



---

## CONTENTS

### **PERSONAL PROFILES:**

- Name and address

### **ACADEMIC PROFILES:**

- Educational Qualifications
- Other Examinations completed
- Teaching Experiences
- Level of teaching undertaken
- Evaluation works done in different University
- Abroad visit for academic purpose
- Honors & Awards
- University Administrative & Evaluation works
- Membership of Different Academic and Administrative Bodies

### **RESEARCH ACTIVITIES PROFILES:**

- Major Fields of Research interest
- M. Phil./Ph. D., Awarded
- Research Projects
- Conferences/ Seminars/symposiums participated
- Workshop participated
- Refreshers Course/ Orientation Programme participated
- Invited Talks/ Research paper presented in National and International Conferences / Seminars / Symposiums/ Workshops
- Conference/Seminar/Other Activities Organized
- Research Publications
- Books published as an editor
- Total number of reviewed paper
- Referee/ Reviewer of different Journals/Proceedings

## PERSONAL PROFILES

**Name** : **Dr. B. CHALUVARAJU**

**Residential Address** : D.No.43, 2<sup>nd</sup> Floor, Marenahalli,  
Near Maheshwaramma Temple, Vijayanagara,  
Bangalore-560 043, Karnataka.

**Phone & E-mail** : 09449270389(M), 0821-6558621(R)  
bchalugaraju@gmail.com

## ACADEMIC PROFILES

**Educational Qualification:** M.Sc., Ph. D. (University of Mysore)

### Other Examinations Completed:

- First Aid Nature Cure.
- Karnataka State Lower & Higher Grade Drawing Examinations.
- Hindi Madhayam, Dakshina Barathi Hindi Prachara Samithi, Madras.

### Teaching Experiences:

Sl. No.	Designation & Nature of Employment	Place of Work	Periods
1	Lecturer	D. Banumaiah's First Grade College, Mysore	05-10- 1999 to 03-03-2003
2	Lecturer/Asst. Prof. Asst. Prof. (Sr. Scale)	Dept. of Mathematics Bangalore University	05-03-2003 to 19-10-2012
3	Professor & Chairman	Dept. of Mathematics Tumkur University	20-10-2012 to 20-10-2014
4	Asst. Prof. (Sr. Scale)	Dept. of Mathematics Bangalore University	20-10-2014 to 22-06-2015
5	Associate Professor	Dept. of Mathematics Bangalore University	22-06-2015 to till date

### Level of teaching undertaken:

B. Sc. (Mathematics), B. E. (Engineering Mathematics), M. E. ( Advanced Engineering Mathematics), M. Sc. (Algebra, Linear algebra, Functional analysis, Discrete Mathematics, Graph theory, Differential Geometry, Topology, Numerical Analysis, Measure & Integration, Real and Complex Analysis.) & MCA (Discrete Mathematical Structure and Computer Orientated numerical analysis).

### **Evaluation works done in different Universities:**

- [1] Bangalore University, Bangalore
- [2] Tumkur University, Tumkur
- [3] University of Mysore, Mysore
- [4] Gulbarga University, Gulbarga.
- [5] Mangalore University, Mangalore
- [6] Kuvempu University, Shivmoga.
- [7] Karnataka University, Dharwad
- [8] S. V. University, Tirupati.
- [9] S. P. M. University, Tirupati.
- [10] Dravidian University, Kuppam.
- [11] Pondicherry University, Pondicherry.
- [12] Rani Chennamma University, Belgaum
- [13] V. S. K. University, Bellary.
- [14] KSOU, Mysore.
- [15] RIE, Mysore
- [16] Davanagere University, Davanagere.
- [17] Christ University, Bangalore.

### **Abroad visit for academic purpose:**

- [1] Department of Mathematics, Uludag University, Bursa, Turkey (2008).

### **Honors & Awards:**

- [1] Reviewer of American Mathematical Society (AMS), USA (from 2009 to till date).
- [2] Bharat Shiksha Ratan Award received 14<sup>th</sup> Feb. 2011 from GSHEG, Speaker Hall, Constitution Club of India, New Delhi.
- [3] Best Innovative Research paper Presenter, in Recent Discoveries in Protein Science, on 30<sup>th</sup> March 2013 at KSHEC, Govt. of Karnataka, Bangalore.

### **University Administrative & Evaluation works:**

- [1] Assistant Custodian of Bangalore University PG –Examination (M.Com, MTA & MFA) during December/January-2005 & 06.

