

Staff Profile

1. **Name:** Dr. P. GAYATHRI
2. **Gender:** Female
3. **Date of Birth:** 15/06/1980
4. **Age as on 05.04.2019 :** 38 Years 9 months 15 days
5. **Educational Qualifications:** M.Sc., M.Phil., Ph.D.,



S.No	Degree	Subject	College/University	Year	Class /Percentage
1	Ph.D	Mathematics	Bharathidasan University	Oct 2013	
2	M.Phil	Mathematics	Alagappa University	Dec 2006	Second class
3	M.Sc	Mathematics	Annamalai University	May 2004	First class
4	B.Sc	Mathematics	Seethalakshmi Ramaswamy College, Trichy.	April 2000	First class with Distinction

6. Total Teaching Experience as on 05.04.2019

Name of college	From	To	YY//MM/DD
A V.C.College (Autonomous), Mannampandal, Mayiladuthurai.	24.06.2005	07.05.2013.	07/10/13
A V.C.College (Autonomous), Mannampandal, Mayiladuthurai.	16.06.2016	Till date	02/09/20
Saranathan College of Engineering, Tiruchirappalli.	28.06.2013	20.06.2014	01/00/08
SASTRA UNIVERSITY, Thanjavur.	26.06.2014	30.04.2016	01/10/04

7. Total Teaching Experience at AVC College (specify SF/Aided) as on 05.04.2019

Sl. No.	Institution	From	To	Subjects Taught
1	Self Financing	24.06.2005	07.05.2013.	All UG, PG Mathematics, Allied Mathematics and M. Com, Engineering Mathematics etc.
2	Aided	16.06.2016	Till Date	UG, PG, M.Phil Mathematics and Allied Mathematics,

8. Conferences attended

– Number 5

1. Attended UGC sponsored National Conference on “Coding theory and Cryptography” at Fatima College, Madurai on 7th and 8th Sep 2011.
2. Attended UGC sponsored National Conference on “Recent Advances in Applied Mathematics” at Govt.Arts College for Women, Pudukkottai on 28th and 29th Jan 2011.
3. Attended International Conference on “ Number Theory and Algebraic Geometry” on 21st and 22nd Dec 2015 at SASTRA University, Kumbakonam.
4. Attended International Conference on “Number Theory” at SASTRA University, Kumbakonam on 21st and 22nd Dec 2014.
5. Attended UGC sponsored National Level Conference at Jamal Mohamed College (Autonomous), Trichy on “Graph Theory, Fuzzy Graph Theory and their applications” on 10th and 11th Feb 2016.

9. Seminars attended

- Number 7

1. Attended National level Seminar on “Mathematical methods for Research” sponsored by UGC at A.V. C College (autonomous) from 8.02.2008 to 9.02.2008.
2. Attended National level Seminar on “ Mathematical Modeling in Health care” sponsored by UGC at Govt. college (Autonomous) Kumbakonam from 28.09.2008 to 29.09.2008
3. Attended Seminar on “Enhancing the Utility of Library Resources” at A.V. C College (autonomous) from 20 and 21 Feb 2009 Sponsored by IQAC.
4. Attended State level Seminar on “Recent Developments in Mathematics” sponsored by UGC at A.V.C College (autonomous), Mannampandal on 2nd and 3rd Mar 2010.
5. Attended National level Seminar on “Mathematics and its Applications” at Shrimati Indira Gandhi College, Trichy on 19th Sep 2011.

6. Attended Regional level Seminar on “Recent Trends in Mathematics” at Shrimati Indira Gandhi College, Trichy on 26th Sep 2014.
7. Attended State level Seminar on “Mathematical Modelling” sponsored by UGC at A. V. C College (autonomous), Mannampandal on 29th Mar 2012.

10. Workshops attended

– Number

3

1. Attended workshop on “Setting Question Bank for part – A questions” sponsored by UGC at A. V. C College (autonomous), Mannampandal from 26.12. 2011 to 27. 12. 2011 organized by IQAC and Controller of Examination.
2. Attended one day Workshop on “Soft computing” at A. V. C College of Engineering, Mannampandal on 2 May 2012 organized by Department of Science and Humanities, A. V. C. College of Engineering, Mannampandal.
3. Attended two day Workshop on “Faculty Enablement Workshop on Teaching and Learning” at Saranathan College of Engineering, Trichy on 3,4 July 2013.

