CURRICULUM VITAE

Dr. R. SUNDARA RAJAN
Associate Professor,
Department of Mathematics,
Hindustan Institute of Technology and Science,
Rajiv Gandhi Salai (OMR),
Padur, Chennai – 603103, India.
Contact No: +91 9884180428.
E-mail: vprsundar@gmail.com

CAREER OBJECTIVE

A position that will incorporate my proven skills and aptitude towards success into a challenging career in the education field that offers professional growth while being resourceful, innovative and flexible.

TEACHING EXPERIENCE

July 2016 ~ Till date	Associate Professor, Department of Mathematics, Hindustan Institute of Technology and Science, Rajiv Gandhi Salai (OMR), Padur, Chennai – 603 103, India.
August 2014 ~ May 2015	Assistant Professor in Mathematics School of Advanced Sciences, VIT University, Chennai – 600 127, India.
July 2012 ~ January 2013	Assistant Professor in Mathematics Tagore Engineering College, Chennai – 600 127, India.
June 2008 ~ May 2009	Lecturer in Mathematics Loyola College, Chennai – 600 034, India.

POST RESEARCH EXPERIENCE

February 2016 ~ June 2016	Post-doctoral Fellow Department of Mathematics, Anna University, Chennai – 600 025, India.

July 2015 ~ January 2016	Post-doctoral Fellow School of Mathematical and Physical Sciences, The University of Newcastle, NSW 2308, Australia.
February 2013 ~ July 2014	Post-doctoral Fellow School of Advanced Sciences, VIT University, Chennai – 600 127, India.

EDUCATIONAL QUALIFICATION

- **Ph.D in Mathematics** from University of Madras – Chennai, during 2009 – 2012 (Highly Commended)
  Title of the Thesis: On Network Embeddings

- **M. Phil.** in **Mathematics** from Ramanujan Institute for Advanced Study in Mathematics, University of Madras – Chennai, during 2007 – 2008 with an aggregate of **75.97% (First Class with outstanding).**

- **M. Sc.** in **Mathematics** from Loyola College – Chennai, during 2005 – 2007 with an aggregate of **91% (First Class with distinction).**

- **B. Sc.** in **Mathematics** from Sri Parama Kalyani College under Manonmaniam Sundaranar University, Tirunelveli, during 2002 – 2005 with an aggregate of **89.86% (First Class with distinction).**

- **H.S.C & S.S.L.C** from Rama Swamy Pillai Higher Secondary School – Ilanji, with an aggregate of **86.5 & 82%** respectively.

RESEARCH ACTIVITIES

Major Field **:** Theoretical Computer Science, Discrete Mathematics

Fine Field **:** Network Embedding and Cheminformatics

Research Interests **:** Embedding Parameters in Networks, Fault Tolerance in Networks, Graph Labeling and Colouring, Domination Problem and Chemical Graph Theory.

Best Paper Award at National Workshop on Discrete Mathematics, Centre for Mathematical Science, Vidyapith 304022, Rajasthan, 2010.

Best Researcher Award at Department of Mathematics, VIT University, Chennai in the year 2015.

Best Researcher Award at School of Science and Humanities, Hindustan Institute of Technology and Science, Chennai in the year 2017.

Young Scientist Award from Venus International Foundation, Chennai in the year 2017.

Best Teacher Award from Hindustan Institute of Technology and Science, Chennai in September 2018.

Certificate of Merit for International Conference on Computer Science and Applications 2018 organized by IAENG at San Francisco, USA during 23-25th October 2018.

Research Promotion Award from Hindustan Institute of Technology and Science, Chennai on 5th April 2019.

Dr. A.P.J Abdul Kalam Award for Innovative Research from Society for Engineering Education Enrichment (SEEE) on 20th July 2019 at Coimbatore.

Major Research Projects:

1. **Funding Agency:** National Board of Higher Mathematics (NBHM), Department of Atomic Energy, Government of India.
   Title: Embedding Problems in Networks and Applications
   Period: 3 Years from 2017 – 2020
   Status: Completed
   Role: Principal Investigator
   Total Funds: 17 Lakhs

2. **Funding Agency:** Science and Engineering Research Board (SERB), Department of Science & Technology (DST), Government of India.
   Title: Distance based topological indices problems in cheminformatics and its applications
   Period: 3 Years from 2018 – 2021
   Status: Ongoing
   Role: Principal Investigator
   Total Funds: 16 Lakhs