- [2] Assistant Custodian of Bangalore University PG-Examination (Foreign Languages and Kannada Certificate Courses) during May/June-2006.
- [3] Assistant Custodian of Bangalore University PG -Examination (M.Sc.- Chemistry and Bio-chemistry) during December/January-2006& 07.
- [4] Deputy Custodian of Bangalore University PG-Examination (M. Sc.,-Mathematics) in December/January-2007& 08.
- [5] B.O. E. Member of Bangalore University (UG - Professional).
- [6] B.O. E. Member of Bangalore University (PG - Professional).2008-2009 Exams
- [7] B.O. E. Chairman of Bangalore University (UG - Professional), 2009-2010 Exams.
- [8] Coordinator of Challenge Valuation Unit, December 2009/January 2010 Exams, Bangalore University, Bangalore.
- [9] B.O. E. Chairman of Bangalore University (PG – Correspondence), 2010-11 Exams.
- [10] Coordinator, PG-Certificate in General Management Course 2010-11 from XLRI Examinations for Apollo's Practicing Manager's, Apollo Hospital, Bangalore.
- [11] Coordinator of Distance Education in Mathematics (Correspondence PG-Course), Bangalore University, Bangalore during 2011-12 exams.
- [12] Assistant Custodian of Bangalore University Central valuation unit of PG-Examination during December/January-2011 & 12.
- [13] B.O. E. Chairman of Bangalore University (PG-Sem. Scheme), 2011-2012 Exams.
- [14] BOE Chairman, PG-Mathematics, Tumkur University, Tumkur (2012-13)
- [15] B.O.S. Member of Bangalore University, Bangalore, (PG-Mathematics) 2012-13.
- [16] B.O.E. Member of KSOU, Mysore (PG-Mathematics) 2012-13.
- [17] B.O. E. Chairman of M.Sc. Mathematics, Tumkur University (2012-13 & 2013-14 ).
- [18] Chairman of Dept. of Studies & Research in Mathematics, Tumkur University (from 09-11-2012 to 20-10.2014).
- [19] Member of Dress Code Committee, Karnataka Collegiate Education, Govt. of Karnataka & Tumkur University, Tumkur (on 17.04.2013) KSHEC, Bangalore
- [20] Member of PG-Examination Booklet verification committee, Tumkur University, Tumkur (on 02.11.12).
- [21] Chairman of College Affiliation Committee, Tumkur University, Tumkur.
- [22] Member of counseling for admission to Ph. D. Course, Tumkur University, Tumkur (15.04.2013)

- [23] Member of Tumkur University PG- Prospectus preparation committee for academic year 2013-14.
- [24] Chairman of LIC Re-verification Committee for academic year 2013-14 (on 29.6.2013)
- [25] Chairman of Computer software verification committee for selection of Guest faculty in Government Collegiate Department, Govt. of Karnataka in association of Tumkur University (on 2.7.2013).
- [26] Member of PG-Admission committee for academic year 2013-14 in Both Faculty of arts & commerce, Tumkur University, Tumkur (30<sup>th</sup> & 31-07-2013).
- [27] Director of Distance Education, Tumkur University, Tumkur (2013-2014).
- [28] B.O.S. Chairman of M.Sc. Mathematics, Tumkur University (2013-14 ).
- [29] B.O.E. Member of Bangalore University, Bangalore, (PG-Mathematics) 2013-14.
- [30] B.O.E. Member of KSOU, Mysore (PG-Mathematics) 2013-14.
- [31] Chairman of Computer software verification committee for selection of Guest faculty in Govt. Collegiate Dept., Govt. of Karnataka in association of Tumkur University.
- [32] Chairman of PG (Mathematics) admission committee for the academic year, Tumkur University, Tumkur 2013-14.
- [33] Member of Reservation Implementation of persons with disabilities in Higher education, Tumkur University, Tumkur.
- [34] Member of PG-Admission Counseling committee for academic year 2013-14 in Both Faculty of Arts & Commerce, Tumkur University, Tumkur (30<sup>th</sup> & 31.07.2013).
- [35] Member of Fee fixation of College affiliation committee, Tumkur University, Tumkur.
- [36] Member of Choice Base Credit System (CBCS) implementation committee, Tumkur University, Tumkur.
- [37] Convener of Robe committee, 7th Annual Convocation, Tumkur University, Tumkur.
- [38] Observer of K-SET examination, December-2013, Tumkur University, Tumkur.
- [39] Member of National Festival celebration committee, Tumkur University, Tumkur.
- [40] Member of National Science day celebration committee, Tumkur University, Tumkur.
- [41] Chairman of College affiliation committee for academic year 2014-15, Tumkur University, Tumkur
- [42] Member of Research Review Committee, Tumkur University, Tumkur(05.04.2014)..

- [43] Chairman of B.Ed. Time Table framing committee for the academic year 2013-14, Tumkur University, Tumkur.
- [44] Member of PG-Time Table framing committee for the academic year 2013-14, Tumkur University, Tumkur.
- [45] Custodian of UG-Examination 2013-14, Tumkur University, Tumkur.
- [46] Chairman of Advisory committee for B. Voc. Degree Courses, Tumkur University, Tumkur (02.06.2014).
- [47] Member of PG-Admission Seat matrix framing committee for the academic year 2014-15, Tumkur University, Tumkur.
- [48] Member of PG-Course Fee fixation for academic year 2014-15, Tumkur University, Tumkur.
- [49] B.O.E. Member of Gulbarga University, Gulbarga, (PG-Mathematics) 2014-15.
- [50] B.O.E. Member of JSS Mahavidya peeta, Mysore, (PG-Mathematics) 2014-15.
- [51] Deputy Custodian of M. Sc., Mathematics, Dec/Jan-2014-15 Exams, Bangalore University, Bangalore.
- [52] B.O.E. Member of Bangalore University, Bangalore, (PG-Mathematics both Distance Education & regular) 2015-16.
- [53] B.O.E. Member of Bangalore University, Bangalore, (UG-Mathematics –Professional Board) 2015-16.
- [54] B.O.E. Member of Yuvaraja’s College, Mysore, (PG-Mathematics) 2015-16.
- [55] Text book reviewing committee member for 1-7<sup>th</sup> Standard both Kannada and English Medium, Govt. of Karnataka, Bangalore, 2015-16 .
- [56] B.O.E. Member of Karnatak University, Dharwad, (PG-Mathematics) 2015-16.
- [57] B.O.E. Member of Kuvemou University, Shimoga, (PG-Mathematics) 2016-17.

