NAME : Dr. ATHUL T. B.

DESIGNATION : Assistant Professor

MOB : +91 9562724994

EMAIL : athultacl@gmail.com

EDUCATIONAL QUALIFICATION: M.Sc., M.Phil., Ph.D.

AREA OF INTEREST : Graph Theory, Analysis

SPECIALISATION : Algebraic Graph Theory, Chemical Graph Theory

ORCID ID : **https://orcid.org/0000-0002-6807-575X**

TEACHING EXPERIENCE:

Designation	Institution	Period
Assistant Professor	Sree Narayana College, Punalur	30-09-2020 to till date
Guest Lecturer	St. Johns College, Anchal	02-01-2017 to 31-09-2017

ADMINISTRATIVE POSITIONS HELD:

- Reviewer of journals
- External Faculty at School of Distance Education, University of Kerala
- NSS Programme Officer

PUBLICATIONS

2025- Akhil C. K., Athul T. B., Roy John, Manju N. V., and, Shubha A. B., Graph Theoretical Analysis of SARS-COV-2 Spike Protein, International Journal of Basic and Applied Sciences, Vol. 14 (4), 194-198. DOI : https://doi.org/10.14419/01r2zb80

2025 -Athul T. B., Roy John, Akhil C. K., Manju V. N., and Subha A. B., The Total Graph of Path Related Graphs and Their Extension, Global and Stochastic Analysis, Vol. 12 (4) , 124-132

2025- Athul T. B., Roy John, Manju V N , Akhil C. K., Complete Extension and Join of Two Graphs, International Journal of Basic and Applied Sciences, Vol. 14 (2), 340-343.

DOI : https://doi.org/10.14419/vnr9q131

2024 - Athul T. B., G. Suresh Singh, A characterization of the Total Graph of Interval Graphs and Proper Interval Graphs, Mapana Journal of Sciences, Vol. 23, 125-131

DOI: https://doi.org/10.12723/mjs.70.7

2023 - Manju V N, Athul T. B., G. Suresh Singh, Anti-Adjacency Matrices of Certain Graphs Derived from Some Graph Operations, Ratio Mathematica Vol 48, 243-253
DOI: http://dx.doi.org/10.23755/rm.v48i0.1189

2023 – Manju V N, Athul T. B., G. Suresh Singh, Some Bounds for the Wiener Index of Weak Join of Two Graphs, Advances in Mathematics: Scientific Journal, Vol. 12, 107–113.

DOI: https://doi.org/10.37418/amsj.12.1.7

2020 – Athul T. B., G. Suresh Singh, Total Graph of Regular Graph, Advances in Mathematics: Scientific Journal, Vol. 9, 4213–4220. DOI: https://doi.org/10.37418/amsj.9.6.103

AWARDS AND HONOURS

1. Excelsior award for best presentation among the Faculty Paper Presentations in the National Conference RICERCA 2021, organized by IQAC & Research Committee, St. Joseph's College for Women, Alappuzha in association with Kerala Sasthra Sahithya Parishath & Society of Biotechnologists, India during 5th– 11th October 2021.

GRANTS AND FELLOWSHIPS

2017-CSIR-JRF, CSIR

INVITED TALKS

1. Three Day National Workshop on Algebra, Analysis and Graph Theory organized by Department of Mathematics, Government College, Kattappana, Idukki on 7-9 January, 2026.
2. One day Orientation programme organized by Department of Mathematics, Ayyankali Memorial Arts and Science College, Kuryottumala,, Pathanapuram on 7th August, 2024.
3. National Level webinar Madhava Lecture Series on Applied Mathematics, Organized by Department of Applied Science and Humanities, Universal Engineering College, Thrissur on 02nd November, 2023
4. Two day National Seminar on recent trends in Mathematics organized by Department of Mathematics, Govt. College, Nedumangad sponsored by Department of Collegiate Education on 2-3, November, 2023
5. One Day Workshop on SageMath organized by Department of Mathematics, Ayyankali Memorial Arts and Science College, Kuryottumala,, Pathanapuram on 17th January, 2023
6. One day Seminar on Ramsey Numbers organized by Department of Mathematics St. Stephens College, Pathanaputam on 22th February, 2022

Papers Presented

2025- The Total Graph of Interval Graphs and Proper Interval Graphs, International Conferences on Advances in Pure and Applied Mathematics organized by Department of Mathematics, St Stephen's College, Pathanapuram in in collaboration with Kerala State Higher Education Council (KSHEC) during 19th to 21st February 2025.

2024 -Mathematical Concepts and Astronomy in Ancient Indian Knowledge System, International Seminar on Global Issues and Samskrit Knowledge System organized by Department of Sanskrit, University of Kerala, Triruvananthapuram during 17-19, December 2024.

