

<b>Name:</b>	<b>Photo</b> 			
<b>Designation:</b>	<b>Assistant Professor</b>			
<b>Qualification:</b>	<i>M.Sc., M.Phil., Ph.D.</i>			
<b>Area of specialization:</b>	<i>Algebraic Graph Theory, Chemical Graph Theory</i>			
<b>Experience:</b>	<b>Industrial Experience</b>		<b>Teaching Experience</b>	
	<b>0</b>		<b>4</b>	
<b>Number of workshops / FDP attended:</b>	<b>Number of Workshops</b>		<b>Number of FDPs</b>	
	<b>2</b>		<b>8</b>	
<b>Publications:</b>	<b>Conference</b>		<b>Journal</b>	
	<b>National</b>	<b>International</b>	<b>National</b>	<b>International</b>
		<b>1</b>		<b>4</b>
<b>Books / Book Chapters</b>				
<b>Patents:</b>	<b>National</b>		<b>International</b>	
<b>Professional Body Membership</b>				
<b>Staff Achievements</b>	Achieved Good results			

## Educational Qualifications:

Category	Name of the Degree	Specialization	Year of Passing	Name of the College	Name of the University	% of Marks / Grades obtained	Class obtained
UG	B.Sc.,	Mathematics	2016	Sacred Heart College (Autonomous), Tirupattur – 635 601	Thiruvalluvar University	75 %	First Class
PG	M.Sc.,	Mathematics	2018	Loyola College, Vettavalam – 606 754	Thiruvalluvar University	80 %	First Class with Distinction
	M.Phil.	Mathematics	2019	Loyola College (Autonomous), Chennai – 600 034	Madras University	85 %	First Class with Distinction
	Ph.D.	Mathematics	2024	Vellore Institute of Technology, Vellore – 632014	Vellore Institute of Technology	NA	NA

## Academic Experience:

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
St. Joseph University, Nagaland – 797 115	Assistant Professor	05/09/2019	07/09/2020	1		
Vellore Institute of Technology, Vellore – 632 014	Assistant Professor	01/04/2021	29/02/2024	3		

I.a. Additional Qualification : Nil  
 i. GATE Score (In case of B.E. / B.Tech.)  
 ii. NET / SLET (In case of M.C.A. / M.Sc. / M.A.)

II. Title of Ph.D. Thesis \* : A Study on Topological Indices of Zero Divisor  
 Graphs Associated with Commutative Rings

III. Faculty in which Ph.D. was awarded : Ph.D. Mathematics

IV. Academic Experience as on Jan 2016 : Yes

Workshops/Seminars attended:

Workshops:

- ❖ A Virtual Workshop on "Domination Theory & Topological Indices", 04-06 February, 2021, Dept of Mathematics, MANGALORE UNIVERSITY, Mangalagangothri, Mangalore, India.
- ❖ Has participated in the AFS-III - Annual Foundation School-III (2023), an Advanced Training in Mathematics School organized by the National Centre for Mathematics, a joint center of IIT Bombay and TIFR, Mumbai. The program was held at IISER, Thiruvananthapuram, from 19th June 2023 to 15th July 2023.
- ❖ Has participated in the International Seminar on Mathematical Applications – 2023 (ISMA-2023), organized by the Department of Mathematics, VIT, Vellore, on 04th December 2023 at Dr. Ambedkar Auditorium.

FDP/STTP Attended:

- ❖ Has participated in a Half-a-Day FDP on Graph Coloring Problems and Its Applications, organized by the Academic Staff College in association with the School of Advanced Sciences, VIT Vellore, on 21-Sep-2022.
- ❖ Has participated in a 5-days Teaching Learning Practice (TLP) on A Framework for Machine Learning in the Fields of Statistical Analysis, organized by the Teaching Learning Centre of Excellence (TLCE) in association with the School of Advanced Sciences, VIT, from 12-Feb-2024 to 16-Feb-2024 at TT 513.
- ❖ Has participated in a 5-day Faculty Development Program (FDP) on Current Developments in Mathematics with Applications in Sciences and Technology (CDMAST-2023), organized by the Teaching Learning Centre of Excellence (TLCE) in association with the School of Advanced Sciences, VIT, from 18-Dec-2023 to 22-Dec-2023 at TT 513.
- ❖ Has participated in a 5-days Faculty Development Program (FDP) on Linear Algebra and its Applications, organized by the Department of Mathematics, VIT, from February 27th to March 3rd, 2023.
- ❖ Has participated in a one-week online Faculty Development Program (FDP) on Recent Trends in Mathematics with Applications in Sciences, Engineering, and Technology, organized from 19th to 23rd December 2022, from 10:00 AM to 05:30 PM.
- ❖ Has participated in a 5-days National Level Faculty Development Program (FDP) on Recent Advances in Mathematics, organized from 8th to 12th August 2022.
- ❖ Has participated in a 10-days online Faculty Development Program (FDP) on Data Science and Machine Learning, organized by the E & ICT Academy, NIT Warangal, and the School of Information Technology & Engineering, VIT Vellore, from 26th August 2022 (Friday) to 4th September 2022 (Sunday).
- ❖ Has participated in a 5-days online Faculty Development Program (FDP) on Data Driven Decision Making: Linear Algebra, Integrating Statistical Method, and Data Science in Research organized by the Department of Mathematics, St. Joseph's College, Chennai – 600128, from 23rd September 2024 to 27th September 2024.