**Membership of Different Academic and Administrative Bodies:**

- [1] Member, Research Group in Mathematics Inequality, Victoria University, Australia.
- [2] Member, Faculty of Science, Bangalore University, Bangalore (2004-2006).
- [3] Life Member, Indian Mathematical Society (IMS), India.
- [4] Life Member, Jammu Mathematical Society, University of Jammu, India.
- [5] Life Member, Indian Academy of Discrete Mathematics (ADMA), India.
- [6] Life Member, Indian Society of Mathematics and Mathematical sciences (ISMMS), Gorakhpur, India.

- [7] Treasurer (2004 -2008), Secretary (2009 - 2010) Central College Mathematical Society, Bangalore University, Bangalore.
- [8] Member of International Association of Engineering and Computer Scientist, Hong Kong (2013).

### **RESEARCH ACTIVITIES RECORD**

#### **Major Fields of Research interest:**

Combinatorics, Graph Theory, Complexity Theory and Combinatorial Design Theory.

#### **M. Phil. Awarded: 04**

- [1] Mr. C. Nandheesh Kumar
- [2] Ms. Naveena
- [3] Mr. Anand Agadi
- [4] Mr. Laxmi Kantha

#### **Ph. D. Awarded: 04**

- [1] Ms. K. A. Vidya
- [2] Mr. C. Nandheesh Kumar
- [3] Mrs. V. Chaithra
- [4] Mr. Appaji Gowda C

#### **Total number of Ph.D. students currently working: 07**

(01 – Student submitted the thesis & 01 – Student shortly going to submit the thesis)

#### **Research Projects:**

- [1] BUIRF project program, Bangalore University, Bangalore entitled on “Some studies in the theory of graphs and their application” (2011-12) - 1 lakh (Completed).

#### **Conferences/ Seminars/symposiums participated:**

- [1] **International conference** on the works of Srinivasa Ramanujan held during July 1-2, 2000 at the DOS in Mathematics, University of Mysore, Mysore.
- [2] **Conference** on Graph Theory and its application during March 14-16, 2001 at the Anna University, Chennai.

- [3] **Inaugural Graph theory Day**, during 10th June 2005 at the Christ College Campus, Bangalore-29.
- [4] **National Seminar** on Graph Theory and Algorithms, during June 10-12, 2006 at the PES Institute of Technology, Bangalore.
- [5] **National Conference** on Mathematical foundations of coding, complexity, computation and cryptography, during July 20-22, 2006 at the Indian institute of Science (IISc-IMI), Bangalore.
- [6] **International Conference** On Discrete Mathematics, during December 10-12, 2006 at the Indian institute of Science (IISc-IMI), Bangalore.
- [7] **National Conference** on Graph theory and its Applications during April 12-13, 2007 at the RV College of Engg. Bangalore.
- [8] **International Conference** on Discrete Mathematics and Graph Theory, during June 6-10, 2008 at University of Mysore, Mysore.
- [9] **Seminar on Excitement in Mathematics**, during April 11, 2009 at PES College of Science, Mandya.
- [10] **24<sup>th</sup> annual conference** of the Ramanujan Mathematical Society, on RMS during May 11-13, 2009 Indian Statistical Institute, Bangalore.
- [11] **Symposium** on Mathematics (Series-I) during May 18, 2009 at the Bangalore University, Bangalore.
- [12] The **5<sup>th</sup> Annual Instructional Conference** of ADMA and Graph Theory held during June 8-10, 2009 at Periyar University, Salem.
- [13] **Symposium** on Ramanujan's Mathematics (Series-II) during June 15, 2009 at the Bangalore University, Bangalore.
- [14] **Platinum Jubilee 75<sup>th</sup> Annual Conference** of the Indian Mathematical Society during December 27-30, 2010 at the Kalasalingam University, Kalasalingam, Tamilnadu.
- [15] **National Conference** on Applications of Mathematics & Statistics, during March 25-26, 2011 at Yuvaraj's College, Mysore
- [16] **Conference** on Frontiers in Allied Mathematics, during March 9-10, 2012. M.E.S. College of arts, commerce & Science, Bangalore.
- [17] **Symposium** on Discovery & Application of Innovative materials, KSHEC, Bangalore during November 13, 2012, Tumkur University, Tumkur.



- [18] **International Conference** on Yoga in Education, during November 27-28, 2012, Tumkur University, Tumkur.
- [19] **Symposium** on Discovery & Application of Innovative materials during November 13, 2012 at Karnataka State Higher Education Council (KSHEC), Bangalore.
- [20] **International Conference** on Yoga in Education during November 27-28, 2012 at Tumkur University, Tumkur.
- [21] **National Conference** on Contributions of Sri Vidyanaraya during November 18-20, 2012 at Tumkur University, Tumkur.
- [22] **National Conference** on Challenges and Opportunities for Chemical Sciences in 21<sup>st</sup> Century during 8<sup>th</sup> January 2013 at Karnataka State Higher Education Council (KSHEC), Bangalore.
- [23] **National Conference** on Biotechnological Approaches for Sustainable Environmental Management during 22<sup>nd</sup> January 2013 at Karnataka State Higher Education Council (KSHEC), Bangalore.
- [24] **Conference** on Sanskrutha Bharathi, held on January 26-27, 2013 at Tumkur University, Tumkur.
- [25] **International Conference** on Contemporary human sufferings: Wisdom of Bhagwan Buddha, during March 6<sup>th</sup>, 2013 at Tumkur University, Tumkur.
- [26] **National Conference** on Swami Vivekananda- An epoch maker, held on April 24<sup>th</sup> 2013 at Tumkur University, Tumkur.

