

Publications:

1. *On Mod Difference Labeling of Digraphs*, AKCE International journal of Graphs and Combinatorics, Vol 6-1(2009), 79-84. (With Dr. S. M. Hegde)
2. *Sum Hypergraph Based Access Structure for Secret Sharing Schemes Using CRT*, Proceedings of ICMCM-09, PSG College of Technology, Editors: R.Nadarajan, G A Vijayalakshmi Pai and G Saisundarakrishnan, Coimbatore, Narosa Publishing House, New Delhi, India (2009), 388-393. (With Dr. S. M. Hegde).
3. *Integer signatures for Digraphs*, Proceedings of MIMS – 2011, NIT Calicut, Editors: Dr. S Panda.
4. *Sum Hypergraph Based Access Structure for Secret Sharing Scheme*, NITK Research Bulletin, (With Dr. S. M. Hegde)
5. *An Algorithm for sum labeling of graphs*, NITK Research Bulletin, (With Dr. S. M. Hegde)
6. *Some Structural properties of mod difference digraphs*, communicated, (With Dr. S. M. Hegde) (revised)
7. *Mod difference labeling of tournaments*, communicated, (With Dr. S. M. Hegde) (revised)
8. *Zero-divisor difference digraphs*, communicated, (With Dr. S. M. hedge) (revised)
9. *Integer Signatures of Oriented Cycles and wheels*, communicated, (With Dr. S. M. hedge)

Papers Presented in Conferences

1. 8th State level convention of Indian Society for Technical Education, held at KVG College of Engineering, Sullia, Karnataka, India, 18-19 November, 2005, “Role of basic sciences in sustainable development in rural India”.
2. National seminar on Graph Theory and its Applications, held at **St. Aloysius College, Mangalore, Karnataka, India**, 4-6 January, 2007. “Using graph labeling to store linkages in relational databases”.
3. National Conference on Combinatorics and Graph Theory, held at **Saurashtra University, Rajkot, Gujarat, India**, 10-12 March, 2007. “Application of sum graphs in RDBMS”.
4. UGC sponsored seminar on Graph Theory and its Applications, held at **Milagres College, Kallianpur, Karnataka, India**, 1-2 August, 2008. “An analytical study of sum labeling and its applications”.
5. 5th International Workshop on Graph Labelings, held at **Kalasalingam University, Krishnankoil, Tamilnadu, India**, 7-10, January, 2009. “On mod difference labeling of

digraphs”.

6. National Conference on Discrete Mathematics and its Applications to Science and Social Systems, held at **Govindadasa College, Surathkal, Karnataka, India**, 26-28 February, 2009. “Sum hypergraph based access structure in secret sharing schemes”. (Got the best paper presentation award).
7. 24th Annual Conference of Ramanujan Mathematical Society, held at **Indian Statistical Institute, Bangalore, India** “Zero-divisor difference digraphs”
8. 33rd Australasian Conference on Combinatorial Mathematics and Combinatorial Computing, held at **University of Newcastle, Australia**, 7-11 December, 2009, “Mod difference labeling of tournaments” (Travel sponsored by Department of Science and Technology, Government of India)
9. International Congress of Mathematician 2010, **Hyderabad, India**, 19 - 27 August, 2010, “Mod difference digraphs”. (Travel and Registration sponsored by Organizing Committee of ICM)
10. International Conference on Current Trends in Graph Theory and Combinatorics, **CUSAT, Cochin, India**, 12 - 15 August, 2010. “Applications of Sum and difference labeling of graphs” (Travel sponsored by the organizers).
11. International Conference on Emerging Trends in Mathematics and Computer Applications, **Mepco Schlenk Engineering College, Sivakasi**, 16 - 18 December, 2010. “Sum Hypergraph based access structure in Shamir’s Secret Sharing Scheme”.
12. International Conference on Mathematical Modeling and Applications to Industrial Problems, (MMIP-2011), **National Institute of Technology Calicut**, 28 – 31, March, 2011, “Integer Signatures for Directed Graphs”.
13. 7th Shanghai Conference on Combinatorics, **Shanghai Jiao Tong University, Shanghai, China**, 24 – 28 May, 2011, “Integer Signatures of Oriented Cycles and Wheels” (Travel partially sponsored by CICS-INSA, Chennai).
14. SIAM Conference on Discrete Mathematics – 2012, **Dalhousie University, Halifax, Nova Scotia, Canada**, 18 – 21 June, 2012, “n-Tournaments that have n-Integer Signatures”

Conferences and workshops Attended

1. Indocrypt 2005 held at Indian Institute of Science, Bangalore, 10-12 December 2005.
2. One day workshop on Mathematical Tools for Engineering Applications, held at KVG College of Engineering, Sullia, Karnataka, India, 13th May, 2006
3. Workshop on Effective Teaching of Mathematics at PUC level held at National Institute of Technology Karnataka Surathkal, India, 3-4 March, 2007.
4. 22nd Annual Conference of Ramanujan Mathematical Society, held at National Institute of Technology Karnataka Surathkal, India, 6-8 June, 2007.
5. 17th Symposium on Applied algebra, Algebraic algorithms, and Error Correcting Codes (AAECC) and the Instructional Workshop Applied Algebra, held at Indian Institute of Science, Bangalore, 16-20 December 2007.
6. Pre-Conference workshop on Discrete Mathematics, held at University of Mysore, India, 2-5 June, 2008.
7. International Conference on Discrete Mathematics, held at University of Mysore, India, 06-10 June, 2008.
8. IEEE sponsored premier interaction and networking domain in the Signal Processing held at

