



Various Generalizations of Fuzzy Sets and Their Applications in Engineering and Management

Guest Editor:

Dr. Jeevaraj Selvaraj

Department of Applied Sciences
(Mathematics), Atal Bihari
Vajpayee Indian Institute of
Information Technology and
Management, Gwalior 474015,
India

Deadline for manuscript
submissions:

closed (31 October 2025)

Message from the Guest Editor

Dear Colleagues,

Real-life problems involving incomplete and inadequate information cannot be modelled well using classical (crisp) sets. To better model real-life problems, fuzzy sets were introduced in the literature. Further, many generalizations of fuzzy sets have been developed, and they have wide applications in the field of image processing, information retrieval, data mining, etc. Hence, we also plan to discuss various decision-making methods used to potentially solve such problems. The main aim of this Special Issue is to study the various generalizations of fuzzy sets mathematically. Additionally, we aim to host discussions on the wide range of applications of these generalizations in solving real-life engineering and management problems. Research areas may include (but not limited to):

- Ranking of fuzzy and intuitionistic fuzzy numbers
- Aggregation operators on various classes of fuzzy sets and their generalizations
- Similarity measures on various generalizations of fuzzy sets
- Distance measure-based similarity measures
- Information retrieval applications
- Image processing applications
- Fermatean fuzzy sets and their applications in decision-making.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Francisco Chiclana
School of Computer Science and
Informatics, De Montfort
University, The Gateway,
Leicester LE1 9BH, UK

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

Journal Rank: JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Contact Us

Mathematics Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/mathematics
mathematics@mdpi.com
[X@MathematicsMDPI](https://twitter.com/MathematicsMDPI)