11. Training programmes attended

- Number

2

1. Attended a Faculty development training programme on “Mathematics” at Kongunadu College of Engineering and Technology, Thottiam by Centre for Faculty Development , Anna University, Chennai on 6th to 12th July 2013.
2. Attended a training programme on “Making Presentable powerful presentation” at A.V.C College (autonomous) on from 09.09.2008 organized by A. V. C College Management.

12. Positions Held in Other Institutions

M.Phil External evaluator for Jayaraj Annapackiam College For Women (Autonomous) affiliated to Mother Teresa Womens’ University.-Nov 2017.

13. Research Guidance (Completed and registered)

S.No.	Degree	Completed No.	Ongoing No.
1.	Ph.D	-	3
2.	M.Phil	-	5+1

M.Sc., Mathematics –Project

1. P157126 - S. Aandal Priyadharshini –A study on solving fuzzy linear system- completed on April 2017.
2. P167104 - G. Natarajan –A study on fuzzy transshipment problem - completed on April 2018.
3. P177102 - R.Ganesh Kumar –A study on graph theoretical matrices- April 2019.
4. P177126- S. Anusuya – A study on applications of matrices in graph theory-April 2019.

M.Phil., Mathematics – Research scholars (on-going)

1. M179503- Jagadhabseelan
2. M179510- Sakthivel .M
- 3.M179512- Sivakumar .K
- 4.M179513-Tamilkumaran.S

Ph.D., Mathematics –Research scholars (on-going)

- 1.U.Priyanka, Assistant Professor, A.V.C.College(Autonomous), Mannampandal.
- 2.S.Sunantha, Assistant Professor, Vivekananda College,Sirkali.
- 3.T.Ragavan, Assistant Professor, A.V.C.College(Autonomous), Mannampandal.

13. Invited Talk/Guest Lecture (2006 onwards): 2

1. Acted as a *Resource person* in T.R.B. and I.B.P.S. Special Free coaching classes conducted at Govt. Girls Hr. Sec. School, Mayiladuthurai organized by Lions Club Mayuram, Lions Club of Mayiladuthurai Cental and Lions Club of Mayiladuthurai New century.
2. Acted as a *Resource person* in the Seminar conducted by Vivekananda college of Arts and Science for Women and invited talk given entitled “Graph Theory and its applications”, on 13th Feb 2017.

14. Book Chapters Published: Number

2

1. Book Title- "Agro Biodiversity Informatics" by **National Academy of Agricultural Research Management (NAARM)** - 2014, ISBN: 978-81-909983-8-3, Chapter 6: "Haridhra-Turmeric (Curcuma Longa) Production- A Multivariant Analytical and Data Mining Based Observation.
2. “A New Parallel Algorithm for EREW PRAM Matrix Multiplication”, Part of series of the book entitled “ICCASP/ICMMD-2016,Advances in Intelligent Systems Research” as a **book chapter**, vol 137, pp 759-765.ISSN: 1951-6851,ISBN: 978-94-6252-305-0, ATLANTIS PRESS, doi:10.2991/iccasp-16.2017.103, Feb 2017.

16. Research Articles Published:

Journal

Number

25

Papers Published in Indian and International Journals: (Indian – 1, Inter., National : 24)

