CURRICULUM VITAE

NAME PRATIMA PANIGRAHI



AFFILIATION Professor

Department of Mathematics
Indian Institute of Technology, Kharagpur
Kharagpur 721302, West Bengal, INDIA

RESEARCH AREA Combinatorics and Graph Theory

EDUCATION

- Ph.D., Indian Statistical Institute (Bangalore Center), Thesis Supervisor: Prof. Bhaskar Bagchi, Thesis Title: On the geometrisabilty of some strongly regular graphs related to polar spaces.
- M.Sc. Mathematics (Sambalpur University), First class (First rank), (Gold medallist)
- B.Sc. Mathematics Hons. (Sambalpur University, G.M.College Sambalpur), First class (Third Rank)
- Intermediate Science (I.Sc.) (Sambalpur University, Womens' College Sambalpur), First Class
- Matriculation (BSE Orissa, Dunguri Pali High School), First Class

FELLOWSHIP ■ NBHM Post-Doctoral Research Fellowship

- NBHM Doctoral Research Fellowship
- Merit Scholarship for securing Third Rank in B.Sc.

EXPERIENCE

Organization	Designation	From	То	Nature of Experience
Indian Institute of Technology Kharagpur	Professor	15.3.2018	Till date	Teaching and research
Indian Institute of Technology Kharagpur	Associate Professor	04.5.2010	14.3.2018	Teaching and research
Indian Institute of Technology Kharagpur	Assistant Professor	14.6.2002	03.5.2010	Teaching and research
Indian Institute of Technology Kharagpur	Postdoctoral fellow(NBHM)	24.7.1998	13.6.2002	Teaching and research

Ph. D. STUDENTS

- 1. **Dr. Debdas Mishra** (degree awarded, 2008), Thesis Title: Graceful lobsters obtained by applying component moving and joining techniques.
- 2. **Dr. Srinivasa Rao Kola** (degree awarded, 2011), Thesis Title: Some results on radio k-coloring of graphs.
- 3. **Dr. Laxman Saha** (degree awarded 2013, joint guidance with Prof. P. Kumar) Thesis Title: Theoretic and algorithmic results on radio k-coloring of graphs.
- 4. **Dr. Sriparna Chattopadhy** (degree awarded, 2015), Thesis Title: Some graph theoretic and spectral results on power graphs of certain finite groups
- 5. **Dr. Nibedita Mandal** (degree awarded, 2017), Thesis Title: Some results on L(2,1)-coloring and irreducible no-hole coloring of graphs.

- 6. **Dr. Fouzul Atik** (degree awarded, 2017), Thesis Title: Some results on spectra of distance and distance signless Laplacian matrices of graphs.
- 7. **Dr. Arpita Das** (degree awarded, 2019) Thesis Title: Some results on normalized spectrum of graphs.
- 8. **Dr. Priyanka Singh** (degree awarded, 2020) Thesis Title: Some results on self-centered graphs and related problems
- 9. **Dr. Aditi Howlader** (degree awarded, 2023) Thesis Title: Distance and generalized distance spectra of some graphs.
- 10. **Dr. Saraswati Bajaj** (degree awarded, 2023) Thesis Title: Universal adjacency spectrum of some graphs associated with algebraic structures.
- 11. Mr. Aqib Khan (continuing)
- 12. Mr. Kush Kumar Singh (continuing)
- 13. Ms. Komal Kumari (continuing)
- 14. Mainak Basunia (continuing)

PAPERS REVIEWED FOR JOURNALS

Discrete Mathematics, Discrete Applied Mathematics, Australian Journal of Combinatorics, Linear Algebra and Its Applications, Linear and Multilinear Algebra, Ars Combinatoria, Electronic Notes on Discrete Mathematics, Mathematica Scientia, Communications in Algebra, Indian Journal of Pure and Applied Mathematics, AKCE International Journal of Graphs and Combinatorics, Lecture Notes on Computer Science, and many more.

