

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
	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:

Category	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 SaiRam 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 “**Frontiers 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,NewDelhi.
6. Attended the FDP on **Mathematics and Statistics to commemorate birth anniversary of Living Legend Prof.C R Rao** from 28th Dec.2020 - 02 nd 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 15-9-2025 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 ICMCE2015 from 14-15 DEC 2015 at VIT University .
2. Presented a paper titled “**Irregular Coloring in Mycielskian Graphs**” in National

Seminar on Recend 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 ”**Z₃ vertex magic labeling and Z₃ edge magic labeling for the extended duplicate graph of arrow graph**”in International Conference on Computing Science from 016-11-2018 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, **E_3 - 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 Extinctor 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 ENTHUSIATS**

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