2024 – 'Complete Extension and Adjacency Matrix of Total Graphs', SERB Sponsored 4th International Conference on Advanced Trends in Computational Engineering Mathematics

organized by Department of Mathematics, KLEF- Deemed to be University, Guntur, Andhra Pradesh during 9-13 July, 2024

2023 – 'Some Properties of Total Graphs', Ninenth International Conference on Discrete Mathematics and Mathematical Modelling in Digital Era organized by Department of Mathematics, The Gandhigram Rural Institute (Deemed to be University), Gandhigram Tamil Nadu, India during 23-25 March 2023.

2021- "Total Graphs and Regular Graphs", National Conference RICERCA 2021, organized by IQAC & Research Committee, St. Joseph's College for Women, Alappuzha in association with Kerala Sasthra Sahithya Parishath & Society of Biotechnologists, India during 5th– 11th October 2021.

2020 – "The total Graph of Regular Graphs", International Conference on Innovations in Graphs and its Alliances in Digital Era, organized by Department of Mathematics, University of Kerala, Kariavattom on 22-24 January, 2020.

2020 –"The total Graph of C_n and K_n", International Conference on Science, Engineering, Technology & Social Sciences organized by Department of Mathematics, Kuriakose Elias College, Mannanam, on February 1-2, 2020

2019 – "Some Basic Concepts of Algebraic Graph Theory", Second International Conference on Science, Engineering, Technology & Social Sciences organized by Department of Mathematics, Kuriakose Elias College, Mannanam, on January 18, 2018

Conferences / Seminars / Webinars Organizes

1. Member Organizing Committee International Conferences on Advances in Pure and Applied Mathematics organized by Department of Mathematics, St Stephen's College, Pathanapuram in in collaboration with Kerala State Higher Education Council (KSHEC) during 19th to 21st February 2025.
2. Member Organizing Committee in the Science Day celebration 2022 Organized by the Department of Mathematics and Science Club, Sree Narayana College, Punalur on 2nd March, 2022.
3. Member Organizing Committee in the Webinar on Twin Prime Conjucture, Organized by the Department of Mathematics and IQAC, Sree Narayana College, Punalur on 27th July, 2021.
4. Member Organizing Committee in the Webinar series on Energy and Environment, Organized by the Department of physics, Sree Narayana College, Punalur.

5. Programme Coordinator in The Online Induction Programme for first year degree students organized by IQAC, Sree Narayana college, punalur on 31-01-2021

6. Member Organizing Committee in the Webinar on An Introduction to Mathematical Optimal Control Theory, Organized by the Department of Mathematics and IQAC, Sree Narayana College, Punalur on 28th December 2020.

7. Member Organizing Committee in the International Conference on Novel Trends in Pure and Applied Mathematics organized by the department of Mathematics, University of Kerala from 22nd to 24th January 2019.

Conferences / Seminars / Webinars Attended

1. Participated in the International Expert Lecture II on Using Mathematics to Create Symmetry Patterns by Dr Joseph A Gallian, Professor of Mathematics and Statistics, University of Minnesota Duluth, USA, organised by the Department of Mathematics in association with IQAC, Christ Nagar College, Maranalloor, Trivandrum, on 14 March 2022.
2. Participated in the International Expert Lecture on Linear Algebra Today organised by the Department of Mathematics in association with IQAC, Christ Nagar College, Maranalloor, Trivandrum, on 9 June 2021.
3. Participated in the webinar on Topology and Nano topology organized by Hindusthan college of engineering and technology, Coimbatore, Tamil Nadu on 31 August 2021.
4. Participated the webinar series on Exploring New Avenues of Research In Graph Theory Degree and Distance Based Measures in Graphs" organized by the Department of Mathematics on 27 August 2021.
5. Participated in the one-day professional Development programme on solving delay differential equation using numerical methods organized by Hindusthan college of engineering and technology, Coimbatore, Tamil Nadu on 9 June 2021.
6. Participated in the Webinar on "Cosets and Lagrange's Theorem" organized by the Department of Mathematics, K.R.College of Arts & Science, K.R.Nagar, Kovilpatti on 09-06-2021.
7. Participated in the Five Days International Webinar on the Topic "Recent Trends in Applied Mathematics" organized by the Department of Mathematics, KSMDBCollege, Sasthamcotta from 24th May 2021 to 28th May 2021.