SUBJECTS TAUGHT

Discrete Mathematics, Graph Theory and Algorithms, Engineering Mathematics I, Engineering Mathematics II, Topology, Linear Algebra, Abstract Algebra, Matrix Algebra, Information and Coding Theory, Transform Calculus, Operations Research, Number Theory, Preparatory Mathematics, Combinatorics and graph theory.

WORKSHOP ORGANISED

D S T Sponsored National Workshop on "Some Recent Research Directions in Graph Theory", In the Department of Mathematics, IIT Kharagpur, during May 26-30, 2008.

SELECTED INVITED LECTURES

- On Graphs Constructed from Algebraic Structures and their Different kind of Spectra, National Level Faculty Development Program, RBVRR Womens' College, Narayanguda, Hyderabad, Telangana, 2-6 May, 2022.
- 2. On minimal (k,g)-cage graphs and their spectra, International Conference on 'Analysis and Discrete Mathematics', 49th Annual Conference of Odisha Mathematical Society(OMS), 26-27 March 2022, Utkal University, Bhubaneswar.
- 3. Some Popular conjectures in Discrete Mathematics, Webinar, 13th Feb 2021, Jawaharlal College Patnagarh, India.
- 4. Some results on Self-centered Graphs, Virtual Workshop on Pure Mathematics held on 21-25 September 2020, organised by the Department of Pure Mathematics, University of Calcutta.
- 5. An Overview of Recent Results on Irreducible No-hole L(2,1)-coloring of Graphs, International Webinar on Graph Labeling and Applications ICGLA-2020 (Webinar) in memory of late Prof. B.D. Acharya during September 17-19, 2020 at Dep[artment of Mathematics, Goa University.
- 6. Open problems on self-centeredness of generalized Petersen graphs, International Conference on Graph Connections(ICGC 2020), 6-8 August 2020 (Online), Bishop Chulaparambil Memorial College, Kottayam, Kerala, INDIA
- 7. Few Recent Results on Distance Spectra of Distance Regular Graphs, National seminar on "Graph Theory & its Applications", Sambalpur University, Jyotivihar, Burla, Orissa, India, 27-28, February 2020. (Keynote speaker)
- 8. An Outline of some Applications of Graph Theory and Laplacian Spectrum of Zero-Divisor Graphs, National Seminar "On Application of Graph Theory to promote interdisciplinary and multidisciplinary research in allied social science, engineering and technology", Jointly organized by Indian Council of Social Science Research & Department of Mathematics, Sushil Kar College, Ghoshpur, Champahati, South 24 Parganas, West Bengal, April 26-27, 2019 2019
- 9. Bounds on spectral radius of power graphs of some finite groups, International conference on recent trends in graph theory and combinatorics, held at Cochin University of Science and Technology, April 26-29, 2018.
- Lower bounds on radio k-chromatic number of graphs, Academy of Discrete Mathematics and Applications Annual workshop, held at Vidyasagar University, March 26-29, 2018.
- 11. An open problem on Gersgorin Discs of distance matrices of graphs, Visva Bharati Meet on Algebra and its Applications, held at Visva Bharati University, March 23-25, 2018.