Symposium Attended:

Nil

Conference Attended:

- ❖ International Conference on "ANALYSIS AND APPLIED MATHEMATICS", April 26-28, 2022, Dept of Mathematics, Ayya Nadar Jannaki Ammal College, Sivakasi, Tamil Nadu, India. Paper title: Computing on Degree Based Topological Indices of Zero Divisor Graph.

- ❖ International Conference on "WAVELET ANALYSIS AND GRAPH THEORY", September 15-16, Dept of Mathematics, SASTRA UNIVERSITY, Thanjavur, Tamil Nadu, India. Paper title: Computing Topological Indices of Zero Divisor Graph Based on Vertex Degree.
- ❖ International Conference on "Recent Developments in Mathematics", August 24 – 26, 2022, Canadian University Dubai, UAE. Paper title: On Topological Indices for Zero Divisor Graph Based on Eccentricity.
- ❖ International Conference on Recent Trends in Applied Mathematics (ICRTAM 2023), February 24–25, 2023, Dept of Mathematics, Loyola College, Chennai. Tamil Nadu, India. Paper title: Wiener Index and Graph Energy of Zero Divisor Graph for Commutative Rings.
- ❖ International Conference on "Mathematical Sciences and Applications", March 24–25, 2023, Dept of Mathematics, Sacred Heart College, Tirupattur, Tamil Nadu, India. Paper title: Computation of Distance Based Topological Indices Associated with Zero Divisor Graphs.
- ❖ International Conference on "EMERGING TRENDS OF MATHEMATICS IN ENGINEERING AND APPLIED SCIENCES (NCETMEAS-2023)", December 22–23, 2023, Dept of Mathematics, SRIVENKATESWARA UNIVERSITY, TIRUPATI, Tamil Nadu, India. Paper title: On Degree Based Computation of Topological Descriptors in Zero Divisor Graphs with Commutative Rings.

Completed / Ongoing Projects:

Patent:

Journal Publications:

### **Journals:**

- ❖ Clement Johnson Rayer, and Ravi Sankar Jeyaraj, Applications on Topological Indices of Zero-Divisor Graph Associated with Commutative Rings, *Symmetry*, 15, no. 2 (2023): 335.
- ❖ Clement Johnson, and Ravi Sankar, Graph energy and topological descriptors of zero divisor graph associated with commutative ring. *Journal of Applied Mathematics and Computing* (2023): 1-16.
- ❖ Clement Johnson R, and Ravi Sankar J, Wiener Index and Graph Energy of Zero Divisor Graph for Commutative Rings. *Asian-European Journal of Mathematics* (2023): 2350211.
- ❖ Clement Johnson R, and Ravi Sankar J, Computation of Some Graph Energies of the Zero Divisor Graph Over the Commutative Ring. *Iranian Journal of Mathematics*. 15, no. 2 (2024): 79-90.
- ❖ Clement Johnson R, and Ravi Sankar J, COMPUTING TOPOLOGICAL INDICES OF ZERO DIVISOR GRAPH BASED ON DEGREE. *TWMS J. App. and Eng. Math.*, Special Issue N.1, 2023, pp. 50-60.

### **Scopus:**

- ❖ Clement Johnson Rayer, and Ravi Sankar Jeyaraj, Applications on Topological Indices of Zero-Divisor Graph Associated with Commutative Rings, *Symmetry*, 15, no. 2 (2023): 335. (Scopus, Q2 IF=2.940).

- ❖ Clement Johnson, and Ravi Sankar, Graph energy and topological descriptors of zero divisor graph associated with commutative ring. *Journal of Applied Mathematics and Computing* (2023): 1-16. (Scopus, Q2, IF=2.167).
- ❖ Clement Johnson R, and Ravi Sankar J, Wiener Index and Graph Energy of Zero Divisor Graph for Commutative Rings. *Asian-European Journal of Mathematics* (2023): 2350211. (Scopus, Q2, IF=0.8).
- ❖ Clement Johnson R, and Ravi Sankar J, Computation of Some Graph Energies of the Zero Divisor Graph Over the Commutative Ring. *Iranian Journal of Mathematics*. 15, no. 2 (2024): 79-90. (Scopus, Q2, IF=1.3).

Books / Book Chapters:

Awards:

Startup:

Webinar:

Resource Person:

Online Courses:

- ❖ Has completed the NPTEL online course on Graph Theory by Prof. Soumen Maity from IISER Pune, receiving the Elite Award. The course was held from January to March 2022 and was funded by the Government of India.