Curriculum Vitae

Dr. Sk Amanathulla

Assistant Professor Raghunathpur College Raghunathpur, Purulia Pin-723133

West Bengal

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Personal Details:

❖ Language Known: Bengali, English, Hindi

Date of Birth: 12/01/1987

❖ Blood Group: A+

❖ Father's Name: Sk Saokat Ali

* Mother's Name: Negimonnesha Bibi

❖ Nationality: Indian



Academic Qualifications:

Qualification	Board / University	Subjects	Year	Division/Class
Ph. D	Vidyasagar University	Graph Theory	2018	-
M.Sc.	Vidyasagar University	Applied Mathematics	2009	1 st
B.Sc.	Vidyasagar University	Mathematics (H), Chemistry, Physics	2007	1 st
Higher Secondary	W.B.C.H.S.E	Bengali, English, Mathematics, Physics, Chemistry, Biology	2004	1 st
Madhyamik	W.B.B.S.E	Bengali, English, Mathematics, Physical Science, Life Science, History, Geography	2002	1 st

Other Qualifications:

Examination Passed	Co-ordinating Authority	Subject	Year of Passing	All India Rank
NET	Joint CSIR-UGC	Mathematical Science	2014	55
GATE	IIT Roorkee	Mathematical Science	2009	247

Subjects of Interest:

- **❖** Algebra
- **❖** Analysis
- Computational Mathematics
- Graph Theory
- Discrete Mathematics
- Fuzzy Graphs
- Fuzzy Mathematics
- **❖** C-Programming

List of Published Books:

❖ Title: School Service Commission Higher Mathematics Gateway. Publisher: Oxizone Books.

❖ Title: C-Cooking (A text book for C language). Publisher: Techno World. (Publish soon)

Teaching Experience:

Designation	Name of the Institution	Nature of Appointment	Period of Services
Assistant Professor	Raghunathpur College, Raghunathpur, Purulia	Permanent	01/11/2019 to Till date
Assistant Teacher	Shankpur Barkhania High School (HS), Keshpur, Paschim Medinipur	Permanent	29/11/2013 to 31//10/2019
Assistant Teacher	Manjura Jr. High School, Majura, Jhargram.	Permanent	12/10/2009 to 28//11/2013

List of Publications:

2023

- 1. Jasminara Khatun and Sk Amanathulla and Madhumangal Pal, Picture Fuzzy Cubic Graphs with Applications, Accepted, Journal of Intelligent and Fuzzy Systems (2023), SCIE, Impact Factor: 2.
- 2. Sk Amanathulla, Jasminara Khatun and Madhumangal Pal, L(3,2,1)-labeling problem of square of path, International Journal of Mathematics for Industry, (2023) doi.org/10.1142/S2661335223500077 (2023), SCOPUS INDEXED, WoS, Impact Factor: 0.2.
- 3. Biswajit Das Adhikari, Avisek Banerjee, Sk Amanathulla and Sukumar Mondal, International Journal of Mathematics for Industry, (2023) doi.org/10.1142/S2661335223500089 (2023), SCOPUS INDEXED, WoS, Impact Factor: 0.2.
- **4.** Biswajit Bera, Sk Amanathulla and Sanat Kumar Mahato, A Comprehensive Study of Picture Fuzzy Planar Graphs with Real-World Applications, Journal of Uncertain Systems, (2023) doi.org/10.1142/S1752890923500095, **SCOPUS INDEXED.**
- **5.** Jasminara Khatun, Sk Amanathulla, Sheng-Lung Peng, Minimization of Span in L (3, 1)-Labeling for a Particular Type of Intersection Graphs, in Book Fuzzy Optimization, Decision-making and Operations Research: Theory and Applications, Springer International Publishing, (2023) 207-217, **SCOPUS INDEXED.**
- **6.** Jasminara Khatun and Sk Amanathulla, An Application of Neutrosophic Graph in Decision-Making Problem for Alliances of Companies, in Book Fuzzy Optimization, Decision-making and Operations Research: Theory and Applications, Springer International Publishing, (2023) 241-255, **SCOPUS INDEXED.**
- 7. Nupur Patra, Sk Amanathulla, Madhumangal Pal and Sukumar Mondal, A restricted L (2, 1)-labelling problem on interval graphs, TWMS Journal Of Applied And Engineering Mathematics, 13(2), 635-648, (2023), SCOPUS INDEXED.

2022

- 8. Sk. Amanathulla, B. Bera and M. Pal, L(2,1,1)-labeling of interval graphs, International Journal of Mathematics for Industry, 14(1) (2022) 22500031-22500038, SCOPUS INDEXED, WoS, Impact Factor: 0.2.
- 9. Sk. Amanathulla and M. Pal, L(2,2,1)- labelling problems on square of paths, International Journal of Advanced Intelligence Paradigms, (2022), doi: 10.1504/IJAIP.2022.10034134, SCOPUS INDEXED.
- **10.** Sk. Amanathulla and M. Pal, An introduction to picture fuzzy graph and its application to select best routes in an airlines network, in Book, Advanced and application of fuzzy sets and logic, IGI Global, 385-411 (2021), **SCOPUS INDEXED.**
- 11. Avisek Banerjee and Sk. Amanathulla, Application of Picture Fuzzy Bondage Set to Find Least Crowded Passenger-Friendly Railway Division in India, Research Square, (2022).