- 12. On Irreducible no-hole coloring of hypercubes, 83rd Annual Conference of Indian Mathematical Society, Tirupati University, Dec. 12-17, 2017.
- 13. Some recent results on distance spectra of graphs, Tamkang University, Indo-Taiwan conference, Taiwan, 18-21 July, 2017.
- 14. Developments on distance spectra of distance regular graphs, Alia University, Kolkata, 19-23, Dec, 2016.
- 15. Spectra of Graphs, Department of Mathematics, University of Calcutta (24-25 Feb. 2016).
- On graphs associated with algebraic structures, Vyasanagar College, Jajpur Road, Orissa, Annual conference of Orissa Mathematical Society (Feb. 2015)
- 17. Some open problems on distance regular graphs ,Jadavpur University, Kolkata (2014)
- 18. On Radio k-coloring of graphs, Sambaplur University, Annual conference of Orissa Mathematical Society (2012)
- 19. On unit distance strongly regular graphs, Annual Conference of ADMA, V V V College, Virudhunagar, Madurai, Tamilnadu (2012)
- 20. On Colouring of Graphs, University of Calcutta (2011)
- 21. m-distance graceful trees, Banaras Hindu University (2011)
- 22. On Radio k-colorings of powers of cycle ,Cochin University of Science and Technology (2010)
- 23. Some variations of coloring of graphs ,University of Calcutta, (2009)
- 24. On some combinatorial problems ,Institute of Mathematics and Applications, Bhubaneswar,(2009)
- 25. A survey on radio k-coloring of graphs , Kalasalingam University, Krisnankoil, Madurai, Tamilnadu(2008)
- 26. Partial ordering relations ,Raja Narendralal Khan Womens' College, Midnapore, (2008)
- 27. Graph Algorithms , NERIST, Nirjuli, Itanagar, (2006)
- 28. On Radio k-labelling Numbers of Paths , Kalasalingam University, Krishnankoil, Tamilnadu, (2006)

List of Publications

I. Journal Papers

- **1.** Aqib Khan, Pratima Panigrahi, Swarup Kumar Panda, A study on determination of some graphs by Laplacian and signless Laplacian permanental polynomials, AKCE International Journal of Graphs and Combinatorics, 1-12, 2023
- 2. Aditi Howlader, and Pratima Panigrahi, On the distance spectrum of generalized balanced trees, Linear and Multilinear Algebra, 2023, 1-23, 2023, DOI: https://doi.org/10.1080/03081087.2023.2187014
- **3.** Saraswati Bajaj and Pratima Panigrahi: Universal adjacency spectrum of the looped zero divisor graph for a finite commutative ring with unity, Asian-European Journal of Mathematics, Vol. 16, No. 6 (2023) 2350100,2023, World Scientific Publishing Company, https://doi.org/10.1142/S1793557123501000
- **4.** Arpita Das and Pratima Panigrahi: Independence number and the normalized laplacian eigenvalue one, Discrete Mathematics, Algorithms and Applications, 2023, https://doi.org/10.1142/S1793830922501749
- **5.** Saraswati Bajaj and Pratima Panigrahi: Universal adjacency spectrum of the looped zero divisor graph of Zn, Bulletin of the Malaysian Mathematical Sciences Society, 45,2017-2039, 2022.
- **6.** Nibedita Mandal and Pratima Panigrahi: L(2,1)-coloring and Irreducible No-hole Coloring of Lexicographic Product of Graphs, AKCE International Journal of Graphs and Combinatorics, Vol19(2)133-140(2022). https://doi.org/10.1080/09728600.2022.2084355
- **7.** Aditi Howlader and Pratima Panigrahi: On the distance spectrum of minimal cages and associated distance biregular graphs, Linear Algebra and Its Appl. 636, 115-133 (2022), https://doi.org/10.1016/j.laa.2021.11.014.(SCI)
- **8.** Saraswati Bajaj and Pratima Panigrahi: Universal adjacency spectrum of zero divisor graph on the ring Zn and its complement, AKCE International Journal of Graphs and Combinatorics, Vol. 19, issue 1, (2022), 1-17. DOI:10.1080/09728600.2021.2001701(SCIE)
- **9.** Saraswati Bajaj and Pratima Panigrahi: On the adjacency spectrum of zero divisor graph of ring Z_n, Journal of Algebra and its Applications, 21(10), 2250197, (2021) DOI: 10.1142/S0219498822501973(SCIE)
- **10.** Arpita Das, Pratima Panigrahi: "Construction of simultaneous cospectral graphs for adjacency, Laplacian and normalized Laplacian matrices", Kragujevac Journal of Mathematics, 47(6) (2023), 947-964, to appear