**Workshop participated:**

- [1] **Workshop** on new syllabus for B.Sc., Mathematics held during July 25-26, 2000 at the DOS in Mathematics, University of Mysore, Mysore.
- [2] **Workshop** on Mathematics-implementation of semester scheme in UG courses, during October 8, 2001 at the DOS in Mathematics, University of Mysore, Mysore.
- [3] **National workshop** on Emerging frontiers in combinatorial optimization, during June 21 - 28, 2002 at the Department of Mathematics, University of Pune, Pune.
- [4] **CARDMATH National Group Discussions and workshop** on signed discrete structures and applications, during November 15-24, 2005 at the Regional Institute of Education, Mysore.

- [5] **Instructional workshop** on Applications of Graph Theory in Chemistry, during March 27-31, 2006 at the Karnataka University, Dharwad.
- [6] **Work shop** on Discrete Mathematics and Graph Theory, during June 2-5, 2008 at University of Mysore, Mysore.
- [7] **Work shop** on Transformation theory of ordinary and basic hyper geometric function, during February 14-19, 2009 at Gorakhpur University Gorakhpur.
- [8] **Workshop** on the Vision group of Mathematics & Computer Science, during 19<sup>th</sup> - 20<sup>th</sup> March 2010 at Kuvempu University, Shimoga.
- [9] **Workshop** on Accelerating Research Discovery & Innovation, during 26<sup>th</sup> April 2010 at Bangalore University, Bangalore.
- [10] **International Workshop** on Combinatorial Matrix Theory & Generalized Inverses of Matrices during January 2-7, 2012 at Manipal University, Manipal.
- [27] **Workshop** on Relevance of Mechanism Design and Game theory in modern economic analysis, during January 10<sup>th</sup>, 2013 at Karnataka State Higher Education Council (KSHEC), Bangalore.
- [28] **Workshop** on Text book reviewing for 1-7<sup>th</sup> Standard, Govt. of Karnataka, Bangalore (three day for every month from December 2015 to April)

**Refreshers Course/ Orientation Programme participated:**

- [1] **Refresher Course** in Mathematics, held during January 5 - 7, 2004 at the UGC-Academic Staff College, Bangalore University, Bangalore.
- [2] **Orientation Programme**, held during 10<sup>th</sup> Dec.2004 To 7<sup>th</sup> Jan. 2005 at the UGC-Academic Staff College, Bangalore University, Bangalore.
- [3] **Refresher Course** in Mathematics, held during 24<sup>th</sup>Jan.2011 to 14<sup>th</sup> Feb.2011 at the UGC-Academic Staff College, Bangalore University, Bangalore.
- [4] **Refresher Course** in Mathematics, held during 1<sup>st</sup> June 2015 to 21<sup>st</sup> June 2016 at the UGC-HRDC, Bangalore University, Bangalore

**Research paper presented in National and Inter- national Conferences / Seminars / Symposiums/ Workshops:**

**[4] The split total domination number of a graph.**

In National conference on challenges of the 21<sup>st</sup> century in Mathematics and its allied topics, during February 3 - 4, 2001 at the DOS in Mathematics, University of Mysore, Mysore.

**[5] Double global domination in graph.**

In National Seminar on Graph Theory, during September 5 - 7, 2002, St. Mary;s College (KMA),Trichur, Kerala

**[6] The Paired-neighborhood number of a graph.**

In the 14<sup>th</sup> International Conference of the Jangjeon Mathematical Society, during December 22 - 24, 2003 at the University of Mysore, Mysore.

**[7] On domination and its related parameters in 2-& (2(i)- compliment) in graphs.**

In National Conference on recent developments in applications of Mathematics, during March 21- 22, 2005 at the Sri Padmavati Mahila Visvavidyalayam, Tirupati.

**[8] The perfect matching neighbourhood number of a graph.**

In National Conference on Graph theory, during April 16 - 17, 2005 at the Alliance Business Academy, Bangalore.

**[9] The complementary total domination in graphs.**

In National Seminar on Operator Theory and application, during March 1-3 .2006 at the Jammu University, Jammu.

**[10] Special kinds of complementary graphs in domination theory.**

In Instructional workshop on Applications of Graph Theory in Chemistry, during March 27 - 31, 2006 at the Karnataka University, Dharwad.

**[11] On 2-global and 2(i)-global domination number of a graph.**

In 72<sup>nd</sup> Annual Conference on Indian Mathematical Society, during Dec 27-30, 2006 at the RD University, Jabalpur.