8. Participated in the four day faulty development programme on Self Adaptive System and Machine Learning Techniques organized by Mahaguru Institute of Technology, Kattachira on 22nd, 23rd, 24th and 26th April 2021.
9. Participated in the National Webinar organized by Department of Mathematics in collaboration with Internal Quality Assurance Cell(IQAC) of Jawaharlal College, Patnagarh on 13th February 2021.
10. Participated in the National Webinar, "COMPLEX NETWORKS" organized by the Department of Mathematics and IQAC, Sree Narayana College, Sivagiri, Varkala on 19th December 2020.
11. Participated in the National Webinar on NAAC Reaccreditation Process During Post Covid Scenario organized by IQAC, Yadhava College, Madurai on 10th November 2020.
12. Participated in the National Webinar on Graph Theory & Problem – Solving Using Sage Math organized by the PG & Research Department of Mathematics, SD College, Alappuzha on 4,5 and 6 November 2020.
13. Participated in the Online lecture series in Mathematical Analysis - Visualization and Applications, organized by the department of Mathematics in association with IQAC, St. John's College, Anchal, Kollam, Kerala from 20-08-2020 to 04-09-2020.
14. Participated in the Two-day International Webinar on Algebra, Analysis & Topology Organized by Department of Mathematics, Bankura University & Bankura Mathematical Society, Bankura University from 13th -14th August, 2020.
15. participated in the International Conference on Recent Trends in Graph Theory (ICRTGT-2020) organized by Department of Mathematics, Karnatak University, Dharwad, India during July 27-29, 2020.
16. Participated in the International Webinar on Special Functions and Discrete Mathematics organized by Department of Mathematics, University of Kerala from 02 - 05 August 2020.
17. Participated in the Webinar on Homomorphisms on Cyclic Groups organized by PG and Research Department of Mathematics, Government College for Women (Autonomous), Kumbakonam on 31.07.2020
18. Participated in the 6th Annual International Conference on Algorithms and Discreate Mathematics organized by the department of CSE, IIT Hyderabad from 13th February 2020 to 15th February 2020.
19. Participated in the Indo- French Pre- Conference on Algorithms and Combinatorics of CALDAM 2020 organized by the department of CSE, IIT Hyderabad from 10th February 2020 to 11th February 2020.

20. Participated in the National level Workshop on Modern Breakthroughs in Number theory and Discreate Geometric Problems organized by Department of Mathematics, University of Kerala from 10th December 2019 to 13th December 2019.
21. Participated in the Two day Workshop on R programming organized by by Department of Mathematics, St. Johns College, Anchal on March 7-8, 2019.
22. Participated in the National Seminar on Computational Mathematics and Machine Learning, Organized by Centre for Quantitative Analysis, Department of Mathematics, University of Kerala from 16th to 18th October 2019.
23. Participated in the National level Workshop on Discovering the Art of Mathematics organized by Department of Mathematics, University of Kerala from 18th to 20th December, 2018.
24. Participated in the National Conference on Advances in Graph Theory and Combinatorics organized by Department of Mathematics, St. Stephen's College, Pathanapuram from 27th to 28th September, 2018.
25. Participated in the Two Day Regional Level Workshop on SageMath organized by Department of Mathematics, St. Joseph's College, Alapuzha on 5th to 6th , February 2018.
26. Participated in the Two Day National Workshop on SageMath organized by Department of Mathematics, St. John's College, Anchal on 21th to 22th , February 2018.
27. Participated in the National Conference on Discrete and Computational Mathematics organized by Department of Mathematics, University of Kerala from 11st to 13rd January , 2018.
28. National Multi-Disciplinary Annual Research Conference (MARC) organized by School of Mathematical and Physical Sciences, University of Kerala on December 15-18, 2015.
29. Refresher Course for M.Sc. Mathematics students in Kerala organized by Kerala School of Mathematics, Kozhikode.
30. Golden Jubilee Memorial National seminar on Applied Mathematics, organized by Dept. of Mathematics, St. Johns College, Anchal on March 6-7, 2013.
31. One Day Seminar on Visual Mathematics organized by Dept. of Mathematics, St. Johns College, Anchal on February 2013.
32. Enrichment Programme in Mathematics Sponsored by NBHM organized by Dept. of Mathematics, Govt. college chittur. on August 22-28, 2012.

Orientation programmes / Refresher courses/ STTP attended

1. Participated in the NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC) Organized by UGC-MMTTC, University of Kerala, Kariavattom, Thiruvananthapuram from September 02, 2024 to September 12, 2024.
2. Participated in the One Week online Short-Term Faculty Training Programme (Interdisciplinary) on Digital Content Management One-Learning organized by Sree Narayana College for Women, Kollam, in academic collaboration with Kerala State Higher Education Council from June 13th to June 19th of 2021
3. Participated in the five-day STTP on mathematical software's held from 13 September, 2021 to 17 September, 2021 at Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur.
4. Participated in the Six-day STTP on Innovative tools for Mathematics organized by Department of science and humanities, Hindustan College of Engineering and Technology, Coimbatore on from 3rd May 2021 to 8th May 2021
5. Participated in the Two-Week Refresher Course in Mathematics organized by Department of Mathematics, Ramanujan College from 16-30 March 2021.
6. Participated in the 4-Week Induction/Orientation Programme for Faculty in Universities/Colleges/Institutes of Higher Education from November 10- December 09, 2020.