


Name: Dr.R.AVUDAINAYAKI				
Designation:	ASSOCIATE PROFESSOR			
Qualification:	M.sc.,M.Phil.,Ph.D.,			
Area of specialization:	GRAPH THEORY			
Experience:	Industrial Experience		Teaching Experience	
	NIL		18 Years 6 Month	
Number of workshops / FDP attended:	Number of Workshops		Number of FDPs	
	3		8	
Publications:	Conference		Journal	
	National	International	National	International
	5	5	6	9
Professional Body Membership	1.IEEE Membership 2.ISTE Membership 3.National Institute For Technical Training & Skill Development			
Staff Achievements	1.NPTEL DISCIPLINE STAR 2. NPTEL ENTHUSIASTS			

Educational Qualifications:

Categor y	Name of the Degree	Specialization	Year of Passing	Name of the University	% of Marks / Grades obtained	Class obtained
UG	B.Sc	Mathematics	14.04.2001	M.S.University	67%	FIRST
PG	M.Sc	Mathematics	17.04.2003	M.S.University	75%	FIRST
	M.Phil	Mathematics	15.11.2004	M.S.University	64%	FIRST
PhD	Ph.D	Graph Theory	28.07.2021	Madras University	-	-

Academic Experience:

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
Pattammal Algesan Arts and Science College	Lecturer	26/07/2006	30/03/2007	-	8	4
Sri Andal Alagar Engineering College	Lecturer	03/09/2007	05/06/2008	-	9	2
Indira Gandhi College for Women	Lecturer	14/07/2008	11/12/2009	1	4	27
Adhiparasakthi Engineering College	Assistant Professor	14/12/2009	30/05/2011	1	5	16
Sri SaiRam Institute of Technology	Associate Professor	03/06/2011	30/06/2025	14	-	27
Sri SaiRam Engineering College	Associate Professor	01/07/2025	Till Date	-	3	-
				16	28	76
TOTAL EXPERIENCE				18	6	16

Anna University Research Supervisor Ref no: NIL**Workshops/Seminars attended:**

1. Attended the Workshop on ‘‘**Fuzzy Logic & Probability And Queueing Theory**’’ on 2013 in Sri Sai Ram Institute of Technology, Chennai.
2. Attended the Workshop on ‘‘**Graph Theory and Discrete Mathematics**’’ held on 20th & 21st August 2015 in Sri Sai Ram Institute of Technology, Chennai.
3. Attended the Workshop on ‘‘**How to write Research Papers for Refereed Journals**’’ held on 24th January 2015 in Sri Sai Ram Institute of Technology, Chennai.

FDP/STTP Attended:

1. Attended the FDP on ‘‘**Innovative Teaching Methodologies**’’ held on 3 May 2011 in AdhiParasakthi Engineering College, Chennai.
2. Attended the FDP on ‘‘**Discrete Mathematics & Graph Theory**’’ held on 30th June and 1st July 2016 in KCG College of Technology, Chennai.
3. Attended the International Conference on **Mathematical Computer Applications** on December 2014 at SSN College of Engineering, Chennai.
4. Attended the FDP on ‘‘**Frontriers of Mathematics**’’ held on 17-8-2020 to 26-8-2020 in SRM University, Ramapuram Chennai.
5. Attended the FDP on ‘‘**Stress Management**’’ from 21-9-2021 to 25-9-2021 by AICTE, New Delhi.
6. Attended the FDP on **Mathematics and Statistics to commemorate birth anniversary of Living Legend Prof. C R Rao** from 28th Dec. 2020 - 02nd Jan. 2021 in R.B.V.R.R. Womens College (Autonomous).
7. Attended the online FDP on **Exploring Recent Trends in Applied Mathematics and Machine Learning** from 20th May 2024 to 24th May 2024 by Department of Mathematics at Koneru Lakshmaiah Educational Foundation (Deemed to be University), Bachupally Campus, Hyderabad.
8. Attended the online FDP on ‘‘**Innovative Applications of Mathematics in Real World Challenges**’’ from 15-09-2025 to 19-09-2025 by New Prince Sri Bavani College of Engineering and Technology, Chennai.

Symposium Attended: Nil

Conference Attended:

1. Presented a paper titled ‘‘**Irregular coloring of some class of Graphs**’’ in ICMCE 2015 from 14-15 DEC 2015 at VIT University.
2. Presented a paper titled ‘‘**Irregular Coloring in Mycielskian Graphs**’’ in National

Seminar on Recent Trends in Graph Theory and Combinatorics from 26-07-2016 to 27-07-2016 at Meenakshi college for Women, Chennai – 600024.