Served as an external reviewer for the following international journals:

1. Discrete Applied Mathematics
2. Ars Combinatoria
3. The Australasian Journal of Combinatorics
4. The Computer Journal
5. HELIYON
6. IEEE Access
7. Iranian Journal of Mathematical Chemistry
8. Journal of Supercomputing
9. Journal of the Serbian Chemical Society
10. KNOSYS

11. Pattern Recognition Letters
12. World Wide Web Journal

Scholarship/Fellowship:

2018	Open Arms travel grant to attend ICM 2018 Rio de Janeiro, Brazil.
2016 ~ 2017	Dr. D. S. Kothari Postdoctoral Fellowship University Grants Commission (UGC), Government of India, India.
2015 ~ 2016	Endeavour Post-doctoral Fellowship Government of Australia, Australia.
2013 ~ 2014	Post-doctoral Fellowship National Board of Higher Mathematics (NBHM), Government of India.
2011~ 2012	Senior Research Fellowship (under a Major Project) Funded by Department of Science and Technology (DST), Government of India.
2009~ 2011	Junior Research Fellowship (under a Major Project) Funded by Department of Science and Technology (DST), Government of India.
2007 ~ 2008	Earn While you Learn Scheme University of Madras, Chennai - 600 005, India.

Organizer:

1. International Workshop on Discrete Mathematics, organized by Department of Mathematics, Tagore Engineering College, Chennai on 7th September 2012.
2. International Workshop on Sensor Networks and Interconnection Networks 2013, organized by School of Advanced Sciences, VIT University, Chennai on 30th November 2013.
3. International Workshop on Parallel Computing 2014, organized by School of Advanced Sciences, VIT University, Chennai on 11th December 2014.
4. Winter Course – Workshop through MATLAB 2017, organized by Department of Mathematics, Hindustan Institute of Technology and Science, Chennai during 4-5th January 2017.
5. National Workshop on Programming Techniques in MATLAB 2017, organized by Department of Mathematics, Hindustan Institute of Technology and Science, Chennai during 22-23rd August 2017.

6. National Conference on Emerging trends in Mathematics & Application in Engineering and Technology (NCETMAET – 2018), organized by Department of Mathematics, Hindustan Institute of Technology and Science, Chennai during 22-23rd March 2018.
7. International Seminar on Applications of Graph Theory in Networking, organized by Department of Mathematics, Hindustan Institute of Technology and Science, Chennai on 16th July 2018.
8. National Guest Lecture on Role of Statistics in the Big Data Era, organized by Department of Mathematics, Hindustan Institute of Technology and Science, Chennai on 5th September 2019.
9. International Guest Lecture on Applications of Mathematics in Computer Science and Information Technology, organized by Department of Mathematics and Computer Science, Hindustan Institute of Technology and Science, Chennai on 20th February 2020.
10. International Guest Lecture on Role of Mathematics in Computer Science and Information Technology, organized by Department of Mathematics and Information Technology, Hindustan Institute of Technology and Science, Chennai on 02nd March 2020.

International Conferences / Workshop:

- International Conference of Applied and Engineering Mathematics, Imperial College London, U.K.
  - Presented research paper.

- International Conference on Informatics Engineering & Information Science, University Technology Malaysia, Malaysia.
  - Chairperson for a paper presentation session.

- 4th Workshop on UNESCO-HP "BRAIN GAIN INITIATIVE", Kuwait University, Kuwait.
  - Presented research paper.
- Computer-Assisted Research Mathematics and its Applications (CARMA) Retreat 2015, The University of Newcastle, Australia.
  - Invited talk.

- Discrete Structures and Algorithms Seminar 2015, The University of Melbourne, Australia.
  - Invited talk.

- International Conference on Mathematical Computer Engineering (ICMCE 2016) organized by VIT University, Chennai Campus during 16-17th December 2016.
  - Chairperson for a paper presentation session.

- Workshop on Interconnection Networks 2017, The Department of Mathematics, Amrita School of Engineering, Coimbatore during 27-28th April 2017.
  - Invited talk.

- International Conference on Mathematical Computer Engineering (ICMCE 2017) organized by VIT University, Chennai Campus during 3-4th November 2017.
  - Chairperson for a paper presentation session.

- International Conference on Advances in Mathematical Sciences (ICAMS) organized by VIT University, Vellore Campus during 1-3rd December 2017.
  - Invited talk and chairperson for a paper presentation session.