1. Meena K, Gayathri P, Goplalan MA, Subramanian K.R, Estimation of Blood Flow Characteristic Frictional Resistance through a Catheterized Tapered Artery with Stenosis using Two Fluid Non-Newtonian Model, Indian Journal of Science, Discovery Publications, ISSN 2319 – 7749, Dec 2012, vol 1(2) pp 95-104.
2. Gayathri P, Goplalan MA, Subramanian K.R, Modelling of Non-Newtonian Blood Flow Resistance and Pressure Drop through an Artery, International Journal of Applied Mathematical Analysis and Applications, Serials Publicaitons, ISSN 0973 – 3868, Jan-June 2011, v 6(1), pp 51-59.
3. Gayathri P, Meena K, S.Vidhyalakshmi, Numerical solution of Magneto-Hydrodynamic and Hematocrit on Blood Flow” in International Journal of Scientific Transactions in Environment and Technovation, BVG Trust, ISSN 0973 – 9157, Oct-Dec 2011, v 5(2) pp 86-91.
4. Gayathri P, Meena K, Subramanian K.R, Mathematical Investigation For Blood Flow Through A Catheterized Tapered Artery With Stenosis Using Single Fluid Casson Model”, International Journal of Mathematics and Engineering with Computers, International Science Press, ISSN 2230-8911, July-Dec 2012, vol 3(2) pp 97-111.
5. Gayathri P, Subramanian K.R, Non-Newtonian Casson fluid flow through a stenosis in catheterized tapered artery, International Journal of Mathematics Computer Science and Information Technology, Serial Publications, ISSN: 0974-5580, v 5(2),pp 103-111, 2012.
6. Meena K, Gayathri P, Subramanian K.R, A Non-Newtonian Herschel-Bulkley fluid flowthrough a stenosis in catheterized tapered artery, International Journal of Current Research, ISSN: 0975-833X, v 5(6),pp 1473-1483, June 2013, <http://www.journalcra.com>.
7. Gayathri. P, Kannan. K, Sarala.D, Max-Min method to solve fuzzy Transshipment problem, Applied Mathematical Sciences, 9(7), 337-343,2015, ISSN: 1312-885X (Print)
ISSN: 1314-7552 (Online) (SCOPUS), **Impact factor- 0.781.**
8. Gayathri P, Subramanian K.R, A new approach on finding the PI index of polyominoes, Jamal Academic Research Journal : An Interdisciplinary special Issue, Feb 2016.ISSN 0973-0303,27-32.
9. Gayathri P, Subramanian K.R, Statistical analysis of observation on Pisum sativum production, Jamal Academic Research Journal : An Interdisciplinary special Issue, Feb 2016.ISSN 0973-0303,239-244.

10. Gayathri P, Subramanian K.R, An Algorithm to Solve Fuzzy Trapezoidal Transshipment Problem, International Journal of Systems Science and Applied Mathematics, Science publishing group, Nov 2016, vol:1(4),pp58-62,doi: 10.11648/j.ijssam.20160104.14, ISSN Print: 2575-5838 ISSN Online: 2575-5803.
11. Gayathri P, Subramanian K.R, The PI (Padmakar-Ivan) Index of Polyominoes, International Journal of Discrete Mathematics, Dec 2016, vol 1(1), pp 1-4, Science Publishing group, doi: 10.11648/j.dmath.20160101.11.
12. Gayathri P, Priyanka U, Sandhiya S, Sunandha S, Subramanian K.R, M-Polynomials of Penta-Chains, Journal of Ultra Scientist of Physical Sciences, Vol 29(4), 164-168, April 2017. ISSN: 2231-346X(PRINT), 2319-8044(ONLINE) Impact factor : 2.90 .
13. Gayathri P, Priyanka U, Sandhiya S, A significant computation for finding PI index of Phenylene, Journal of Ultra Chemistry, Vol 13(3), 60-64, May 2017. ISSN: 0973-3450(PRINT), ISSN : 2319-8036(ONLINE) Impact factor: 2.29.
14. Gayathri P, Priyanka U, Degree Based Topological Indices of Banana Tree Graph, International Journal of Current Research and Modern Education, Special Issue NCETM, July, PP- 13-24, 2017, ISSN: 2455 – 5428. Impact factor : 6.725.
15. Gayathri P, Priyanka U, Degree based topological indices of Linear Phenylene, International Journal of Innovative Research in Science Engineering and Technology, Vol. 6, Issue 8, PP. 16986-16997, August 2017. ISSN: 2319- 8753. Impact factor: 6.209 .
16. Gayathri P, Ragavan T, Wiener Matrix Sequence, Hyper-Wiener Vector, Wiener Polynomial Sequence and Hyper-Wiener Polynomial of Bi-phenylene, International Journal of Innovative Research in Science Engineering and Technology, Vol. 6, Issue 8, PP. 16998-17005, August 2017, ISSN: 2319- 8753. Impact factor : 6.209 .
17. Gayathri P, Priyanka U, Degree based topological indices of Jahangir graphs, International Journal of Current Advanced Research, Vol. 6, Issue 11, PP. 7154-7160, November 2017. ISSN: O: 2319-6475, ISSN: P: 2319-6505, Impact factor: 5.995 .
18. Gayathri P, Priyanka U, Degree Based Topological Indices of Zig-Zag chain, Journal of Mathematics and Informatics, Vol. 11, 2017, 83-93, ISSN: 2349-0632 (P), 2349-0640 (online), December 2017. Impact factor: 1.627 .
19. Gayathri P, Ragavan T, Wiener Vector, Hyper-Wiener Vector, Wiener number, Hyper-Wiener number of molecular graphs” Annals of Pure and Applied Mathematics, Vol. 15, No. 1, 51-65, ISSN: 2279-087X (P), 2279-0888(online), December 2017, Impact factor: 2.117 .