- **11.** Arpita Das and Pratima Panigrahi: Normalized Laplacian spectrum of some Q-coronas of two regular graphs, Discussiones Mathematicae-General Algebra and Applications , 41(1) (2021), 127-138. (Scopus)
- **12.** Aditi Howlader and Pratima Panigrahi: Distance and Distance Signless Laplacian Spectrum of Some k-Partitioned Transmission Regular Graphs, Indian Journal of Discrete Mathematics, Vol 6 (2),141–163,2020.
- **13.** Nibedita Mandal and Pratima Panigrahi: L(2,1)-colorings and Irreducible No-hole Colorings of the Direct Product of Graphs, *Discrete Applied Mathematics*, Vol 280, 186-200, 2020.(SCI) ELSEVIER.
- **14.** Nibedita Mandal and Pratima Panigrahi: On irreducible no-hole L(2, 1)-coloring of Cartesian product of trees with paths, AKCE International Journal of Graphs and Combinatorics, 2020, //doi https.org/10.1016/j.akcej.2019.12.023, Taylor and Francis
- **15.** Priyanka Singh, Pratima Panigrahi and Aakash Singh: On self-centeredness of generalized Petersen graphs, Lecture notes in computer science, 12016(2020), 141-155.
- 16. Laxman Saha and Pratima Panigrahi: A new graph radio k-coloring algorithm, Discrete Mathematics, Algorithms and Applications, Vol. 11 (1), 2019 https://doi.org/10.1142/S1793830919500058 (World Scientific, ESCI, SCOPUS)
- **17.** Arpita Das and Pratima Panigrahi, New classes of simultaneous cospectral graphs for adjacency, Laplacian and normalized Laplacian matrices, *Kragujevac Journal of Mathematics*, 43(2), 303-323, 2019.
- **18.** Fouzul Atik and Pratima Panigrahi: Bounds on maximal and minimal entries of the \$p\$-normalized principal eigenvector of the distance and distance signless Laplacian matrices of graphs, *Graphs and Combinatorics*, Vol 34, 1019-1035, 2018. (SCIE) Springer.
- **19.** Fouzul Atik and Pratima Panigrahi: On the distance and distance signless Laplacian eigenvalues of graphs and the smallest Gersgorin disc, The *Electronic Journal of Linear Algebra*, Vol 34, 191-204, 2018. (SCIMago) International Linear Algebra Society.
- **20.** Sriparna Chattopadhyay, Pratima Panigrahi, Fouzul Atik: Spectral radius of Power graphs on certain finite groups, *Indagationes Mathematicae*, 29(2) (2018), 730-735. (SCOPUS) ELSEVIER
- **21.** Nibedita Mandal and Pratima Panigrahi: On Irreducible No-hole L(2,1)-Coloring of Edge-multiplicity-paths-replacement graphs, *Discussiones Mathematicae Graph Theory*, 38(2) (2018), 525-552. (SCIE)
 - **22.** Arpita Das and Pratima Panigrahi: Normalized Laplacian Spectrum of Some R-coronas of Two Regular Graphs, *Southeast Asian Bulletin of Mathematics*, 42(6) (2018), 833-844.

