

KONGUNADU ARTS AND SCIENCE COLLEGE
(Autonomous)
Coimbatore – 641 029

Collaborative Research Work Academic Year (2025-2026)

S. No.	Name of the Faculty	Collaboration with	Name and Place of the Collaborative Institution	Joint Research work/Title of the Research Article Published	Duration
1.	M. Venkatachalam Assistant Professor of Mathematics	IkaHesti Agustin	University of Jember, Indonesia	Leveraging LSTM and Dominating Sets for Precise NPK Nutrient Forecasting in Agriculture.	6 Months
2.	M. Venkatachalam Assistant Professor of Mathematics	ZainurRasyidRidlo	University of Jember, Indonesia	On RIDS Analysis for Shade Tree Placement and Its Application to STGNN Multi-step Forecasting on RH and CO2 Concentration of Coffee Agroforestry	6 Months
3.	C. Ravichandran Assistant Professor of Mathematics	KS Nisar	Prince Sattam bin Abdulaziz University, Saudi Arabia	Stability and solutions of adjoint nonlinear impulsive neutral mixed integral equations in dynamic systems	6 Months
4.	C. Ravichandran Assistant Professor of Mathematics	KS Nisar	Prince Sattam bin Abdulaziz University, Saudi Arabia	A strong technique for solving the fractional model of multi-dimensional Schnakenberg reaction-diffusion system.	6 Months
5.	C. Ravichandran Assistant Professor of Mathematics	KS Nisar	Prince Sattam bin Abdulaziz University, Saudi Arabia	Qualitative analysis on existence and stability of nonlinear fractional dynamic equations on time scales	6 Months

6.	N. Mohanapriya Assistant Professor of Mathematics	Prof.Dafik	University of Jember, Indonesia	A study on geo chromatic and total geo chromatic number of caterpillar tree and comb product of tree-like graphs.	6 Months
7.	N. Mohanapriya Assistant Professor of Mathematics	IkaHesti Agustin	University of Jember, Indonesia	On Rainbow Antimagic Coloring of Wheel-Related Graphs.	6 Months
8.	M. Venkatachalam Assistant Professor of Mathematics	Elsa Yuli Kurniawati, Ika Hesti Agustin, Arika Indah Kristiana, Robiatul Adawiyah	University of Jember	Application of Rainbow Vertex Antimagic Coloring in Multi- Step Time Series Forecasting for Efficient Railway Passenger Load Management	1 year
9.	M. Venkatachalam Assistant Professor of Mathematics	Laxmi Rathour, IN Cangul	National Instituteof Technology, Chaltlang, Aizawl Mizoram	On r-dynamic k-coloring of ladder graph families	1 year
10.	M. Venkatachalam Assistant Professor of Mathematics	Arika Indah Kristiana, Ika Hesti Agustin	Universiy of Jember	Reflexive Edge Strength in Certain Graphs with Dominant Vertex	1 year
11.	M. Venkatachalam Assistant Professor of Mathematics	Kiswara Agung Santoso, Indah Lutfiyatul Mursyidah, Ika Hesti Agustin, Swaminathan Venkatraman	Universiy of Jember	A Robust Algorithm for Asymmetric Cryptography Using Rainbow Vertex Antimagic Coloring	1 year
12.	M. Venkatachalam Assistant Professor of Mathematics	Susanto, Arika I. Kristiana, Dafik, Arif Fatahillah, Dushyant Tanna	University of Jember	Enhancing Students' Conjecturing Skills Through RBL-STEM with Antimagic Coloring and Geometric Transformation in Batik Design	1 year

13.	M. Venkatachalam Assistant Professor of Mathematics	Ika Hesti Agustin, Dafik Dafik, Ika Nur Maylisa	Univesity of Jember	On Local Antimagic b-Coloring of Graphs: New Notion	1 year
14.	C. Ravichandran Assistant Professor of Mathematics	Kottakkaran Sooppy Nisar,	Department of Mathematics, College of Science and Humanities in Alkharj, Prince Sattam Bin Abdulaziz University, Alkharj 11942, Saudi Arabia.	A fractional-order framework for investigating groundwater depletion under environmental and human pressures	3 months, 2 days
15.	C. Ravichandran Assistant Professor of Mathematics	Kottakkaran Sooppy Nisar,	Department of Mathematics, College of Science and Humanities in Alkharj, Prince Sattam Bin Abdulaziz University, Alkharj 11942, Saudi Arabia.	Analyzing predator-prey dynamics in the context of global warming using fractional integro differential equations	6 months
16.	C. Ravichandran Assistant Professor of Mathematics	Kottakkaran Sooppy Nisar,	Department of Mathematics, College of Science and Humanities in Alkharj, Prince Sattam Bin Abdulaziz University, Alkharj 11942, Saudi Arabia.	Fractal-fractional approach to stability in enzyme kinetics: A mathematical model perspective	15 days, 2 months
17.	C. Ravichandran Assistant Professor of Mathematics	Kottakkaran Sooppy Nisar,	Department of Mathematics, College of Science and Humanities in Alkharj, Prince Sattam Bin Abdulaziz University, Alkharj 11942, Saudi Arabia.	Discussions on Sobolev type Neutral Nonlocal fractional differential equation	20 days, 1 month