20. Gayathri P, Ragavan T, R. Thaiyalnayaki, A Simplified Computational Methodology of Finding Wiener Number and Hyper-Wiener Number of Triangular Graphs, International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume 6 Issue IV, April 2018 ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 6.887.
21. Gayathri P, Ragavan T, Vinothini K, A Significant Computation of Wiener Number and Hyper-Wiener Number of Graphs, International Journal for Research in Applied Science & Engineering Technology (IJRASET), ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 6.887, Volume 6, Issue IV, 3232-3239, April 2018.
22. P Gayathri, S Pavithra, A Consequential Computation of Degree-Based Topological Indices of Triangular Benzenoid, International Journal of Mathematics And its Applications, Volume 6, Issue 1-D, 617-627, IJMAA, 2018,
23. Gayathri P, Sunantha S, Multiplicative Connectivity Indices of $TUC_4C_8(R)$ Nanotube, P. Gayathri, S. Sunantha, International Journal of Mathematics and Soft Computing, Volume 8, No. 1, 69-82, 2018.
24. Gayathri P, Priyanka U, G.K. Bagyalakshmi, A well-defined model of Multiplicative connectivity invariants of Jahangir Graph $J_G(n,m)$, International Journal of Research in Engineering Application & Management, (IJREAM) Vol. 4(8), 361-369, ISSN: 2454-9150, Nov 2018.
25. Gayathri P, Priyanka U, An exact model of Multiplicative connectivity invariants of Linear Phenylene $[L_p(G(a,k,n))]$, American International Journal of Research in science, Technology, Engineering & Mathematics, ICOMAC 2019, ISSN: 2328-33491, PP 157-175, Feb 2019.

17. Proceedings Published in Seminars/Conferences etc., Number

15

1. Presented a paper entitled “Fuzzy Normal (INVARIANT) subgroups of H/β^{**} in UGC sponsored **National Seminar** on “Mathematical Modelling in Health care” at Govt. Arts College (Autonomous), Kumbakonam on 28th, 29th March 2008 NSMMHC – 2008 organized by the Ramanujan Research Centre, Department of Mathematics, Govt. Arts College (Autonomous), Kumbakonam.