- International Workshop on Graph Theory and Internet of Things in Engineering, organized by Vellore Institute of Technology, Chennai Campus during 13-14th July 2018.
  - Invited talk.
- School of Mathematical Sciences, Queen Mary, University of London, UK on 29th July 2018
  - Invited talk.
- Department of Computer Science, Royal Holloway, University of London, UK on 30th July 2018.
  - Invited talk.
- International Congress of Mathematicians 2018 (ICM 2018), Rio de Janeiro, Brazil during 1-9th August 2018.
  - Participated.
- Department of Mathematics and Computer Science, Federal University of Juiz de Fora, Brazil on 7th August 2018.
  - Invited talk.
- International Conference on Mathematical Computer Engineering (ICMCE 2018) organized by VIT University, Chennai Campus during 23-24th November 2018.
  - Chairperson for a paper presentation session.
- Department of Computer Science, National University of Singapore, Singapore on 3rd June 2019.
  - Invited talk
- School of Computing, National University of Singapore, Singapore on 7th June 2019.
  - Research discussion
- Institute for Mathematical Research, Universiti Putra Malaysia (UPM), Malaysia during 10-11 June 2019.
  - Invited talk and as a Visiting Researcher
- Department of Research and Consultancy, Universiti Tenaga Nasional (UNITEN), Malaysia on 12th June 2019.
  - Invited talk and a Research Collaborator
- Department of Mathematics, National University of Singapore, Singapore on 18th June 2019.
  - Research discussion
- International Workshop on Discrete Mathematics and Theoretical Computer Science (IWDMTCS 2020) organized by Sri Venkateswara College of Engineering, Sriperumbudur, Chennai during 5-6th March 2020.
  - Invited talk

National Conferences / Workshop:

- VIII National Conference on Emerging Trends in Graph Theory 2017, The Department of Mathematics, Christ University, Bengaluru during 3-4th March 2017.
  - Invited talk.

- Smart Board Training to the Faculty Members, School of Science and Humanities (SS&H), Hindustan Institute of Technology and Science (HITS) on 5th August 2017.
  - Hands on Training.

- Two days National Seminar on "Computer Networking: Scope and Challenges in Engineering & Technology, Department of Information Technology, Viswajyothi College of Engineering and Technology, Ernakulam, Kerala during March 14-15, 2019
  - Invited talk

MEMBERSHIP OF PROFESSIONAL BODIES

- International Association of Engineers (IAENG), UK – Life Time (No: 149345)
- International Association of Computer Science and Information Technology (IACSIT), Singapore – Life Time (No. 80350096)
- Ramanujan Mathematical Society (RMS), India – Life Time (No. 1303)
- The Association of Mathematics Teachers of India (AMTI), India – Life Time (No. L17013)
- American Mathematical Society (AMS), USA – One Year.
- Society for Engineering Education Enrichment (SEEE), India – Life Time (LM TN 9968)

LIST OF PUBLICATIONS

Published	–	49
Accepted for Publication	–	3

See Annexure – I

PHD GUIDANCE DETAILS

Currently working	–	6

INDEXING

h-index	– 10
i10-index	– 10
Citation index	– 311
DBLP	– http://dblp.uni-trier.de/pers/hd/r/Rajan:R=_Sundara
Google Scholar	– https://scholar.google.co.in/citations?user=pN3kGSkAAAAJ&hl=en&oi=ao
Research Gate	– https://www.researchgate.net/profile/R_Sundara_Rajan
SCOPUS Id	– https://www.scopus.com/authid/detail.uri?authorId=56586381700

PERSONAL INFORMATION

Date of Birth	: 03-05-1985
Gender	: Male
Marital status	: Married
Nationality	: Indian
Blood Group	: A_1 +ve
Permanent address	: P1B 204, XS Real Symphony, No. 9, Rajiv Gandhi Salai (OMR), Padur, Chennai – 603103, Tamilnadu, India.