- [12] **Maximal Paired domination in graphs.**  
In 19<sup>th</sup> International Conference of the Jangeon Mathematical Society, during February 22 - 24, 2007 at the Bangalore University, Bangalore.
- [13] **Bounds on 2-global and 2(i)-global dominating sets in graphs.**  
In Graph Theory day-III International Conference on Recent Developments in Combinatorics and Graph Theory, during June 10-14, 2007 at Kalasalingam University, Krishnankoil, Tamilnadu.
- [14] **Theory of domination and its related parameters in graphs.**  
In International Conference on Advances in Mathematics: Historical Development and engineering application, during December 19 - 22, 2007 at the G. B. Pant University, Pantnagar, Uttarkand.
- [15] **Some parameters on neighbourhood number of a graph.**  
In International Conference on Graph Theory and its Applications, during December 11-13, 2008 at Amritha Vishwa Vidyapeetham, Amritha School of Engineering, Coimbatore.
- [16] **Some bounds on k-total domination critical graphs.**  
In Sixth National conference on Indian society of mathematics and mathematical sciences, during February 20-21, 2009 at Gorakhpur University Gorakhpur.
- [17] **On Cover coloring sets and its related parameters in graphs.**  
In 21<sup>st</sup> International Conference of the Jangeon Mathematical Society, during August 13 - 15, 2009 at the AIT, Chichmagalore, India.
- [18] **Neighbour chromatic number of a graph**  
In International Conference on Recent Advances in Mathematics and Applications during January 13-15, 2010 at the University of Burdwan, Burdwan -713 104, West Bengal, India
- [19] **Alpha-vertex chromatic number of a graph**  
In Conference on Special Functions and their Applications during June 21-23, 2010 at the Jiwaji University, Gwalior.

- [20] **Odd and even distanced roman domination in graphs**  
 In Knowledge Utsav National Level Conference, during August 28<sup>th</sup> 2010. Jain Research Foundation, Jain University, Bangalore.
- [21] **On perfect k- domination in graph**  
 In the Importance of Discrete Mathematics in Mathematics & Computer Science, during March 13-14, 2012, Maharani's College for Women, Bangalore.
- [22] **Graph theoretic interpretation of protein structure: A perspective**  
 In Recent Discoveries in Protein Science, on 30<sup>th</sup> March 2013 at KSHEC, Govt. of Karnataka, Bangalore.

**Invited Talks/ Chair the session in National and Inter - national Conferences / Seminars / Symposiums/ Workshops:**

- [1] **Concepts of graph theory and its applications.**  
 In UGC- sponsored National Workshop on Recent developments in Mathematics, during 30<sup>th</sup> March 2007, Govt. Science College, Bangalore.
- [2] **On neighbourhood number and its related parameters in graphs.**  
 In 20<sup>th</sup> International Conference of the Jangjeon Mathematical Society, during August 21 - 23, 2008 at the Uludag University, Bursa, Turkey (Also Chair the session).
- [3] **Minimum cardinality of cover coloring set in graphs.**  
 In Work shop on Transformation theory of ordinary and basic hyper geometric function, during February14-19, 2009 at Gorakhpur University Gorakhpur.
- [4] **On dual neighbourhood sets and its related parameters in graphs**  
 In National Symposium on Recent Advances in Applied Mathematics, during February 8-9, 2010 at the Gulbarga University, Gulbarga.
- [5] **Binary sums of a graph**  
 In the National Conference on the works of Srinivasa Ramanujn during July 03, 2010 at the University of Mysore, Mysore.

- [6] **Application of social network theory & domination theory in graphs,**  
In National conference on graph theory and its computer applications, SSIT, Tumkur during 19 & 20<sup>th</sup> June 2013.
- [7] **Application of graph theory to some molecular structure: A perceptive**  
In 26<sup>th</sup> International Conference on Jangjeon Mathematical Society held on 1-4, August 2013 at Acharya Graduate studies, Bangalore (Also Chair the Session).
- [8] National Conference on Recent Advances in Mathematics, held on 24<sup>th</sup> January 2014, JSS College of Arts, Commerce & Science, Mysore(Chair the Session).
- [9] **From Zero to Infinity and beyond: A Philomathematical perspective**  
In National Conference on Buddhist Science & Modern Science, during 5<sup>th</sup> May 2014, Sera Jey Monastic University, Bylakuppe (Also Chair the Session).
- [10] **Molecular graph descriptor through some structural Analysis**  
In International Conference on Emerging trends in Mathematical Sciences, held on 25-26, July 2014 at VSK University, Bellary (Also Chair the session).
- [11] **Graph Theoretic Interpretation of Protein Network: A perspective**  
In National Conference on Advances in Geometry, Analysis and Fluid Mechanics held on August 26-27<sup>th</sup> 2014 at Kuvempu University, Shimoga (Also Chair the session).
- [12] **Molecular graph descriptor through some structural analysis perspective**  
International Conference on Mathematics- Yesterday and Today held on December 26-27<sup>th</sup> December 2014 at JSS Mahavidyapeetha, Mysore (Also Chair the session).
- [13] In National Conference on Recent Trends in Graph Theory and its Applications held on 5-6<sup>th</sup> February 2015 at Mangalore University, Mangalore (Chair the session).
- [14] **Interpretation of graph model through some network analysis**  
In National Conference on Mathematics and its Applications held on 21<sup>st</sup> February 2015 at University of Mysore, Mysore (Also Chair the session).
- [15] **Discrete modeling and its application in Social Network Analysis**  
International Conference of Differential Geometry, Analysis and Fluid Mechanics, held on 4-5 February 2016 at Kuvempu University, Shimoga (Also Chair the session).

- [16] **Chemical graphs and its applications**  
In National Conference on Recent advances in Mathematics and their applications during 19-20 February, 2016 at JSS Mahavidyapeeta, Mysore (Also Chair the session).
- [17] **Partial geometries of some generalized polygons in combinatorial geometry**  
In National Conference on Geometry, Topology & Their Applications held on 3-4 August 2016 at Karnatak University, Dharwad(Also Chair the session).