- **23.** Arpita Das and Pratima Panigrahi, Spectra of R-vertex join and R-edge join of two graphs, *Discussiones Mathematicae General Algebra and Applications*, 38(1), (2018), 19-32.(*Scopus*)
- **24.** Arpita Das and Pratima Panigrahi, Normalized Laplacian spectrum of some subdivision-joins and R-joins of two regular graphs, *AKCE International Journal of Graphs and Combinatorics*, 15(3) (2018), 229-312.(ELSEVIER)
- **25.** Nibedita Mandal and Pratima Panigrahi: On Irreducible No-hole L(2,1)-Coloring of Subdivision of Graphs, *Journal of Combinatorial Optimization*, 33 (2017),1421-1442. (SCIE)
- **26.** Arpita Das and Pratima Panigrahi: Normalized Laplacian spectrum of some subdivision-coronas of two regular graphs, *Linear and Multilinear Algebra*, 65(5) (2017), 962–972. (SCIE)
- **27.** Arpita Das and Pratima Panigrahi: Normalized Laplacian spectrum of different type of coronas of two regular graphs, *Kragujevac Journal of Mathematics*, 41(1) (2017), 57–69.
- **28.** Priyanka Singh and Pratima Panigrahi: Some results on self-centerdness and minimal self –centeredness of power and product graph, Journal of Orissa Mathematical Society, 36 (2017), 81-95.
- **29.** Sriparna Chattopadhyay and Pratima Panigrahi: On sum of Powers of the Laplacian Eigenvalues of Power Graphs of certain Finite Groups, *Electronic Notes in Discrete Mathematics*, 63 (2017), 137-143. (ELSEVIER)
- **30.** Sriparna Chattopadhyay and Pratima Panigrahi: Some structural properties of power graphs and k-power graphs of finite semigroups, *Journal of Discrete Mathematical Sciences and Cryptography*, 20(5) (2017), 1101-1119.(TAYLOR AND FRANCIS)
- **31.** Priyanka Singh and Pratima Panigrahi: On self-centeredness of tensor product of some graphs, *Electronic Notes in Discrete Mathematics*, 63 (2017), 333-342. (ELSEVIER)
- **32.** Nibedita Mandal and Pratima Panigrahi: L(2,1)-colorings and Irreducible No-hole Colorings of Cartesian Product of Graphs, *Electronic Notes in Discrete Mathematics*, 63 (2017) 343-352. (ELSEVIER)
- **33.** Nibedita Mandal and Pratima Panigrahi: On irreducible no-hole L(2,1)-labelings of hypercubes and triangular lattices, *Lecture Notes in Computer Science*, Vol 9602, 254-263, (2016).

- **34.** Fouzul Atik and Pratima Panigrahi: Distance spectral radius of k-partitioned transmission regular graphs, *Lecture Notes in Computer Science*, Vol 9602, 26-36, (2016).
- **35.** Priyanka Singh and Pratima Panigrahi: On self-centeredness of product of graphs, *International Journal of Combinatorics*, Article ID 2508156, http://dx.doi.org/10.1155/2016/2508156 (HINDAWI)
- **36.** Nibedita Mandal and Pratima Panigrahi: Solutions of Some L(2,1)-coloring Related Open Problems, *Discussiones Mathematicae Graph Theory*, 36, 279-297,2016. **(SCIE)**
- **37.** Srinivasa Rao Kola and Pratima Panigrahi: A lower bound for radio k-chromatic number of an arbitrary graph, *Contributions to Discrete Mathematics*, Vol. 10, No. 2, 45-56, 2016.
- **38.** Fouzul Atik and Pratima Panigrahi: Families of graphs having few distinct distance eigenvalues with arbitrary diameter, *Electronic Journal of Linear Algebra*, Vol 29, 194-205, 2015.
- **39.** Fouzul Atik and Pratima Panigrahi: On the distance spectrum of distance regular graphs, *Linear Algebra and Its Applications*, 478 (2015), 256-273. **(SCIE)**
- **40.** Srinivasa Rao Kola and Pratima Panigrahi: Radio Numbers of some caterpillars, *Electronic Notes in Discrete Mathematics*, 48(2015),289-296. (ELSEVIER)
- **41.** Laxman Saha and Pratima Panigrahi: On the radio number of square of graphs, *Electronic Notes in Discrete Mathematics*, 48(2015), 205-212. (ELSEVIER)
- **42.** Sriparna Chattopadhyay and Pratima Panigrahi: Some relations between power graphs and Cayley graphs, *Journal of Egyptian Mathematical Society*, 23(3),457-462, 2015. (ELSEVIER)
- **43.** Sriparna Chattopadhyay and Pratima Panigrahi: On Laplacian spectrum of power graphs of finite cyclic and dihedral groups, *Linear and Multilinear Algebra*, 63 (2015), 1345-1355. (SCIE)
- **44.** Laxman Saha and Pratima Panigrahi: A Lower bound for radio k-chromatic number, *Discrete Applied Mathematics*, Vol. 192 (2015), 87-100. **(SCI)**
- **45.** Srinivasa Rao Kola and Pratima Panigrahi: Radio Numbers of Certain m-distant Trees, Journal of Discrete Mathematics (2014), Article ID 486354, http://dx.doi.org/10.1155/2014/486354(HINDAWI).
- **46.** Sriparna Chattopadhyay and Pratima Panigrahi: Connectivity and Planarity of Power Graphs of Finite Cyclic, Dihedral and Dicyclic Groups, *Algebra and Discrete Mathematics*, Vol. 18 (2014).

