Abstract

The purpose of this paper is to introduce a new form of generalized mapping namely fgb-continuous, fgb-irresolute mappings, fgb-closed maps, fgb-open and fgb*-open maps in fuzzy topological spaces. Some of their properties and characterization have been proved. As an application of these generalized fuzzy sets, fuzzy gbT1/2-space, fgb-homeomorphism and
Fgb*-homeomorphism are introduced and discussed in detail.

**Reference**

- D. Andrijevic, On b-open sets, Mat. vesnik 48 (1996), 59-64.
- S.S. Benchalli and Jenifer Karnel, On fgb-closed sets and fb-separation Axioms in Fuzzy Topological Spaces, (communicated).

**Index Terms**

Computer Science  
Fuzzy Systems

**Key words**

- Fgb-closed sets
- fgbq-neighbourhood
- fgb-neighbourhood
- fgb-continuous
- fgb-irresolute mappings
- fgb-closed maps
fgb*-open maps
fuzzy gbT1/2-space
fgb-homeomorphism
fgb*-homeomorphism