**Recourse Person/Keynote speakers:**

- [1] **Applications of graph theory in allied sciences** (Key note address)  
In Events of Mathematics, MLA College of Sciences, Bangalore during Dec. 22, 2010.
- [2] **NET Coaching for Mathematical sciences**  
In the Department of Mathematics, Karnataka University, Dharwad during August 21-23, 2010.
- [3] **Role of mathematics in Social Sciences** (Key note address)  
In The Mathematics Forum, Dept. of Mathematics, Govt. Sc. College, Shikaripura, Shimoga during August 10, 2011.
- [4] **Recent trends in group theory**  
In the Seminar on Mathematics, Dept. of Mathematics, Mount Carmel College, Bangalore during October 5, 2011.
- [5] **The role of algebra in Modern Mathematics** (Key note address)  
In Symposium of Mathematics, Dept. of Mathematics, Vijaya College, Bangalore during October 22, 2011.
- [6] **Interpretation of graph models through social network analysis**  
In Refresher Course in Mathematics & Statistics, UGC – Academic Staff College, Bangalore University, Bangalore during February 10, 2014.
- [7] **Graph models through some social network analysis**  
National Conference on Recent Trends and Advances in mathematics and its Application, S.P. Mahila Visvavidyalayam, Tirupati during March 12-13, 2015.
- [8] **Elements of Graph Theory and its applications**

UGC-HRDC (Academic Staff College), University of Mysore, Mysore during February 21 & 29, 2016.

### **Conference/Seminar/Other Activities Organized:**

- [1] **The 19<sup>th</sup> International Conference** of the Jangjeon Mathematical Society, during February 22 - 24, 2007 at the Bangalore University, Bangalore as a **JOINT CONVINIER**.
- [2] **Ganitha Sangama**, State Level Mathematics Quiz, Olympiad and Lecture Contest, during May 15, 2009 at the Bangalore University, Bangalore as a **JOINT CONVINIER**.
- [3] **Symposium on Mathematics (Series-I)** during May 18, 2009 at the Bangalore University, Bangalore as a **JOINT CONVINIER**.
- [4] **National Conference** on “Geometry, Algebra, logic, number theory and its applications” on 6<sup>th</sup> December 2012.
- [5] **Workshop on CBCS Structure of PG-Mathematics**, held on 12<sup>th</sup> December 2013 at Department of Studies & Research in Mathematics, Tumkur University, Tumkur.

### **Research Publications:**

- [1] The maximal neighborhood number of a graph. Far East J. App. Math, 5 (3) (2001) 301-307. (With N. D. Soner and B. Janakiram)(**ISSN: 0972-0960**).
- [2] Total split domination in graphs. Far East Journal of Appl. Math.6 (1) (2002) 89-95. (With N. D. Soner and B. Janakiram). (**ISSN: 0972-3067**).
- [3] Double edge domination in graphs. PJMS (Jangjeon Mathematical Society) South Korea, 5 (2002) No.1, 15-20. (With N. D. Soner) (**ISSN: 89-87809-15-3**).
- [4] The double global domination number of a graph. Journal of Indian Math. Soc. (IMS) 70 (1- 4 )(2003) 191-195. (With N. D. Soner and B. Janakiram). (**ISSN: 0019-5839**).
- [5] Domination in 2-complement (2 (i)-complement) of a graph. Advanced Studies in Contemporary Mathematics, South Korea, 7(2003)145-154. (With N. D. Soner and B. Janakiram). (**ISSN: 0972-3067**).
- [6] The connected double domination number of a graph. Journal of Acta Ciencia Indica, 29 (M) 2 (2003) 237-242. (With N. D. Soner). (**ISSN: 0253-732X**).
- [7] The uniform neighbourhood number of a graph. PJMS (Jangjeon Mathematical Society) S. Korea, 6(2) (2003) 125 -135. (With N. D. Soner). (**ISSN: 89-87809-15-3**).



- [8] The total nonsplit domination number of a graph, *Journal of Mathematical Education*. Vol.38, No.2 (2004) 77- 80. (With N. D. Soner). **(ISSN: 0047-6269)**.
- [9] Maximal edge neighbourhood in graphs. *Indian Journal of Mathematics (AMS)*, Vol.46, Nos.2- 3 (2004) 283-291. (With N. D. Soner). **(ISSN: 0019-5324)**.
- [10] On neighborhood number and its related parameters in graphs-I, *Vignana Bharathi, Journal of Sc. Engg. & Tech., BUB*, Vol.17 (2) (2005)139-147. **(ISSN: 0377-8487)**.
- [11] Double split (nonsplit) domination in graphs. *South East Asian J. Math. & Math. Sc.* Vol. 3 (2005) 83 - 94. (With Puttaswamy), **(ISSN: 0972-7752)**.
- [12] The paired-neighborhood number of a graph. *PJMS (Jangjeon Mathematical Society) South Korea*, 8 (2005) No.1, 113-121. (With N. D. Soner). **(ISSN: 89-87809-15-3)**.
- [13] The k-nonsplit domination number of a graph. *International Journal of Mgmt. & Syst.* Vol. 22, No.1 (2006) 53- 58. (With N. D. Soner and B. Janakiram).
- [14] Paired-neighborhood in Graphs. *Far East Journal of Appl. Math.*22 (2) (2006) 215 - 224. (With N. D. Soner and K. M. Yogesha). **(ISSN: 0972-0960)**.
- [15] k-neighborhood, k-connected neighborhood and k-co-connected neighborhood number of a graph, *Journal of Analysis and Computation* Vol. 3, No.1, (2007), 9-12. **(ISSN: 0973-2861)**.
- [16] Bi-efficient domination in graphs. *PJMS (Jangjeon Mathematical Society) South Korea*, 10 (2007) No.2, 131-137. (With K. A. Vidya). **(ISSN: 89-87809-15-3)**.
- [17] Complementary total domination in graphs, *Journal of Discrete Math. Sc. and Cryptography*, 10(2007) 3, 505-516. (With N. D. Soner). **(ISSN: 0972-0529)**.
- [18] Perfect dominating set graph of a graph G, *Advances and Applications in Discrete Mathematics*, 2 (2008)1, 49-57(With K. A. Vidya). **(ISSN: 0974-1658)**.
- [19] 2-global and 2(i)-global dominating sets in graphs, *Intenat. J. of Phy. Sc. (Ultra scientist of Phy. Sc)* Vol. 20(2)(2008) M, 481-488. **(ISSN: 0970-9150)**.
- [20] Some parameters on Neighborhood sets in graphs, *Graph theory and its Applications. Mac Millan Advanced Research Series*, (2009) 26-35. **(ISSN: 0230-63863-5)**.
- [21] Roman edge domination in graphs. *National Academy of Science Letters, India Sect. A*, 79 ( P-I) (2009), 45-50 (With N. D. Soner and J. P. Srivastava). **(ISSN: 0369-8211)**.
- [22] Maximal paired-domination in graphs, *International Journal of Mathematics and Computation*. Vol. 4, No.S09 (2009) 99-104 (With S. C. Sigarkanti and K. A. Vidya). **(ISSN: 0974-570X)**.

