Dedicated to Professor Yeol Je Cho on the occasion of his retirement

Coincidence points for multivalued weak $\Gamma$-contraction mappings on metric spaces

M. R. ALFURAI DAN, S. BENCHABANE and S. DJEBALI

Abstract.

We present some new coincidence fixed point theorems for generalized multi-valued weak $\Gamma$-contraction mappings. Our outcomes extend several recent results in the framework of complete metric spaces endowed with a graph. Two illustrative examples are included and some consequences are derived.

Acknowledgments. The first author acknowledges King Fahd University of Petroleum and Minerals for supporting this research. The authors thank the three referees for their careful reading and helpful suggestions which led to an improvement of the original manuscript.

References


Received: 29.09.2017; In revised form: 08.07.2018; Accepted: 15.07.2018
2010 Mathematics Subject Classification. 06F30, 46B20,47H10, 54H25.
Key words and phrases. fixed point, coincidence point, multi-valued mappings, weak $\Gamma$-contraction.
Corresponding author: M. R. Alfuraidan; monther@kfupm.edu.sa


[17] Yolacan, E., Kiziltunc, H. and Kir, M., Coincidence point theorems for $\varphi - \psi$-contraction mappings in metric spaces involving a graph, Carpathian Math. Publ., 8 (2016), No. 2, 251–262