2021:

- **12.** Sk. Amanathulla, B. Bera and M. Pal, Balanced picture fuzzy graph with application, Artificial Intelligence Review, 54, 5255-5281 (2021), **SCI, Impact Factor: 12.**
- **13.** Sk. Amanathulla, G. Muhiuddin, D. Al-Kadi and M. Pal, Distance two surjective labeling of paths and interval graphs, Discrete Dynamics in Nature and Society, (2021), doi.org/10.1155/2021/9958077, **SCIE**, **Impact Factor: 1.637.**
- **14.** Hossein Rashmanlou, G. Muhiuddin, Sk Amanathulla*, R. A Borzooei and Madhumangal Pal, A Study On Cubic Graphs With Novel Application, Journal of Intelligent and Fuzzy Systems, 40, 89–101 (2021), **SCIE**, **Impact Factor: 2.**
- **15.** Sk. Amanathulla and M. Pal, L(3,2,1)-labeling problems on trapezoid graphs, Discrete Mathematics Algorithms and Applications, 13(5) (2021), doi.org/10.1142/S1793830921500683, **SCOPUS INDEXED.**
- **16.** Sk. Amanathulla, B. Bera and M. Pal, Real world applications of discrete mathematics, Malaya Journal of Matematik, 9(1), 152-158 (2021), **UGC CARE LISTED.**
- **17.** Sk. Amanathulla, B. Bera and M. Pal, L(2,1,1)-labeling of circular-arc graphs, Journal of Scientific Research, 13(2), 537-544 (2021), **UGC CARE LISTED.**
- **18.** Sk. Amanathulla, B. Bera and M. Pal, Surjective L(3,1)-labeling of circular-arc graphs, Malaya Journal of Matematik, 9(1), 925-929 (2021), **UGC CARE LISTED.**
- **19.** Sk. Amanathulla, G. Muhiuddin, D. Al Kadi and M. Pal, Multiple attribute decision-making problem using picture fuzzy graph, Mathematical Problems in Engineering, (2021), 9937828, **SCOPUS INDEXED.**

2020:

- **20.** Sk. Amanathulla and M. Pal, L (h, k)-Labeling of Intersection Graphs, in Book, Handbook of Research on Advanced Applications of Graph Theory in Modern Society, IGI Global, 135-170, (2020), **SCOPUS INDEXED.**
- **21.** Sk. Amanathulla and M. Pal, Involvement of Graph Theory in Reality, in Book, Mathematics and Its Connections to Real World, Kindle Direct Publishing, 113-131, (2020).

2019:

22. Sk. Amanathulla, M. Pal and Sankar Sahoo, L(3,1,1)-labeling numbers of squares of paths, complete graphs and complete bipartite graphs, Journal of Intelligent and Fuzzy Systems, 36 (2019) 1917–1925, **SCIE**, **Impact Factor: 1.851.**

2018:

23. Sk. Amanathulla and M. pal, Surjective L(2,1)-labeling of cycles and circular-arc graphs, Journal of Intelligent and Fuzzy Systems, 35 (2018), 739-748, **SCIE**, **Impact Factor: 1.851.**

24. Sk. Amanathulla and M. Pal, L(1,1,1)- and L(1,1,1,1)-labeling problems of square of paths, complete graphs and complete bipartite graphs, Far East Journal of Mathematical Sciences, 106(2) (2018) 515-527 **,SCOPUS INDEXED**.

2017:

- **25.** Sk. Amanathulla and M. Pal, L(3,2,1)- and L(4,3,2,1)-labeling problems on interval graphs, AKCE International Journal of Graphs and Combinatorics, 14 (3) (2017) 205-215, **SCOPUS INDEXED.**
- **26.** Sk. Amanathulla and M. Pal, L(3,2,1)-labeling problems on permutation graphs, Transylvanian Review, 25(14), 2017 3939-3953, **SCOPUS INDEXED.**
- **27.** Sk. Amanathulla and M. Pal, $L(h_1, h_2, ..., h_m)$ -labeling problems on interval graphs, International Journal of Control Theory and Applications, 10(01) (2017) 467-479, **SCOPUS INDEXED.**
- **28.** Sk. Amanathulla and M. Pal, $L(h_1, h_2, ..., h_m)$ -labeling problems on circular-arc graphs, Far East Journal of Mathematical Sciences, 102(6) (2017) 1279-1300, **SCOPUS INDEXED.**

2016:

- **29.** Sk. Amanathulla and M. Pal, L(3,2,1)- and L(4,3,2,1)-labeling problems on circular-arc graphs, International Journal of Control Theory and Applications, 9(34) (2016) 869-884, **SCOPUS INDEXED.**
- **30.** Sk. Amanathulla and M. Pal, L(0,1)- and L(1,1)-labeling problems on circular-arc graphs, International Journal of Soft Computing, 11(6) (2016) 343-350, **SCOPUS INDEXED.**

List of Presentation of Papers in Conference:

1. **Title of article:** Picture Fuzzy Cubic Graphs and its Applications.

