbatore, 09-Aug-2021 to 19-Aug-2021.
- Online FDP on Research Methodology and Pedagogy for Tertiary Education, Dr. N. G.P. Arts and Science College, 15-Jun-2021 to 21-Jun-2021.
- Five day online FDP on Hands on Training in Latex, Kongu Engineering College, Erode, 28-Sep-2020 to 2-Oct-2020.
- Three Days National Level FDP on How to Crack CSIR- NET & SET in Mathematics, Dr. N.G.P. Institute of Technology, CBE, 24-Jun-2020 to 26-Jun-2020.
- Two day online FDP on Algebra and Analysis, Vellalar College for Women, Erode, 16-Jul-2020 to 17-Jul-2020.
- Faculty development program on Documentation of Graph using Latex, C Abdul Hakeem College of Engineering and Technology, 13-May-2020
- One week FDP Program on Quality Initiatives in Higher Education, Consortium of Colleges, 13-April-2020 to 20-April 2020.
- FDP Course on Descriptive Statistics with R software, Indian Institute of Technology, Kanpur, (Feb-April 2020)
- One Week online Certificate Course on Digital Teaching Techniques, ICTACADEMY, 10-Aug-2020 to 15-Aug-2020.

- Recent Advances in Mathematics, Department of Mathematics, Dr. N.G.P. Arts and Science College, Coimbatore, 2-Jun-2019 & 3-Jun-2019.
- NAAC Revised Accreditation Framework and OBE Assessment Methodology, Dr. N.G.P. Arts and Science College, Coimbatore, 27-May-19 to 2-Jun-19.
- One Day FDP on Algebra and Number Theory, Department of Science and Humanities, Dr. N.G.P. Institute of Technology, Coimbatore, 18-May-2019,
- Introduction to Python Programming, ICT Academy, Sri Ramakrishna College of Arts and Science for Women, 17-Dec-18 to 18-Dec 18.
- Linear Algebra and its Applications, Dr. N.G.P. Institute of Technology, Coimbatore, 28-July-18.

### Conference / Seminar / Workshop Organized

- Coordinator, Inter Collegiate Competition XTASY'23, Department of Mathematics, Dr. N.G.P. Arts and Science College, 09-Mar-2023
- Organizing Member, Science Academics Refresher course in Differential Equation and its Applications,
   Dr. N.G.P. Arts and Science College, 11-Aug-21 to 26-Aug-21.
- Organizing Member, National Conference on Recent Trends in Basic and Applied Sciences, Dr. N.G.P.
   Arts and Science College, Coimbatore, 2-Mar-2020 to 3-Mar-2020.
- Organizing Member, Emerging Trends in Mathematics with Computer Applications, Dr. N.G.P. Arts and Science College, Coimbatore, 12-Sep-19 to13-Sep-2019.
- Convener, Inter Collegiate Competition MATHFEST 2019, conducted by Department of Mathematics CA, Dr. N.G.P. Arts and Science College, Coimbatore, on 21-Aug-19.
- Convener, Workshop on R-Walk Through For Data Analytics, conducted by Department of Mathematics CA, Dr. N.G.P. Arts and Science College, Coimbatore, on 8-Sep-18.
- Convener, Inter Collegiate Competition MATHFEST 2018, conducted by Department of Mathematics CA, Dr. N.G.P. Arts and Science College, Coimbatore, on 14-Sep-18.

### **Membership in Professional Bodies**

Name of the Professional Body	Nature of membership	Duration
The Association of Mathematics Teachers of India	Life Membership	Life-time
(AMTI)		

## Awards / Honors

Awards / Honors	Agency / Institute	Year of Award
NPTEL Topper - The	Indian Institute of Technology, Guwahati	2022
Psychology of Language		

Best Teacher (Mathematics)	Dr. N.G.P. Arts and Science College, Coimbatore	2022
Best Mentor	Dr. N.G.P. Arts and Science College, Coimbatore	2022
Best Mentor	Dr. N.G.P. Arts and Science College, Coimbatore	2020
<b>NPTEL Topper -</b> Advanced	Indian Institute of Technology, Madras	2018
Graph Theory		
University III Rank	Bharathiar University	2006

# **Recognition National / International**

Nature of Recognition	Organization / Institution	Year
NCAT Institute Coordinator	International Forum for Excellence in Higher Education	2017 to 2023