

## **FACULTY PROFILE TEMPLATE**

**Please ensure that this Template is ‘Thoroughly Followed/Replicated’ in your profile**

- ❖ **Please mention year of passing (Educational Qualifications)**
- ❖ **In case of Updating Existing Faculty profiles, please send the new additions in ‘Highlighted Form/Text’.**

### **Basic Details:**

- **Name:** Dr. J. Saral
- **Designation:** Assistant Professor (OG)
- **Phone Number:** 9940821054
- **Email ID:** saralj@srmist.edu.in
- **Area or Subject:** Graph Theory
- **Affiliation:** Department of Mathematics, SRM Institute of Science and Technology, Ramapuram.

### **Educational Details:**

- **Degree** – M. Sc., M. Phil, Ph. D.
- **Area or Subject** – Mathematics
- **University**

Ph. D. Mathematics – 2020, Kalasalingam Academy of Research and Education, Srivilliputhur, Tamil nadu.

M.Phil – 2008, St. Joseph’s College, Trichy, Tamilnadu.

M.Sc. Mathematics – 2007, Bharathidasan University, Trichy, Tamilnadu.

B.Sc. Mathematics – 2005, Thanthai Hans Roever College, Perambalur, Tamilnadu.

## **Other Details:**

### **Courses:**

- Algebra
- Mathematical Foundation
- Numerical methods
- Probability Statistics

**Research Interests:** Graph Theory.

### **Publications:**

- S. Arumugam, J. Saral, Identification of Bottleneck Elements in Cellular Manufacturing Problem, Procedia Computer Science, Volume 74, 2015, 181-185.
- S. Arumugam, J. Saral and Ashwin Ganesan, Decomposition of bipartite graphs arising in cellular manufacturing systems, International Journal of Soft Computing and Applications, Vol. 8, No. 2, July 2016, 28-34.
- S. Arumugam, J. Saral, Minimizing the Number of Exceptional Edges in Cellular Manufacturing Problem, Electronic Notes in Discrete Mathematics, Vol. 53, 2016, 465- 472.
- S. Arumugam, J. Saral, Cellular Manufacturing Problem - A Graph Theoretic Approach, • Bulletin of the JSME, Journal of Advanced Mechanical Design, Systems, and Manufacturing, Vol. 13, 2019

### **Papers Presented in international/national conferences:**

- Presented a Paper entitled “Cellular Manufacturing Problem – A Graph Theoretic Approach” at the UGC Sponsored National Conference on Discrete Mathematics (NCDM 2015) held on Jan 9th and 10th, 2015 at St. Joseph College (Autonomous), Trichy, organized by the Department of Mathematics, School of computing Science, St. Joseph College (Autonomous), Trichy.
- Presented a Paper entitled “Decomposition of bipartite graphs arising in cellular manufacturing systems” at the International Workshop on Graph Algorithms (IWGA 2015) held on May 13, 2015 at University Saints Malaysia (USM), Penang, Malaysia, organized by the School of computer Science, USM.

### **Working Papers:**

- Distance 2 domination sets in graphs

### **Work in Progress:**

- Distance 2 domination sets in graphs

### **Academic Experience:**

- Working as a Lecturer in Dr. MGR Janaki College of Arts and Science, Chennai from July 2019 to Present.
- Worked as a Lecturer in Kalasalingam Academy of Research and Education, Krishnankoil from June 2015 to Apr 2019.
- Acted as a Research Scholar in Kalasalingam Academy of Research and Education, Krishnankoil from Jan 2010 to May 2015.
- Worked as a Lecturer in Roever College of Engineering and Technology, Perambalur from June 2009 to November 2009.
- Worked as a Lecturer in Thanthai Hans Roever College, Perambalur from August 2008 to May 2009