- [23] Some parameters on neighbourhood number of a graph, *Electronic Notes in Discrete Mathematics*, Elsevier B.V, 33(2009)139-146. **(ISSN: 1571-0653)**.
- [24] Smallest and largest binary sums of a graph, *South East Asian J. Math. & Math.* Vol. 8 No. 2(2010)7-15 (With R. Y. Denis and K. A. Vidya). **(ISSN: 0972-7752)**.
- [25] The dual neighbourhood number of a graph, *Int. J. Contemp. Math. Sciences*, 5(47) (2010) 2327 - 2334 (With V. Loksha and C. Nandeeshkumar). **(ISSN: 1312-7586)**.
- [26] k-Perfect domination in graphs, *Australasian Journal of Combinatorics* Vol. 48(2010) 175-184 (With M. Chellai and K. A. Vidya). **(ISSN: 1034-4942)**.
- [27] The vertex cover chromatic number of a graph, *Canadian Journal on Computing in Mathematics, Engineering & Medicine*, 2-1(2011) 1-10 (With C. Nandeeshkumar and I. Rusagara). **(ISSN: 1923-1660)**.
- [28] Roman domination in odd and even graphs. *South East Asian J. Math. & Math.* Vol. 10. No. 1(2011) 97-104 (With V. Chaitra). **(ISSN: 0972-7752)**.
- [29] Roman domination in Complementary Prism Graphs. *International J. Math. Combin.* Vol. 2(2012) 24-31 (With V. Chaitra). **(ISSN: 1937-1055)**.
- [30] The neighbor coloring set in graphs, *Int. J. of Applied Math. & Comput.* 4(3) (2012) 89 -93. (With C. Nandeeshkumar and C. Appaji Gowda) **(ISSN: 0974-4673)**.
- [31] On Bi-connected neighborhood number of a graph, *Advances in Domination Theory-I*, Ed. V. R. Kulli, Vishwa International Publications (2012)111-120. (With C. Nandeeshkumar and M. Balakrishna), **(ISBN : 81-900205-6-0)**.
- [32] Bounds on k-Perfect domination in trees: An algorithmic approaches, *J. Opuscula Mathematica*. Vol. 34 (2012) (With K. A. Vidya). **(ISSN: 1232-9274)**.
- [33] Fair domination in line graph and its complements, *International J. of Math. Sci. & Engg. Appls. (IJMSEA)* 7(4) (2013) 430-443, (With Chaithra. V), **(ISSN: 0973-9424)**.
- [34] Split and nonsplit domatic number of a graph, *Advances in Domination Theory-II*, Ed. V. R. Kulli, Vishwa International Publications (2013) 63-74, (With C. Appaji Gowda and N. Manjunath), **( ISBN : 81-900205-6-0)**.
- [35] Special kind of colorable complements of a graph, *International J. Math. Combin.* 3(2013) 35-43, (With C. Nandeeshkumar and V. Chaitra), **(ISSN: 1937-1055)**.
- [36] Concept, role and developments of theory of a graph: A perceptive , *Knowledge of Power*, Ed., S. K. Narasimhamurthy, Prasaraanga, Kuvempu University, Shimoga (2014) 207-221 **( ISBN : 978-93-83985-04-3)**.
- [37] Generalized perfect domination in graphs, *Journal of Combinatorial Optimization*, Springer 27 (2) (2014) 292-301, (With K.A. Vidya), **(ISSN: 1382- 6905)**.