- **47.** Bhaskar Bagchi , Pratima Panigrahi, Uma kant Sahoo: On the strongly regular unit distance graphs, *Journal of Combinatorial Mathematics and Combinatorial Computation*, Vol. 89 (2014), 293-302. (CHARLS BABBAGE RESEARCH CENTER)
- **48.** Sriparna Chattopadhyay and Pratima Panigrahi: Power Graphs of Finite Groups of Even Order, *Communications in Computer and Information Science*, Vol. 283 (2012) 62-67.
- **49.** Laxman Saha and Pratima Panigrahi: A graph k-coloring algorithm, *Lecture Notes in Computer Science*, 7643(2012), 125-129.
- **50.** Laxman Saha and Pratima Panigrahi: On the radio number of toroidal grids, *Australian Journal of Combinatorics*, 55 (2013), 273-288. (COMBINATORIAL MATHEMATICS SOCIETY OF AUSTRALIA)
- **51.** Laxman Saha and Pratima Panigrahi: Antipodal Number of Some Powers of Cycle, *Discrete Mathematics*, Vol.312, Issue 9 (2012) 1550-1557. **(SCI)**
- **52.** P. Panigrahi and R. N. Mohapatra: All primitive strongly regular graphs except four are hyperenergetic, *Applied Mathematics Letters*, Vol.24 (2011) 1995-1997. **(SCI)**
- **53.** Laxman Saha, Pratima Panigrahi and Pawan Kumar: On Radio Number of Power of Cycles, *Asian-European Journal of Mathematics*, Vol.4(3) (2011), 523-544. (WORLD SCIENTIFIC)
- **54.** Laxman Saha, Pratima Panigrahi and Pawan Kumar: "Improved Bounds for Radio k-Chromatic Number of Hypercube Qn," *International Journal of Mathematics and Mathematical Sciences*, volume 2011, doi: 10.1155/2011/961649, (2011). (HIANDAWI).
- **55.** D. Mishra and P. Panigrahi: Some new classes of graceful lobsters obtained by applying inverse and component moving transformations, *International Journal of Mathematics Trends and Technology*, Vol.1, Issue 2, pp 6-16, 2011.
- **56.** Srinivasa Rao Kola and P. Panigrahi: Improved lower bounds for Radio k-chromatic number of Hypercube Q_n, *Computers and Mathematics with Applications*, Vol. 60(2010), 2131-2140. (SCI)
- **57.** D. Mishra and P. Panigrahi: "Some New Classes of Graceful Lobsters Obtained from Diameter Four Trees, *Mathematica Bohemica*, Vol.135(3) (2010), 257-278. (Academy of Sciences of the Czeck Republic, Since 1872)
- **58.** P. Panigrahi: Graceful Labelling of some 3-distant trees, *Utilitas Mathematica*, Vol.83 (2010), 81-93. (SCIE)
- **59.** P. Panigrahi and Srinivasa Rao Kola: Improved Bounds for Some of the Radio k-chromatic numbers of Paths, *Journal of Combinatorial Mathematics and Combinatorial Computation*, Vol.69 (2009), 139-144. (CHARLS BABBAGE RESEARCH CENTER)