## **Seminars, Webinars, Workshops and Conferences Attended**

- Attended the summer school in Algebra and its applications conducted by the Department of Mathematics, Aligappa University, and Karaikudi from 22nd May to 9th June 2006.
- Attended the one day seminar on E-learning Resources for Academic Research held on 2nd Feb 2008 organized by St. Joseph's College, Trichy.
- Attended the Platinum Jubilee 75th Annual Conference of the Indian Mathematical Society organized by n-CARDMATH, Kalasalingam University during Dec 27-30, 2009.
- Attended the Instructional Workshop on Graph Theory organized by the Department of Mathematics, Annamalai University during from 29th Dec 2009 to 11th Jan 2010.
- Attended the Instructional Workshop on Graph Algorithms organized by n-CARDMATH, Kalasalingam University during Feb 17-24, 2010. Attended the Workshop on Introduction to Graph Algorithms organized by nCARDMATH, Kalasalingam University during Feb 3-6, 2010.
- Attended the Instructional Workshop on Graph Colorings organized by n-CARDMATH, Kalasalingam University during Mar 10-15, 2010. Attended the Instructional Workshop on Mathematical Modeling and Simulation organized by n-CARDMATH, Kalasalingam University during July 07-14, 2010.
- Attended the National Conference on Theoretical Computer Science and Discrete Mathematics (NCTCSDM 2012) jointly organized by n-CARDMATH, Kalasalingam University and Department of Computer Science, Ball State University, Muncie, USA during Jan 09-11, 2012.
- Attended the 23rd International Workshop on Combinatorial Algorithms (IWOCA 2012) organized by n-CARDMATH, Kalasalingam University during July 19-21, 2012.
- Attended the one day seminar on Advances in Gamma spectrometry using Photomultipliers organized by n-CARDMATH, Kalasalingam University on 18th Sep 2012.
- Attended the International Workshop on Domination in Graphs organized by nCARDMATH, Kalasalingam University from 27th Jan to 1st Feb 2014.
- Attended the International Workshop on Graph Labeling Problems organized by nCARDMATH, Kalasalingam University from Feb 5-11, 2014.
- Attended the International Workshop on Graph Theory and its Applications to Visual Cryptography organized by n-CARDMATH, Kalasalingam University from Mar 10-15, 2014. Participated the Faculty Development Program on Art of Counseling organized by Center for Learning Technology and Department of Business Administration, Kalasalingam Academy of Research and Education from Nov 16-18, 2016.
- Participated the Faculty Development Program on Teaching with Technologies organized by Center for Learning Technology, Kalasalingam Academy of Research and Education from Apr 04, 2018.
- Participated the Faculty Development Program on Advanced Teaching and Learning Methodologies organized by Center for Learning Technology and Department of Social Work, Kalasalingam Academy of Research and Education from Aug 29-31, 2018.
- Participated the Faculty Development Program on Recent Trends in Engineering Mathematics organized by Department of Mathematics, School of Advanced Sciences, Kalasalingam Academy of Research and Education from Dec 19-21, 2018.
- Attended the National Conference on Advances in Mathematical and Applied Sciences organized by Department of Mathematics, Dr. MGR Janaki College of Arts and Science for Women, Chennai during Sep 27, 2019.
- Attended the Training Program on Work Life Harmony conducted by Anna Institute of Management, Administrative Training Institute, Govt. of Tamil Nadu, Chennai, during Aug 17, 2019.
- Attended the State Level Technical Workshop on Intellectual Property Rights organized by Tamilnadu State Council for Science and Technology Patent Information Center, Govt. of Tamil Nadu, Chennai and Dr. MGR Janaki College of Arts and Science for Women, Chennai supported by Department of Science and Technology, Govt. of India, Delhi during Dec 12-13, 2019.
- Attended the Webinar on Enhancing Interpersonal Skills organized by Department of Psychology, Dr. MGR Janaki College of Arts and Science for Women, Chennai during May 30, 2020.

- Attended the National Webinar on Theory of Graphs – An Emerging Field of Research organized by PG and Research Department of Mathematics, Thiagarajar College, Madurai during May 20, 2020.
- Attended the International Webinar on Special Functions and Discrete Mathematics organized by Department of Mathematics, University of Kerala, during Aug 02-05, 2020.
- Attended the online National Lecture Series on Graph Theory and its Applications organized by Postgraduate and Research Department of Mathematics, Mar Thoma College Tiruvalla in collaboration with Kerala Mathematical Association (KMA), during Aug 19-21, 2020.
- Attended the online FDP programme on Discrete Mathematics, Graph Theory and its Applications organized by Department of Applied Sciences and Humanities in association with IQAC, Universal Engineering College, Vallivattom, Thrissur, Kerala, India, during Aug 17-21, 2020.
- Attended the Two Days International Webinar on Fuzzy and Neutrosophic Systems organized by Department of Mathematical Sciences, Bodoland University, STAD, Assam, India, during Aug 21-22, 2020.
- Attended the International Webinar on Graph Labeling and Applications (ICGLA – 2020) organized by Department of Mathematics, Goa University, Goa, India, during Sep 17-19, 2020.
- Attended the International virtual Conference on Progress in Mathematics toward Industrial Applications (PMTIA – 2020) organized by Department of Mathematics, SRM Institute of Science and Technology, Ramapuram, Chennai, during Nov 06-07, 2020.

#### **Competitions Participated and Won**

- Participated in National Quiz, Awakening Indians to India, conducted by All India Chinmaya Yuva Kendra, the youth wing of Chinmaya Mission on Jan 2004.
- Participated in Quiz as a part SESQUICENTENARY MATHEMATICAL OLYMPIAD organized by The Mathematics Association, St. Joseph's College, Trichy on 17th Mar 2004. Participated in the inter department Quiz Competition organized by Department of English, Thanthai Hans Roever College, Perambalur on 10th Mar 2004.
- Won First Prize in the intercollegiate Quiz Competition organized by Department of Mathematics, Adaikalamatha College, Thanjavur on 2005.
- Participated RDD Mathematics Olympiad-2005, organized by RDB Institute of Mathematical Science, Papanasam on 29th Jan 2005.
- Participated and Won Second Prize in Written Test, Quiz and Surprise Event as a part SESQUICENTENARY MATHEMATICAL OLYMPIAD organized by The Mathematics Association, St. Joseph's College, and Trichy on 17th Feb 2005.
- Won Second Prize in Essay Writing Tamil organized by Thanthai Hans Roever College, Perambalur on 2006. Won Third Prize in Quiz as a part SESQUICENTENARY MATHEMATICAL OLYMPIAD organized by The Mathematics Association, St. Joseph's College, Trichy on 28th Feb 2007.
- Won Second Prize in Master Mind (Written) –MATRO QUIZ organized by Department Mathematics, Thanthai Hans Roever College, Perambalur on 2007.
- Participated in State Level Quiz Contest for PG Students in Mathematics organized by Alagappa University, Karaikudi on 14th Mar 2007.

#### **Achievements and Awards:**

- University rank holder in UG (Bharathidasan University 6th Rank).
- Qualified "Tamilnadu State Level Eligibility" (SLET) Test -2017.
- Cleared "Business English Certification" (BEC) at Preliminary level.

**Membership: Nil**

**Please send in your latest **PASSPORT SIZE** photograph.**