- [38] Minimality conditions of  $\Pi_k$ -Connectedness in graphs, Gen. Math. Notes: An Intl. Journal, 24 (2) (2014) 78-84 (With N. Manjunath & K.M. Yogeesh), **(ISSN: 2219-7184)**.
- [39] PBIB Designs and association schemes arising from some connected dominating set, South Asian J Math, 2014, 4(5), 225-232. (With N. Manjunath & G. Deepak), **(ISSN: 2251-1512)**.
- [40] The Dom-chromatic index of a graph. International J. of Math. Sci. & Engg. Appls. (IJMSEA) 8(6) (2014)43-49, (with C. Nandeeshkumar & C. Appaji Gowda), **(ISSN: 0973-9424)**.
- [41] The total domination polynomial of a graph, J. of Inf. & Math. Sc. 6(2)(2014) 87-92(With Chaithra. V), **(ISSN: 0975-5748)**.
- [42] Doubly total and paired domination in graphs, South Asian J. Math. 5(1) (2015) 25-31. (With C. Appaji Gowda), **(ISSN: 2251-1512)**.
- [43] Split domination in Normal product of paths and cycles, Gen. Math. Notes: An Intl. Journal, 28 (1) (2015) 72-80 (With C. Appaji Gowda), **(ISSN: 2219-7184)**.
- [44] Generalized vertex induced connected subsets of a graph. International J. Math. Combin. 2(2015) 61-68, (With Medha Itagi Huligol, N. Manjunath and Syed Asif ulla), **(ISSN: 1937-1055)**.
- [45] Fair domination polynomial of a complete bipartite graph, South Asian J. Math. 5(3) (2015) 132-140. (With Chaithra. V), **(ISSN: 2251-1512)**.
- [46] Split domination number of a prism graph, Advances and Applications in Discrete Mathematics, 16(1)(2015), 67-76(With C. Appaji Gowda),**(ISSN: 0974-1658)**.
- [47] On  $\Pi_k$ -connectivity of some product graphs, Notes of Number theory and Discrete Mathematics, 21(2) (2015), 70-79 (With Medha Itagi Huligol, N. Manjunath and Syed Asif ulla), **(ISSN: 1310-5132)**.
- [48] Dom-chromatic number of a graph, Malaya Journal of Matematik, 4(1), (2016) 1-7 (With C. Appaji Gowda), **(ISSN: 2319-3786)**.
- [49] Affirmative domination in graphs, Palestine Journal of Mathematics, 5(1) (2016) 6-11 (With Chaithra. V), **(ISSN: 2219-5688)**.
- [50] On coefficients of edge domination polynomial of a graph, J. Disc. Maths. Sc., and Crypt. Taylor & Francis, (2016)1-16 (With Chaithra. V), **(ISSN: 0972-0529)**.
- [51] On Binding number of some special classes of trees, International J. Math. Combin. 1(2016) 76-81, (With H. S. Boregowda and S. Kumbinarasaiah), **(ISSN: 1937-1055)**.
- [52] PBIB-Design with  $m=1, 2, 3, 4$  and  $\lfloor p/2 \rfloor$  - associated classes arising from  $\gamma_{cc}$ -sets of some special kind of graphs, South East Asian J. of Math. & Math. Sci., 12(2) (2016)30-41 (With N. Manjunath), **(ISSN : 0972-7752)**

- [53] Sign domination in arithmetic graphs, Gulf Journal of Mathematics, 4 (3), (2016) 49-54 (With Chaithra. V), **(ISSN: 2309-4966)**.
- [54] The Split (Nonsplit) Nomatic Numbers of a graph, Internat. J. of Maths. & its Appl. (2016) to appear (With C. NandheeshKumar) (ISSN: 2347-1557)
- [55] Sign dominating switched invariants of a graph, Bull. Int. Math. Virtual Inst. 7(2017) 53-63 (With Chaithra. V), **(ISSN: 2303-4955)**.
- [56] On Set domination number of graph, Kyungpook Mathematical Journal, (2016) to appear (With Chaithra. V), **(ISSN: 1225-6951)**.
- [57] The vertex chromatic edge weighted indices of a graph, J. Transaction on Combinatorics (2016) to appear (With H. S. Boregowda and C. NandheeshKumar), (ISSN: 2251-8657).

### **Research paper published in conference proceedings.**

- [1] The split total domination number of a graph. Proc. Nat. Conf. On challenges of the 21<sup>st</sup> century in math and its allied topics, Ed: B. S. Kiranagi, (2001) 311-316. (With N. D. Soner).
- [2] Double global domination in graphs. Proc. Nat. Conf. On Graph theory, Trichur, Kerala (2002) 117-124. (With N. D. Soner).
- [3] Graph theoretic interpretation of protein structure: A perspective, Proc. Nat. Conf. Recent Discoveries in Protein Science, KSHEC, Govt. of Karnataka, (2013) 173-181. (With C. Nandeeshkumar and M. Jayaramu) **(ISSN: 978-81-923331-5-1)**.

### **Books published as an editor:**

- [1] Linear Algebra, Published by Karnataka State Open University, Mysore, 2011.
- [2] Computer Programming & Numerical Analysis, Published by Karnataka State Open University, Mysore, 2012.

### **Total number of reviewed paper:**

- [1] American Mathematical Society-Math. Sci. Net= 28.
- [2] Zentrablast-Math. Sci. Net=32

### **Referee of different Journals/Proceedings:**

- [1] Graphs and Combinatorics, Springer-Verlag, Japan.
- [2] Italian Journal of Pure and Applied Mathematics, Italy.
- [3] Proceeding of Jangjeon Mathematical Society, South Korea.

- [4] Transaction of Combinatorics, UAE.
  - [5] Journal of Analysis and Computations, India.
  - [6] Journal of Informatics and Mathematical Sciences, India
  - [7] South East Asian Journal of Mathematics and Mathematical Sciences, India.
  - [8] Proceedings of National Academy of Sciences, Springer, India.
  - [9] Discussion Mathematicae-Graph Theory, Poland.
  - [10] The Australasian Journal of Combinatorics, Australia.
- .....

Last update: 21-09-2016