KG COLLEGE OF ARTS AND SCIENCE

affiliated to Bharathiar University and Accredited by NAAC
An ISO 9001 : 2015 Certified Institution

Research and Development Cell
Faculty Researcher Profile

R & D CELL - KGCAS
co-Kreating Genius

Name	Dr.P. Poongodi	Degrees	M.Sc., M.Phil., Ph.D
Image for home page	Google drive link can be shared—yet to create		
Faculty Profile	Poongodi Palanisamy received her Ph.D degree in Fuzzy Algebra and its Applications from Karpagam University, Coimbatore, India. Her Research area of interests is Fuzzy Algebra and its applications. She has more than eleven years of working experience under various colleges. She has published nearly twelve articles under various titles in Scopus indexed journals and referred journals both National and International level journals.		
Keywords	Fuzzy matrix, Interval Valued Fuzzy Matrix, Generalized Inverse, Orderings.		
RESEARCH PROJECTS / FOCUS AREAS			
Title and escription of research projects and Ph.D Research / focus areas (Minimum 100 Words about each projects)	Title and description of research projects: Project not yet undertaken in KGCAS. Ph.D Research: 1. Fuzzy set theory as a means of representing mathematically any imprecise (or) vague system of information in the real world and for the purpose of developing expert systems and soft computing. This theory plays an important role in pattern recognition. It serves as an interface between linguistic variables and quantitative characterization. So under these circumstances, my research is to discuss the various types of orderings between fuzzy matrices. 2. Regular fuzzy matrices are a generalization of invertible matrices. Regular matrices play an important role in many branches of mathematics, since the regularity condition is a linear condition that solves linear equations and takes the place of canonical decomposition. Regular fuzzy matrices are widely applied in estimation, inverse problem and fuzzy optimization problem. Focus Area: Generalized inverses of Interval Valued Fuzzy Matrices as well as Intuitionistic Fuzzy Matrices.		
PUBLICATIONS			

1. https://drive.google.com/file/d/1Yw8nKxl3w6QgN0pI62u9PvAKE4wq0THf/view?usp=sharing

   In this research article, a special type of ordering for k - regular Interval Valued Fuzzy Matrix (IVFM) is introduced as a generalization of the minus partial ordering for regular fuzzy matrices. A set of equivalent conditions for a pair of k – regular IVFM to be under this ordering are obtained.

2. https://drive.google.com/file/d/1gISmqSsWKSEHmp5dxkYe6dp4SJ_j59vj/view?usp=sharing

   In this research article, T-ordering on interval valued fuzzy matrices (IVFM) as a generalization of the T-ordering on fuzzy matrices are investigated. Some equivalent conditions for this ordering using generalized inverse are derived.

3. https://drive.google.com/file/d/1im7UPb4r1aOWN93RkTu2h1Mhb1Iv1bGi/view?usp=sharing

   In this paper, the concept of k- symmetric circulant and s-symmetric circulant Interval Valued Fuzzy Matrices(IVFM) as a generalization of symmetric circulant fuzzy Matrices are introduced. The basic concepts, theorems and properties of k-symmetric circulant Interval Valued Fuzzy Matrix and ssymmetric circulant Interval Valued Fuzzy Matrix are discussed with examples.

Google Scholar ID	https://scholar.google.com/citations?user=7W8g7cIAAAAJ&hl=en
Research Gate ID	https://www.researchgate.net/profile/Poongodi-Palanisamy-3
Orchid ID	https://orcid.org/0000-0002-5860-3299

FACULTY MEMBER CONTACT SECTION

Email	poongodi.p@kgcas .com
Office Address	Dept. of Mathematics, KGCAS, Coimbatore.
Phone No & E-Mail ID.	9994107922 kpoongodi11@gmail.com