18.	C. Ravichandran Assistant Professor of Mathematics	Kottakkaran Sooppy Nisar,	Department of Mathematics, College of Science and Humanities in Alkharj, Prince Sattam Bin Abdulaziz University, Alkharj 11942, Saudi Arabia.	Evaluating the stability and efficacy of fractal-fractional models in reproductive cancer apoptosis with ABT-737	4 days, 4 months
19.	C. Ravichandran Assistant Professor of Mathematics	Kottakkaran Sooppy Nisar,	Department of Mathematics, College of Science and Humanities in Alkharj, Prince Sattam Bin Abdulaziz University, Alkharj 11942, Saudi Arabia.	Exploring Impulsive Fractional Derivatives with Mixed-Delay Integral Boundary Constraints	-
20.	N. Mohanapriya Assistant Professor of Mathematics	Arika Indah Kristiana	University of Jember, Indonesia	β -Local Irregular Chromatic Number of Graphs	6 Months
21.	N.Mohanapriya Assistant Professor of Mathematics	Dafik, Ika Hesti Agustin	CGANT, University of Jember, Indonesia	1) On the local (a, d)-edge antimagic coloring of gear graph and its subdivision 2) On Local Antimagic b- Coloring of Graphs: New Notion 3) A Study on Geo Chromatic and Total Geo Chromatic number of Caterpillar tree and comb product of tree-like graphs	6 Months /Paper

22.	N. Mohanapriya Assistant Professor of Mathematics	Raúl Manuel Falcón Ganfornina	University of Seville, Spain	Finding secure communication channels via rainbow antimagic coloring of m- splitting graphs of Paths.	6 Months
23.	Dr.P.Matheswaran Assistant Professor of Physics	Dr.K.Marimuthu	Department of Physics, The Gandhigram Rural Institute - Deemed to be University	Research Collaboration	3 years
24.	V. Elakkiya Assistant Professor of Biotechnology	Mr. John Inba Raja, Managing Director	G-one saver, Coimbatore	MoU Research Collaboration	6 Months
25.	Dr.T.Kumar Department Of Commerce With Computer Applications	Saito University College, Kuala Lumpur, Malaysia	Malaysia	Career & Job Opportunity in Foreign Countries	4 Days
26.	Dr.C.Shobana Department Of Zoology	Department of Physics, Bharathiar University	Bharathiar University	B.Sc., M.Sc. and Ph.D. project work	5 Years
27.	G. Dhandapani Department of Botany	Dr. Amit Roy	Group leader, Forest Molecular Entomology Team, Department of Forest Genetics and Physiology, Faculty of Forestry and Wood Sciences, Czech University of Life Sciences, Prague.	RNA Interference (RNAi) in the Forest Pests	Since 2020 onwards
28.	Dr. M. Santhoshkumar Department of	Madhukar Hemamalini a	Department of Chemistry, Mother Teresa Women's	Multifaceted analysis of a p- Coumaric acid-tryptamine	12 months

	Biochemistry (UG)		University, Kodaikanal, Tamil Nadu, India	organic salt: Structure, spectra, computational modelling, and biological potential	
29.	Dr.M.Pushpa devi, Department of Clinical Nutrition	Dr.Janani Tamilvanan	Institute of Nutrigenetics And kongunadu Arts and Science College	One day Workshop on Artificial Intelligence and Machine Learning in Nutrition	16.07.2026 (One Day)
30.	Venkatachalam. M Assistant Professor of Mathematics	Research Article has been published	University of Jember, Indonesia	On Local Antimagic b-Coloring of Graphs: New Notion	Dec-2025
31.	C. Ravichandran Assistant Professor of Mathematics	Research Article has been published	Prince Sattam bin Abdulaziz University, Saudi Arabia	Analysis of fractional logistic integro-differential equations with time scales in medical sciences and industry	Dec-2025
32.	S.P.R. Priyalatha Assistant Professor of Mathematics	Published the Research Article	On Nano Soft S (I)-Continuous Functions	Institute of Mathematics, University of Silesia, Bankowa 14, Katowice, POLAND	Dec-2025
33.	N.Mohanapriya Assistant Professor of Mathematics	Research Article has been published	On Local Antimagic b-Coloring of Graphs: New Notion	University of Jember, Indonesia	Dec-2025
34.	P. Revathi Ponnusamy Assistant Professor of Botany	Book Chapter Publication	Chapter 13A Role of Phosphoinositide 3-Kinase (PI3K) and Efficacy of Nanomaterials Against Kinase Inhibitors and Hepatic Insulin Resistance	Department of Chemistry, Karpagam Academy of Higher Education (Deemed to be University), Coimbatore.	Apr-2026