REFERENCES:

1. **Dr. Indra Rajasingh** (PhD-Supervisor and Guide)
   Professor and Dean,
   School of Advanced Sciences,
   VIT University, Chennai – 600 127, India.
   Email: indrarajasingh@yahoo.com

2. **Dr. N. Parthiban** (Research Collaborator)
   Department of Computer Science and Engineering,
   SRM University, Chennai - 603203
   Tamilnadu, India.
   Email: parthiban24589@gmail.com

3. **Dr. Sudeep Stephen** (Research Collaborator)
   Department of Mathematics,
   University of Auckland,
   Auckland 1010, New Zealand
   Email: sudeep.stephens@gmail.com

4. **Professor Joe Ryan** (Research Collaborator)
   School of Electrical Engineering and Computer Science,
   The University of Newcastle,
   Callaghan, NSW 2308, Australia.
   Email: joe.ryan@newcastle.edu.au

5. **Professor Sandi Klavzar** (Research Collaborator)
   Faculty of Mathematics and Physics,
   University of Ljubljana, Slovenia.
   Email: sandi.klavzar@fmf.uni-lj.si

DECLARATION

I hereby assure that the information given above is accurate and true to the best of my knowledge and belief.

Place: Chennai, India

Date: 21.11.2020 **(R. SUNDARA RAJAN)**

Annexure – I

Published

1. **R. Sundara Rajan**, Thomas Kalinowski, Sandi Klavzar, Hamid Mokhtar, and T.M. Rajalaxmi, Lower Bounds for Dilation, Wirelength, and Edge Congestion of Embedding Graphs into Hypercubes, **The Journal of Supercomputing**, 2020.
   https://doi.org/10.1007/s11227-020-03420-w
   Indexed in: Q2, SCI, ISI, DBLP
   Impact Factor: 2.4

2. **R. Sundara Rajan**, T.M. Rajalaxmi, Jia Bao Liu and G. Sethuraman, Wirelength of Embedding Complete Multipartite Graphs into Certain Graphs, **Discrete Applied Mathematics**, Vol. 280, no. 15, (2020) 221-236
   https://www.sciencedirect.com/science/article/pii/S0166218X18302956
   Indexed in: Q2, SCI Expanded, ISI, DBLP
   Impact Factor: 0.8

3. Indra Rajasingh, R. Jayagopal, and **R. Sundara Rajan**, Domination Parameters in Hypertrees and Sibling trees, **Discrete Applied Mathematics**, Vol. 280, no. 15, (2020) 237-245
   https://doi.org/10.1016/j.dam.2020.01.008
   Indexed in: Q2, SCI Expanded, ISI, DBLP
   Impact Factor: 0.8

4. T. Venkata Raghu, **R. Sundara Rajan**, A. Ramesh Babu and S. Anil, Detour Number of 1-Fault Connected Graphs, **Fundamenta Informaticae**, Vol. 172, (2020) 97–104.
   https://content.iospress.com/articles/fundamenta-informaticae/fi1894
   Indexed in: Q3, SCI Expanded, DBLP
   Impact Factor: 1.2

5. A. Arul Shantrinal, **R. Sundara Rajan**, A. Ramesh Babu, S. Anil, M.A. Ahmed, Embedding Complete Multipartite Graphs into Certain Trees, **Journal of Combinatorial Mathematics and Combinatorial Computing**, Vol. 112, (2020) 273-286.
   http://www.combinatorialmath.ca/JCMCC112.html
   Indexed in: Q4
   Impact Factor: 0.5

6. Indra Rajasingh, R. Jayagopal and **R. Sundara Rajan**, Total Domination in Certain Nanotori, **Journal of Combinatorial Mathematics and Combinatorial Computing**, Vol. 112, (2020) 87-94.
   http://www.combinatorialmath.ca/JCMCC112.html
   Indexed in: Q4
   Impact Factor: 0.5

7. T. M. Rajalaxmi, N. Parthiban, Joe Ryan, A. Arul Shantrinal, **R. Sundara Rajan**, A Linear Time Algorithm for Embedding Chord Graphs into Certain Necklace and Windmill Graphs, **Discrete Mathematics Letters**, Vol. 3, (2020), 50-56.
   http://www.dmlett.com/archive/DML20_v3_50_56.pdf

8. **R. Sundara Rajan**, Indra Rajasingh, N. Parthiban, A. Arul Shantrinal and K. Jagadeesh Kumar, A Lower Bound for Edge-congestion of an Embedding, **Applied Mathematics & Information Sciences**, Vol. 13, (2019), 231–237.
   http://www.naturalspublishing.com/Article.asp?ArtcID=20396
   Indexed in: Q3
   Impact Factor: 0.9

9. **R. Sundara Rajan**, T.M. Rajalaxmi, Joe Ryan and Mirka Miller, Improved Bound for Dilation of an Embedding onto Circulant Networks, **Applied Mathematics and Scientific Computing,** Springer-Verlag**,** Vol. 2, no. 62, (2019) 623-632.
   https://link.springer.com/chapter/10.1007/978-3-030-01123-9_62
   Indexed in: SCOPUS