2. Presented a paper entitled “Mathematical Investigation for Blood flow in an artery in the presence of Multiple stenoses” in UGC sponsored **National Seminar** on “Mathematics and its Applications” at Shrimati Indira Gandhi College, Trichy on 19th Sep 2011.
3. Presented a paper entitled “Non-Newtonian Blood Flow in an artery in the presence of multi-Stenoses in dynamic response” in UGC sponsored **National Conference** on “Coding theory and Cryptography” at Fatima College, Madurai on 7th and 8th Sep 2011.
4. Presented a paper entitled “Numerical Solution Of Non-Newtonian Arterial Blood flow through an overlapping Stenosis” in UGC sponsored **National Conference** on “Recent Advances In Pure and Applied Mathematics” at Govt.Arts College for Women, Pudukkottai on 28th and 29th Jan 2011.
5. Presented a paper entitled and published in the proceedings of JMC “A new approach on finding the PI index of polyominoes” presented in UGC sponsored **National Level Conference** at Jamal Mohamed College (Autonomous) on 10-11 Feb 2016.
6. Presented a paper entitled and published in the proceedings of JMC “Statistical analysis of Observation on Pisum sativum production” presented in UGC sponsored **National Level Conference** at Jamal Mohamed College (Autonomous) on 10-11 Feb 2016.
7. A paper presented and published in the Proceeding of 2nd **International Conference** on Communication and Signal Processing (ICCASP 2016) was held on 26th -27th December 2016 at Dr. Babasaheb Ambedkar Technological University Lonere-Maharashtra-India., “A New Parallel Algorithm for EREW PRAM Matrix Multiplication”, ISSN: 1951-6851.
8. A paper presented entitled “Degree Based Topological Indices of Banana Tree Graph” in the **National Conference on Emerging Trends in Mathematics-NCETM-2017** at A.V.V.M. Sri Pushpam College, Poondi on 28th July 2017
9. Presented a paper entitled “Degree Based Topological Indices of zig-zag chain” presented in UGC sponsored **International Level Conference on Mathematical Methods and Computation- ICOMAC 2017** at Jamal Mohamed College (Autonomous),Trichy on 11-Dec 2017.
10. Presented a paper entitled,“ Wiener Vector, Hyper-Wiener Vector, Wiener number, Hyper-Wiener number of molecular graphs” presented in UGC sponsored **International Level Conference on Mathematical Methods and Computation- ICOMAC 2017** at Jamal Mohamed College (Autonomous), Trichy on 11-Dec 2017.
11. Presented a paper entitled, “ D_S – Matrices and D_M –Matrices of Octane Isomers” presented in CSIR, NEW DELHI sponsored 2nd **International Level Conference on Pure and Applied Mathematics - Sri Chandrasekarendra Saraswathi Viswa Mahavidyalaya** at 17-19 Dec 2018.

12. Presented a paper entitled, “A well-defined Model of Multiplicative Connectivity invariants of Banana Tree Graph $Br(p,q)$ ” presented in CSIR, NEW DELHI sponsored **2nd International Level Conference on Pure and Applied Mathematics - Sri Chandrasekarendra Saraswathi Viswa Mahavidyalaya** at 17-19 Dec 2018.

13. Presented a paper entitled, “An exact model of Multiplicative connectivity invariants of Linear Phenylene $[L_p(G(a,k,n))]$ ” in UGC sponsored **International Level Conference on Mathematical Methods and Computation- ICOMAC 2019** at Jamal Mohamed College (Autonomous), Trichy on -20th and 21st Feb 2019.

14. Presented a paper entitled, “A Mathematical approach to find the Relationship between the Wiener Numbers of Isomers of Pentane (C_5H_{12}) and Hexane (C_6H_{14}) and its physical properties” presented in UGC sponsored **International Level Conference on Mathematical Methods and Computation- ICOMAC 2019** at Jamal Mohamed College (Autonomous), Trichy on 20th and 21st Feb 2019.

15. Presented a paper entitled “Multiplicative indices of $TUC_4C_6C_8[m,n]$ Nanotube and $C_4C_6C_8[m,n]$ Nanotori ” in **International Conference on Recent Advancements in Pure and Applied Mathematics(ICRAPAM-19)**” at Govt. Arts College (Autonomous),Kumbakonam on 25th, Feb 2019.

18. Memberships in Professional Bodies (other than Board of Studies, Academic Council etc.,) Life member in RAMANUJAN MATHEMATICAL SOCIETY, Tiruchirappalli from Jan 2015.

19. Orientation Programme Attended: 1

ATTENDED ORIENTATION PROGRAMME CONDUCTED BY UGC AT BHARATHIYAR UNIVERSITY, 17/05/2018 TO 13/06/2018.

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