- **60.** Srinivasa Rao Kola and P. Panigrahi: Nearly antipodal chromatic number of a path P_n, *Mathematica Bohemica*, Vol 134, No. 1 (2009), 77-86. (Academy of Sciences of the Czeck Republic, Since 1872)
- **61.** D. Mishra and P. Panigrahi: Some New Classes of Graceful Lobsters Obtained from Diameter Four Trees, *Utilitas Mathematica*, Vol.80(2009) 183-209. **(SCIE)**
- **62.** P. Panigrahi and D. Mishra: Larger Graceful and Interlaced Lobsters Obtained by Joining Smaller Ones, *South East Asian Bulletin of Mathematics*, Vol. 33 (2009), 509-525.
- **63.** Srinivasa Rao Kola and P. Panigrahi: Radio (n-4)-chromatic number of the Path P_n, *AKCE International Journal of Graphs and Combinatorics*, Vol.6, No. 1(2009), 209-217. (ELSEVIER)
- **64.** P. Panigrahi: A survey on radio k-colorings of graphs, *AKCE International Journal of Graphs and Combinatorics*, Vol. 6, No. 1(2009), 161-169. (ELSEVIER)
- **65.** P. Panigrahi: An Association Scheme Constructed from the Mc-Laughlin Graph, *International Journal of Mathematics and Copmutation*, Vol. 1, 8(2008), 17-28.
- **66.** P. Panigrahi and J. Saha: On Harmoniousness of Hypercubes, *AKCE International Journal of Graphs and Combinatorics*, Vol. 5, No. 2(2008), 189-198. (ELSEVIER)
- **67.** P. Panigrahi: Graceful Labelling of a Class of Superstars, *International Journal of Mathematical Modeling, Simulation and Applications*, Vol. 2, No. 3, 2009.
- **68.** D. Mishra and P. Panigrahi: Graceful Labeling of Some classes of Diameter Six and Diameter Seven Trees, *ICFAI University Journal of Computational Mathematics*, Vol 1, No. 3, 2008, 7-16.
- **69.** D. Mishra and P. Panigrahi: Some Graceful Lobsters with All Three Type of Branches Incident on the Vertices of the Central Path, *Computers and Mathematics with Applications, Vol. 56(2008), 1382-1394.* **(SCI)**
- **70.** P. Panigrahi and D. Mishra: Graceful Lobsters Obtained From Diameter Four Trees Using Partitioning Technique, *Ars Combinatoria*, Vol.87(2008), 291-320. (SCI)
- **71.** D. Mishra and P. Panigrahi: Some Graceful Lobsters with Both Odd and Even Degree Vertices on The Central Path, *Utilitas Mathematica*, Vol.74(2007), 155-177. **(SCIE)**
- **72.** D. Mishra and P. Panigrahi: Graceful Lobsters Obtained by Component moving of Diameter Four Trees, *Ars Combinatoria*, Vol. 81 (2006), 129-146. **(SCI)**
- **73.** D. Mishra and P. Panigrahi: Graceful Lobsters Obtained by Partitioning and Component moving of Diameter Four Trees, *Computers and Mathematics with Applications*, Vol. 50 (2005), 367 380. **(SCI)**

- **74.** R. Badrinath and P. Panigrahi: Graceful Labelling of Balanced Stars of Paths, *Electronic Notes in Discrete Mathematics*, Vol. 15 (2003), 31-33. (ELSEVIER)
- **75.** P. Panigrahi: The Non Collinearity Graph of the O^- (8, 2) Quadric Is Uniquely Geometrisable, *Designs Codes and Cryptography*, Vol. 20(2000), 307 317. (SCI)
- **76.** P. Panigrahi: The Diameter Graph of the Root System E₈ is Uniquely Geometrisable, *Geometriae Dedicata*, Vol. 78 (1999), 121 141. (SCI)
- **77.** P. Panigrahi: The Collinearity Graph of the $O^-(8, 2)$ Quadric Is Not Geometrisable, *Designs Codes and Cryptography*, Vol. 13 (1998), 187 198. (SCI)