10. A. Arul Shantrinal, **R. Sundara Rajan**, T.M. Rajalaxmi and K. Jagadeesh Kumar, Embeddings between circulant networks and hypertrees, **Lecture Notes in Engineering and Computer Science** Springer-Verlag, Vol. 2238, (2018) 85-89.
    http://www.iaeng.org/publication/WCECS2018/
    Indexed in: SCOPUS

11. X. Jiang, Q. Liu, N. Parthiban and **R. Sundara Rajan**, A note on minimum linear arrangement for BC graphs, **Discrete Mathematics, Algorithms and Applications**, Vol. 10(2), (2018) 1-7.
    https://www.worldscientific.com/doi/abs/10.1142/S1793830918500234?journalCode=dmaa
    Indexed in: DBLP, Thomson Reuters
    Impact Factor: 0.4

12. **R. Sundara Rajan**, Indra Rajasingh, M. Arockiaraj, T.M. Rajalaxmi and B. Mahavir, Embedding of Hypercubes into Generalized Books, **Ars Combinatoria,** Vol. 135, (2017) 133-151.
    http://www.combinatorialmath.ca/arscombinatoria/vol135.html
    Indexed in: ISI, DBLP
    Impact Factor: 0.3

13. Mirka Miller, **R. Sundara Rajan**, R. Jayagopal, Indra Rajasingh and Paul Manuel, A Note on the Locating-Total Domination in Graphs, **Discussiones Mathematicae Graph Theory**, Vol. 37, (2017) 745-754.
    http://www.discuss.wmie.uz.zgora.pl/gt/index.php?doi=10.7151/dmgt.1961
    Indexed in: Q2, DBLP, ISI, SCI Expanded
    Impact Factor: 0.3

14. Indra Rajasingh and **R. Sundara Rajan**, Exact Wirelength of Embedding Circulant Networks into Necklace and Windmill Graphs, **Ars Combinatoria,** Vol. 130, (2017) 215-237.
    http://www.combinatorialmath.ca/arscombinatoria/vol130.html
    Indexed in: ISI, DBLP
    Impact Factor: 0.3

15. N. Parthiban, Joe Ryan, Indra Rajasingh, **R. Sundara Rajan** and Nirmala Rani, Exact Wirelength of Embedding Chord Graph into Tree Based Architectures, **International Journal of Networking and Virtual Organisations**, Vol. 17(1), (2017) 76-87.

http://www.inderscience.com/offer.php?id=83547
Indexed in: DBLP
Impact Factor: 1.0

16. Michael Arockiaraj, L. Packiaraj, **R. Sundara Rajan**, Exact Wirelength of Circulant Networks into Cycle-of-ladders, **Ars Combinatoria,** Vol. 132, (2017) 269-283.
http://www.combinatorialmath.ca/arscombinatoria/vol132.html
Indexed in: ISI, DBLP
Impact Factor: 0.3

17. Sandi Klavzar, Paul Manuel, M.J. Nadjafi-Arani, **R. Sundara Rajan**, Cyriac Grigorious and Sudeep Stephen, Average distance in interconnection networks via reduction theorems for vertex-weighted graphs, **The Computer Journal**, Vol. 59(12), (2016) 1900-1910.
http://comjnl.oxfordjournals.org/content/early/2016/08/03/comjnl.bxw046
Indexed in: Q1, SCI Expanded, ISI, DBLP, Thomson Reuters
Impact Factor: 1.0

18. Indra Rajasingh, Paul Manuel, N. Parthiban, D. Azubha Jemilet and **R. Sundara Rajan**, Transmission in Butterfly Networks, **The Computer Journal**, Vol. 59, no. 8, (2016) 1174-1179.
http://comjnl.oxfordjournals.org/content/early/2016/01/11/comjnl.bxv127
Indexed in: Q1, SCI Expanded, ISI, DBLP, Thomson Reuters
Impact Factor: 1.0

19. R. Jayagopal, Indra Rajasingh and **R. Sundara Rajan** Domination Parameters in Hypertree, **Lecture Notes in Computer Science**, Vol. 9602, (2016) 299-307.
http://link.springer.com/chapter/10.1007/978-3-319-29221-2_26
Indexed in: Q2, SCI Expanded, ISI, DBLP
Impact Factor: 0.5