3. Presented a paper titled “**3-Equitable and Even Sum Cordial Labeling for the Extended Duplicate Graph of Arrow Graph**” in National Conference on Emerging Trends in Mathematical Sciences on 22-12-2016 at S.A. Engineering College ,Chennai.
4. Presented a paper titled “**Prime Cordial and Signed Product Cordial Labeling for the Extended Duplicate Graph of Arrow Graph**” in National Conference on Mathematical Techniques and their Applications from 27-01-2017 to 28-01-2017 at SRM University ,Kattankulathur – 603203.
5. Presented a paper titled “**Some Graceful Labeling for the Extended Duplicate Graph of Splitting Graph of Path** ” in International Conference on Mathematical Computer Engineering, at VIT University,Chennai Campus on 3-4 November 2017.
6. Presented a paper titled”**E-Cordial and Product E Cordial Labeling for the Extended Duplicate Graph of Splitting Graph of Path**”in National Conference on Mathematical Techniques and their Applications from 05-01-2018 to 06-01-2018 at SRM University ,Kattankulathur – 603203.
7. Presented a paper titled ” **Z_3 vertex magic labeling and Z_3 edge magic labeling for the extended duplicate graph of arrow graph**”in International Conference on Computing Science from 01-11-2018 to 17-11-2018 at LOYOLA College,Chennai.
8. Presented a paper titled “**Some mean labeling for the extended duplicate graph of arrow graph**” in National Conference on Emerging Trends in Mathematical Sciences on 20-12-2018 at S.A. Engineering College ,Chennai.
9. Presented a paper titled “**Differential Chromatic Number of Central Graph of Some Standard Graphs**” in 2 nd International Conference on Mathematical Techniques and their Applications from 24-03-2021 to 26-03-2021 at SRM University ,Kattankulathur – 603203.
10. Presented a paper titled ” **Differential Chromatic Number of Middle Graph of Some Standard Graph**” in International Conference On Advancements In Applicable Mathematics on 07-03-2022 at S.I.V.E.T. College,Chennai.
11. Presented a paper titled ” **Differential Chromatic Number of Middle Graph of Some Standard Graph**” in International Conference On Advancements In Applicable Mathematics on 07-03-2022 at S.I.V.E.T. College,Chennai.

Completed / Ongoing Projects: NIL

Patent:

1. A game Theory approach to a model in mathematical ecology

2. AI Based Token Dispenser For Queue Management

Journal Publications:

1. B.Selvam, R.Avudainayaki and P.P.Ulaganathan, **Cordial and total magic cordial labelings for the extended duplicate graph of arrow graph**, International Journal of Mathematics Trends and Technology , Vol. 38(1),(2016),5-11.
2. R.Avudainayaki, B.Selvam and P.P.Ulaganathan ,**3-Equitable and even sum cordial labeling for the extended duplicate graph of arrow graph** ,Global Journal of Pure and Applied Mathematics,Vol.13(1),(2017),108-111.
3. R.Avudainayaki, B.Selvam and P.P.Ulaganathan, **Prime cordial and signed product cordial labeling for the extended duplicate graph of arrow graph**, International Journal of Pure and Applied Mathematics” Vol.113(10),(2017),74 – 82.
4. R.Avudainayaki, B.Selvam and P.P.Ulaganathan, **3-Equitable and total magic cordial labeling for the extended duplicate graph of splitting graph of path**, Annals of Pure and Applied Mathematics, Vol. 13(2),(2017),199-206.
5. R.Avudainayaki, B.Selvam and P.P.Ulaganathan ,**Signed product cordial and even sum cordial labeling for the extended duplicate graph of splitting graph of path**, International Journal of Mathematics and its applications,Vol.5,(1),(2017),123–128.
6. R.Avudainayaki, B.Selvam and P.P.Ulaganathan ,**Cordial and product cordial labeling for the extended duplicate graph of splitting graph of path**, International Journal of Mathematical Archive,Vol8(2),(2017),60-64.
7. R.Avudainayaki, B.Selvam and P.P.Ulaganathan ,**E-Cordial and product E-cordial labeling for the extended duplicate graph of splitting graph of path**, Journal of Physics, Conf. Series (2018),1-6.
8. R.Avudainayaki, B.Selvam, **Harmonious and pell Labeling for some extended duplicate graph**, International Journal of Scientific Research in Mathematical and Statistical Sciences, Vol.5(6), (2018), 152-156.
9. R.Avudainayaki, B.Selvam, **E₃- cordial labeling and total 3 - sum cordial labeling for the extended duplicate graph of arrow graph**, International Journal of

Engineering, Science and Mathematics ,Vol.7(8),(2018),50-61.

10. R.Avudainayaki, B.Selvam and P.P.Ulaganathan, **Z_3 -vertex magic total labeling and Z_3 -edge magic total labeling for the extended duplicate graph of arrow graph**, International Journal of Computer Sciences and Engineering, Vol.6(9),(2018),1-5.
11. R.Avudainayaki, B.Selvam and P.P.Ulaganathan ,”**Some mean labeling for the extended duplicate graph of arrow graph**”, Journal of Applied Science and Computations, Vol.6(1),(2019),489-499.
12. R.Avudainayaki, B.Selvam and P.P.Ulaganathan, **Some graceful labeling for the extended duplicate graph of splitting graph of path**, Journal of Emerging Technologies and Innovative Research, Vol. 6(4),(2019),318-324.
13. R.Avudainayaki, B.Selvam and P.P.Ulaganathan, **Anti-magic labeling for some extended duplicate graph**, Journal of Applied Science and Computations, Vol.6(4), (2019),3526-3532.
14. R.Avudainayaki and D.Yokesh, **Irregular Coloring Of Some Special Graphs**, **Advances in Mathematics: Scientific Journal**, 1857-8365 .
15. R. Thamizhselvi, D. , Mohammed Inamul Hassan, M. , Amrith, R.V. , Avudainayaki, **Drugex,-The Drug Extincto App** ,Intelligent Computing and Control for Engineering and Business Systems, ICCEBS 2023

Books / Book Chapters:

1. **DISCRETE MATHEMATICS(ISBN 978-93-646-8509-2)**
2. **MATRICES AND CALCULUS (ISBN 978-93-713-6125-5)**

Awards:

1. **NPTEL DISCIPLINE AWARD**
2. **NPTEL ENTHUSIASTS**

Startup : NIL

Webinar:

1. Attended the Webinar on **Essential Mathematics for Machine Learning** organized by Guru Nanak College (AUTONOMOUS).
2. Attended the Webinar on **Linear Algebra Through Sage Math** organised by the Vellore Institute of Technology Chennai.
3. Attended the Webinar on Applications of Mathematics in Mechanical Engineering organized by KPR Institute of Engineering and Technology.

Resource Person: NIL

Online Courses: NIL