- National Institute of Technology Karnataka Surathkal, India, 30th August, 2008.
- 9 UGC sponsored seminar on Graph Theory, held at Mahatma Gandhi Memorial College, Udupi, Karnataka, India, 27-28 March, 2009.
 - 10 Dr. Homi J. Bhabha Birth Centenary Workshop on Introduction to Graph and Geometric Algorithms held at Indian Institute of Science, Bangalore, India, 15-18 July 2009.
 - 11 39th Annual Convention of Indian Society for Technical Education and National Conference on Managing Technical Education for Leveraging Innovation and Entrepreneurship, held at National Institute of Technology Karnataka Surathkal, India, 18-20 December, 2009.
 - 12 Attended CIMPA-UNESCO-NEPAL research school on “Number Theory in Cryptography and its Applications” held at **Kathmandu University, Dhulikel, Nepal** during 19-31, July 2010. (Registration and accommodation sponsored by CIMPA, France and Travel sponsored by National Board for Higher Mathematics, Department of Atomic Energy, Government of India)
 - 13 Attended ACCS workshop on Adaptive Computing held at Indian Institute of Science, Bangalore on 14th of September, 2012.
 - 14 Participated in International Conference on Legacy of Ramanujan held at **University of Delhi** during 16th December – 22nd December, 2012. (Travel and accommodation are sponsored by the organizing committee)
 - 15 Participated in annual CSI convention and International conference on Intelligent Infrastructure held at **Science City, Kolkata** during 1-2, December, 2012. Awarded best paper presenter in international conferences award by CSI.
 - 16 Participated in one day workshop on “cloud computing” organized by TCS in association with BITES held at SIT Mangalore on 8th February, 2013
 - 17 Participated in annual conference of Ramanujan Mathematical Society held at Reva Institute of Technology and Management, Bangalore during 27-30, June, 2013.
 - 18 Participated in workshop on “Intellectual Property and Innovation Management in Knowledge Era” organized by National Research Development Corporation, New Delhi at KVG College of Engineering, Sullia on 12th November, 2013.
 - 19 Participated in International Workshop on “Lattice Based Cryptography” held at Microsoft Research Labs India, Bangalore on 1st December, 2013.
 20. Attended NBA workshop on "OUTCOME BASED EDUCATION AND ACCREDITATION" organized by SIT on 3rd February, 2014 and 22nd to 24th February, 2014.

Invited Talks in Conferences and Workshops

- 1 Guest lecture on “Secret Sharing Scheme” in KVG College of Engineering, Sullia, on 22nd May, 2010
- 2 Guest lecture on “Share the secret to secure” in Srinivas Institute of Management Studies, Mangalore, on 24th April, 2012
- 3 Gave a lecture with demonstration on “Latex – documentation software” in St. Joseph Engineering College, Mangalore on 22nd May, 2013
- 4 Gave a lecture with demonstration on “Latex – documentation software” in Poornaprajna College, Udupi on 13th July, 2013
- 5 Invited talk on “Applications of Graph labeling and coloring in Cryptography” at National Conference on Graph Coloring and its Applications held at Dr. Ambedkar Institute of

- Technology, Bangalore during 27-28, July, 2013
6. Participated as a resource person and gave lecture/demonstration on Mathematical Softwares for formal models in a TEQIP sponsored workshop on “Mathematical Software for Computer Applications” held at Dr. Ambedkar Institute of Technology, Bangalore from 28th to 29th April, 2014.
 7. Chaired a technical paper presentation session at MANEGMA-2014, a national level conference held at SIMS Pandeshwar on 9th April, 2014.
 8. Gave a guest lecture on “Personality Development and Education” in Value based education camp held at Srinivas College of Education, Bangalore on 9th May, 2014.
 9. Gave an invited talk on “Graph theory in image processing and other applications” in the National Conference on Current Trends in Scientific Research for Engineering Applications held at St. Joseph Engineering College on 17th and 18th July, 2014.
 10. Gave a guest lecture on “Applications of Number Theory” at Government First Grade College, Vamadapadavu on 12th August, 2014.

Details of fellowships:

DST International Travel Grant (Full airfare + Registration fees + Visa fees) to participate and Present research paper at 33rd ACCMCC held at University of Newcastle, Australia in December 2009.

NBHM Travel grant (Full airfare) and CIMPA France grant (Registration + accommodation) to participate in CIMPA-UNESCO-NEPAL research School on "Number Theory in Cryptography and its Applications" held at Kathmandu University, Nepal in July, 2010

CICS travel grant to participate and present a paper in 7SHCC held at Shanghai Jiao Tong University, Shanghai, China in May, 2011