20. **R. Sundara Rajan**, Paul Manuel, Indra Rajasingh, N. Parthiban and Mirka Miller, A Lower Bound for Dilation of an Embedding, **The Computer Journal**, Vol. 58(12), (2015) 3271-3278.
http://comjnl.oxfordjournals.org/content/early/2015/04/01/comjnl.bxv021
Indexed in: Q1, SCI Expanded, ISI, DBLP, Thomson Reuters
Impact Factor: 1.0

21. D. Paul, Indra Rajasingh and **R. Sundara Rajan**, Tree Derived Architectures with Decycling Number equal to Cycle Packing Number, **Procedia Computer Science**, Vol. 57, (2015) 716 - 726.
http://www.sciencedirect.com/science/article/pii/S1877050915019894
Indexed in: SCOPUS
Impact Factor: 1.0

22. T.M. Rajalaxmi and **R. Sundara Rajan**, Embedding of Hypercube into Extended Rooted Theta Mesh, **Procedia Computer Science**, Vol. 57, (2015) 670 - 677.
http://www.sciencedirect.com/science/article/pii/S1877050915019705
Indexed in: SCOPUS
Impact Factor: 1.0

23. Indra Rajasingh, **R. Sundara Rajan** and Paul Manuel, A Linear Time Algorithm for Embedding Christmas Trees into Certain Trees, **Parallel Processing Letters,** Vol. 25(4), (2015), 1-17
http://www.worldscientific.com/doi/abs/10.1142/S0129626415500085
Indexed in: Q3, DBLP, Thomson Reuters
Impact Factor: 0.6

24. Mirka Miller, **R. Sundara Rajan**, N. Parthiban and Indra Rajasingh, Minimum Linear Arrangement of Incomplete Hypercubes, **The Computer Journal**, Vol. 58(2), (2015) 331-337.
http://comjnl.oxfordjournals.org/content/58/2/331
Indexed in: Q1, SCI Expanded, ISI, DBLP, Thomson Reuters
Impact Factor: 1.0

25. N. Parthiban, Indra Rajasingh and **R. Sundara Rajan,** Minimum Connected Dominating set for Certain Circulant Networks, **Procedia Computer Science**, Vol. 57, (2015) 587–591.
http://www.sciencedirect.com/science/article/pii/S1877050915019304
Indexed in: SCOPUS
Impact Factor: 1.0

26. Indra Rajasingh, **R.Sundara Rajan** and D. Paul, A New Approach to Compute Acyclic Chromatic Index of Certain Chemical Structures, **Iranian Journal of Mathematical Chemistry**, Vol. 6, no. 1, (2015) 51-61.
http://ijmc.kashanu.ac.ir/article_9056_877.html
Indexed in: SCOPUS

27. **R. Sundara Rajan**, J. Anitha and Indra Rajasingh, 2-Power Domination in Certain Interconnection Networks, **Procedia Computer Science**, Vol. 57, (2015) 738–744.
http://www.sciencedirect.com/science/article/pii/S187705091501995X
Indexed in: SCOPUS
Impact Factor: 1.0

28. **R. Sundara Rajan**, R. Jayagopal, Indra Rajasingh, T.M. Rajalaxmi and N. Parthiban, Combinatorial Properties of Root-fault Hypertrees, **Procedia Computer Science**, Vol. 57, (2015) 1096–1103.
http://www.sciencedirect.com/science/article/pii/S1877050915019225
Indexed in: SCOPUS
Impact Factor: 1.0

29. N. Parthiban, Indra Rajasingh and **R. Sundara Rajan,** Improved Bounds on Forwarding Index of Networks, **Procedia Computer Science**, Vol. 57, (2015) 592-595.
http://www.sciencedirect.com/science/article/pii/S187705091501933X
Indexed in: SCOPUS
Impact Factor: 1.0

30. **R. Sundara Rajan,** Indra Rajasingh, Paul Manuel, T.M. Rajalaxmi and N. Parthiban, Embedding Circulant Networks into Butterfly and Benes Networks, **Lecture Notes in Computer Science**, Vol. 8986, (2015) 298-306.

http://link.springer.com/chapter/10.1007%2F978-3-319-19315-1_26
Indexed in: Q2, SCI Expanded, ISI, DBLP
Impact Factor: 0.5