Conference details: International Conference on Recent Developments in Research Organized by Department of Mathematics, Tamralipta Mahavidyalaya, West Bengal, June 28, 2023.

2. **Title of article:** Surjective L(2,1)-labeling of paths and interval graphs.

Conference details: 5th Regional Science and Technology Congress, 2022-2023, Jointly Organized by Raja Narendralal Khan Womens College (Autonomous) and Department of Science and Technology and Biotechnology Government of West Bengal, January 13-14, 2023.

3. **Title of article:** Surjective L(3,1)-labeling of circular-arc graphs.

Conference details: Three Days International Seminar on Systematic Approach to Modern Sciences and Its Philosophical Impacts, Organized by Department of Physics, Chemistry, Mathematics, Computer Science, Zoology & Philosophy, Bajkul Milani Mahavidyalaya, Contai, Purba Medinipur, West Bengal., February 6-8, 2020.

4. **Title of article:** Surjective L(2,1)-labeling of cycles and circular-arc graphs.

Conference details: One Day State Level Seminar on Mathematics and its Applications, Organized by Department of Mathematics, Belda College, West Bengal, March 29, 2019.

5. **Title of article:** Surjective L(2,1)-labeling of paths and interval graphs.

Conference details: A National Conference On Engineering Mathematics (TOPAS 2017), Organized by Department of Mathematics, IIT Kharagpur, West Bengal, December 16-17, 2017.

6. **Title of article:** Algorithm to solve L(0,1)- and L(1,1)- labeling problems on circular-arc graphs.

Conference details: National Seminar on Recent Trends in Applied Mathematics and Its Computational Aspects, Organized by Department of Applied Mathematics, Calcutta University, West Bengal, March 25-27, 2015.

7. Title of article: Surjective L(2,1)-labeling of paths and interval graphs.

Conference details: UGC Sponsored National Conference NCFTACM 17, Organized by Department of Mathematics, Vidyasagar University, West Bengal, March 29-30, 2017.

- **8. Title of article:** L(3,2,1)- and L(4,3,2,1)-labeling problems on circular-arc graphs. **Conference details:** National Conference On Optimization and Computational Mathematics (NCOCM 2016), Organized by **Department of Mathematics, Vidyasagar University, West Bengal, March 01-02, 2016.**
- 9. Title of article: Surjective L(2,1)-labeling of cycles and circular-arc graphs.

Conference details: State Level Seminar on Mathematics and its Applications (SLSMA-2019), Organized by Department of Mathematics, Belda College, West Bengal, March 29, 2019.

10. Title of article: Surjective L(3,1)-labeling of circular-arc graphs.

Conference details: Three Days international Seminar On "Systematic Approach To Modern Sciences And Its Philosophical Impacts", Organized by , Bajkul Milani Mahavidyalaya, West Bengal, February 6-8, 2020.

Also, I have attained some Conference and Workshop as listener given below.

11. 3-day National Workshop on Introduction to Algorithms with Special Emphasis to Grapg Algorithms, Organized by Department of Mathematics, Vidyasagar University & ADMA, March 27-29, 2018.

- 12. 13th Annual ADMA Conference and Graph Theory Day-XIII, Organized by Department of Mathematics, SSNCE & ADMA, Tamilnaru, June 8-10, 2017.
- 13. A self-Sponsored Workshop on "Signed Graphs and Semi Graphs", Organized by Department of Mathematics, NIT Durgapur, West Bengal, October 3-7, 2016.
- 14. ADMA Pre-Conference Workshop On Fuzzy Graphs, Organized by Department of Mathematics, B.S. Abdur Rahaman University, Vandalur, Chennai, 600048, June 7-9, 2016.
- 15. National Seminar On "Applied and Computational Mathematics and their Applications", Organized by Department of Mathematics, Vidyasagar University, West Bengal, 7th March, 2008.

Teaching Course Attended:

Programme	Duration	Organized By	
Refresher Course on Teacher Education	23/06/2023 to 08/07/2023	Aligarh Muslim University, Aligarh	
8 th Faculty Induction Programme (FIP)	04/01/2022 to 31/01/2022	Ranchi University, Ranchi	

Award Received:

♦ Best Researcher Award in the International Conference for Award Winners on Engineering, Science and Medicine, held on 12th November 2021, Chennai, India, Organized by VDGOOD Professonal Association.

Other Important Activities:

- **❖** Nodal Teacher, Aikyashree Scholarship, Raghunathpur College.
- **❖** Joint Convenor, Career Counselling Cell, Raghunathpur College.