II. Conference Papers:

- 1. Pratima Panigrahi and Saraswati Bajaj: An outline of some appications of graph theory and Laplacian spectrum of zero divisor graphs, Proceedings of National seminar on Application of graph theory to promote interdisciplinary and multidisciplinary research in allied social science, engineering and technology, April 26-27, 2019, Susil Kar college, Champhati, ISBN: 978-93-91741-08-2, 2021, 8-20.
- 2. Priyanka Singh and Pratima Panigrahi: Almost self-centered index of some graphs, Ambient Communications ans Computer Systems (Springer), 1097 (2020),181-192.
- 3. Srinivasa Rao Kola and Pratima Panigrahi: "On a Conjecture for Radio kchromatic Number of Paths", Presented in International Conference on Applied Mathematics and Theoretical Computer Science, 24-25 January 2013, published in the conference proceedings and Bonfiring Digital Library.
- 4. Pratima Panigrahi and Uma kant Sahoo: Investigations on unit distance property of Clebsch graph and its complement, *Proceedings of the world congress on engineering 2012*, 41-43 (2012).
- 5. Srinivasa Rao Kola and Pratima Panigrahi: "Improved Upper Bounds for Some of the Radio k-chromatic Number of Paths", Presented at XXI Congress and National Conference on Applications of Mathematics in Engineering, Physical and Life Sciences, 7-9 December 2012, Andhra Pradesh Society for Mathematical Sciences.
- 6. Kola, Srinivasa Rao; Panigrahi, Pratima; , Radio numbers of some classes of GP(n,1) and Cin(1,r), INDICON 2011 Annual IEEE, 16-18, 2011 doi:10.1109/INDCON.2011.6139450,pp.1-6
- 7. Pratima Panigrahi: Graceful Operations on Trees, Graph Theory: Research Directions, edited by P. Panigrahi and S. B. Rao, Narosa Publishing House, 2011, pp. 59-74, ISBN 978-81-7319-997-4.

- 8. Pratima Panigrahi: Some Open Problems on Strongly regular graphs: Graph Theory:Research Directions, by P. Panigrahi and S. B. Rao, Narosa Publishing House, 2011, pp. 135-155, ISBN 978-81-7319-997-4.
- 9. D. Mishra and P. Panigrahi: Graceful Lobsters Obtained from Graceful Diameter Four and Six Trees, Proceedings of International conference on Analysis and Discrete Structure, Narosa Publishers 2006, pp 78-88.
- D. Mishra and P. Panigrahi: Graceful Labeling of Some Classes of Lobsters, Proceedings of U.G. C. Sponsored National Seminar "Recent advances on applied mathematics and applications", held at dyasagar University, 18- 19 March, 2004.43- 47.
- 11. P. Panigrahi: An Association Scheme associated with the regular cliques of the Mc-Laughlin Graph, Recent Trends in Mathematical Sciences, Narosa Publisher, New Delhi, 2000, pp 86-93.

III. Publication of workshop Proceeding

Graph Theory: Research Directions, Edited by Pratima Panigrahi and S. B. Rao, Narosa Publishing House, 2011, ISBN 978-81-7319-997-4.

IV. Institute Responsibilities

- 1. Professor Incharge for Physically Disabled students (2020-)
- 2. Institute ICC member(2019-)
- 3. Central Library SLAC member (2019-2022)
- 4. FMC member (2019-2021)
- 5. Incharge of HOD, Mathematics (20th May 2019 to 20th July 2019)
- 6. Between 2004 to 2014 (little break within): Assistant warden of SN, IG, MT, RLB, and SAM Hall of Residences.