31. **R. Sundara Rajan**, N. Parthiban and T.M. Rajalaxmi, Embedding of Recursive Circulants into Certain Necklace Graphs, **Mathematics in Computer Science**, Vol. 9(2), (2015) 253-263.
http://link.springer.com/article/10.1007%2Fs11786-015-0232-2
Indexed in: Q3, DBLP
Impact Factor: 0.6

32. **R. Sundara Rajan**, Paul Manuel and Indra Rajasingh, Embeddings between Hypercubes and Hypertrees, **Journal of Graph Algorithms and Applications,** Vol. 19(1), (2015) 361 - 373.
http://jgaa.info/getPaper?id=363
Indexed in: Q1, DBLP, Thomson Reuters
Impact Factor: 0.9

33. Indra Rajasingh, **R. Sundara Rajan**, N. Parthiban and T.M. Rajalaxmi, Bothway Embedding of Circulant Network into Grid, **Journal of Discrete Algorithms**, Vol. 33, (2015) 2-9.
http://www.sciencedirect.com/science/article/pii/S1570866715000027
Indexed in: Q2, DBLP, Thomson Reuters
Impact Factor: 0.8

34. **R. Sundara Rajan**, Indra Rajasingh, Paul Manuel, Mirka Miller and T.M. Rajalaxmi, Maximum Incomplete Recursive Circulants in Graph Embeddings, **Discrete Mathematics, Algorithms and Applications**, Vol. 7(4), (2015) 1-22.
http://www.worldscientific.com/doi/abs/10.1142/S1793830915500536
Indexed in: DBLP, Thomson Reuters
Impact Factor: 0.4

35. Jasintha Quadras, A. Sajiya Merlin Mahizl, Indra Rajasingh, **R. Sundara Rajan**, Domination in Certain Chemical Graphs, **Journal of Mathematical Chemistry**, Vol. 53(1), (2015) 207-219.
http://link.springer.com/article/10.1007%2Fs10910-014-0422-1
Indexed in: Q2, SCI, SCI Expanded, ISI, Thomson Reuters
Impact Factor: 1.2

36. Paul Manuel, Indra Rajasingh, **R. Sundara Rajan,** N. Parthiban and T.M. Rajalaxmi, A Tight Bound for Congestion of an Embedding, **Lecture Notes in Computer Science**, Vol. 8959, (2015), 229-237.
http://link.springer.com/chapter/10.1007%2F978-3-319-14974-5_22
Indexed in: Q2, SCI Expanded, ISI, DBLP
Impact Factor: 0.5

37. Thalaya Al-Fozan, Paul Manuel, Indra Rajasingh and **R. Sundara Rajan**, Computing Szeged Index of Certain Nanosheets Using Partition Technique, **MATCH Communications in Mathematical and in Computer Chemistry**, Vol. 72(1), (2014) 339-353.
http://match.pmf.kg.ac.rs/electronic_versions/Match72/n1/match72n1_339-353.pdf
Indexed in: Q1, SCI, ISI

Impact Factor: 3.9

38. N. Parthiban, **R. Sundara Rajan** and Indra Rajasingh, Embedding Circulant and Grid Based Network **Journal of Combinatorial Mathematics and Combinatorial Computing,** Vol. 92, (2015) 121-129.
http://www.combinatorialmath.ca/jcmcc/jcmcc92.html
Indexed in: SCOPUS
Impact Factor: 0.2

39. Indra Rajasingh, **R. Sundara Rajan**, Rajesh M and Paul Manuel, Oriented Diameter of Grids, **Journal of Combinatorial Mathematics and Combinatorial Computing,** Vol. 92, (2015) 283-288.
http://www.combinatorialmath.ca/jcmcc/jcmcc92.html
Indexed in: SCOPUS
Impact Factor: 0.2

40. **R. Sundara Rajan**, Indra Rajasingh, N. Parthiban and T.M. Rajalaxmi, A Linear Time Algorithm for Embedding Hypercube into Cylinder and Torus, **Theoretical Computer Science**, Vol. 542, (2014) 108-115.
http://www.sciencedirect.com/science/article/pii/S0304397514003569
Indexed in: Q1, SCI, SCI Expanded, ISI, DBLP, Thomson Reuters
Impact Factor: 0.8

41. Thalaya Al-Fozan, Paul Manuel, Indra Rajasingh and **R. Sundara Rajan**, A new technique to compute PI index and Szeged index of pericondensed benzenoid graphs, **Journal of Computational and Theoretical Nanoscience**, Vol. 11(2), (2014) 533-539.
http://dx.doi.org/10.1166/jctn.2014.3390
Indexed in: Q3, SCI Expanded, ISI, Thomson Reuters
Impact Factor: 1.7

42. Paul Manuel, Indra Rajasingh, Bharati Rajan and **R. Sundara Rajan**, A New Approach To Compute Wiener Index, **Journal of Computational and Theoretical Nanoscience**, Vol. 10(6), (2013) 1515-1521.
http://dx.doi.org/10.1166/jctn.2013.2882
Indexed in: Q3, SCI Expanded, ISI, Thomson Reuters
Impact Factor: 1.7

43. **R. Sundara Rajan**, Embedding of Hypercubes into l -Sibling Trees, **Journal of Interconnection Networks,** Vol. 14, (2013).
http://www.worldscientific.com/doi/abs/10.1142/S0219265913500187
Indexed in: Q3, SCI Expanded, ISI, DBLP, Thomson Reuters
Impact Factor: 0.4

44. Indra Rajasingh, Bharati Rajan and **R. Sundara Rajan**, Embedding of Hypercubes into Necklace, Windmill and Snake Graphs, **Information Processing Letters**, Vol. 112, (2012) 509-515.
http://www.sciencedirect.com/science/article/pii/S0020019012000749
Indexed in: Q2, ISI, DBLP, Thomson Reuters

Impact Factor: 0.6

45. Indra Rajasingh, Bharati Rajan and **R. Sundara Rajan**, Embedding of Special Classes of Circulant Networks, Hypercubes and Generalized Petersen Graphs, **International Journal of Computer Mathematics**, Vol. 89(15), (2012) 1970-1978.
http://www.tandfonline.com/doi/abs/10.1080/00207160.2012.697557#.VPnn-3yUeHQ
Indexed in: Q3, SCI Expanded, ISI, DBLP, Thomson Reuters
Impact Factor: 0.8

46. Paul Manuel, Indra Rajasingh and **R. Sundara Rajan**, Embedding variants of Hypercubes with dilation 2, **Journal of Interconnection Networks**, Vol. 13(1-2) (2012).
http://www.worldscientific.com/doi/abs/10.1142/S0219265912500041
Indexed in: Q3, SCI Expanded, ISI, DBLP, Thomson Reuters
Impact Factor: 0.4

47. Indra Rajasingh, Bharati Rajan and **R. Sundara Rajan**, Combinatorial Properties of Circulant Networks, **IAENG: International Journal of Applied Mathematics**, Vol. 41, no. 4, (2011) 352-356.
http://www.iaeng.org/IJAM/issues_v41/issue_4/index.html
Indexed in: Q3, SCOPUS
Impact Factor: 1.0

48. Indra Rajasingh, Bharati Rajan, **R. Sundara Rajan** and Paul Manuel, Embedding in Fat Trees, **Journal of Combinatorial Mathematics and Combinatorial Computing,** Vol. 79, (2011) 139-146.
http://www.combinatorialmath.ca/jcmcc/jcmcc79.html
Indexed in: SCOPUS
Impact Factor: 0.2

49. Indra Rajasingh, Bharati Rajan and **R. Sundara Rajan**, Wide Diameter of Generalized Fat Tree, in: Proceedings of ICIEIS 2011, **Lecture Notes in Computer Science**, Springer-Verlag, CCIS 253, no. 3 (2011) 424-430.
http://link.springer.com/chapter/10.1007%2F978-3-642-25462-8_38
Indexed in: Q2, SCI Expanded, ISI, DBLP
Impact Factor: 0.5

Accepted for Publication

50. **R. Sundara Rajan**, K. Jagadeesh Kumar, A. Arul Shantrinal, T.M. Rajalaxmi, Indra Rajasingh, and Krishnan Balasubramanian, Biochemical & Phylogenetic Networks-I: Hypertrees and Corona Products, **Journal of Mathematical Chemistry**, 2020.

51. **R. Sundara Rajan**, A. Arul Shantrinal, K. Jagadeesh Kumar, T.M. Rajalaxmi, Indra Rajasingh, and Krishnan Balasubramanian, Biochemical & Phylogenetic Networks-II: *X*-trees and Phylogenetic Trees, **Journal of Mathematical Chemistry**, 2020.

52. **R. Sundara Rajan**, T.M. Rajalaxmi, Sudeep Stephen, A. Arul Shantrinal, K. Jagadeesh Kumar, Embedding Wheel-like Networks, **Iranian Journal of Mathematical Sciences and Informatics**, 2020.