

# Suzuki Type Common Fixed Point Result on *h*-Metric Space

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**Abstract:** In this paper, we defined a general form of the type of Suzuki functions on *h*-metric space to obtain a common fixed point. Our results generalized some results from the literature.

**Keywords:** Suzuki functions

## REFERENCES

- [1]. S. Banach, Sur les operations dans les ensembles abstraits elleur application aux equations integrals, Fund. Math., 3 (1992), 133-181.
- [2]. D. W. Boyd, S. W. Wong, On nonlinear contractions, Proc. Am. Math. Soc., 20 (1969), 458-464.
- [3]. T. Do\_senovi\_c, S. Radenovic, S. Sedghi, Generalized metric spaces: Survey, TWMS. J. Pure Appl. Math., 9 (1) (2018), 3-17.
- [4]. J. Esfahani, Z. D. Mitrovi\_c, S. Radenovi\_c, S. Sedghi, Suzuki-type point results in *h*-metric type spaces, Comm. Appl. Nonlinear Anal., 25 (3)(2018), 27{36.
- [5]. S. Gahler, 2-metrische Raume und ihre topologische Struktur, Math. Nachr., 26 (1963), 115-148.
- [6]. N. Y. Ozgur, N. Tas, Some Fixed Point Theorems on S-metric Spaces, Mat. Vesnik, 69 (1) (2017), 39-52.
- [7]. M. M. Rezaee, M. Shahraki, S. Sedghi, I. Altun, Fixed Point Theorems For Weakly Contractive Mappings On S-Metric Spaces And a Homotopy Result, Appl. Math. E-Notes, 17 (2017), 1607-2510.
- [8]. S. Sedghi, N. V. Dung, Fixed Point Theorems on S-Metric Spaces, Mat. Vesnik, 66 (1) (2014), 113-124.
- [9]. S. Sedghi, N. Shobe, A. Aliouche, A generalization of fixed point theorems in S-metric spaces, Mat. Vesnik, 64 (2012), 258-266.
- [10]. S. Sedghi, N. Shobe, T. Rako\_cevi\_c, Fixed Point Results In S-Metric Spaces, Nonlinear Funct. Anal. Appl., 20 (1) (2015), 55-67.
- [11]. S. Sedghi, N. Shobe, M. Shahraki, T. Do\_senovi\_c, Common fixed Point of four maps in S-metric Spaces, Math. Sci., 12 (2018), 137-143.
- [12]. S. Sedghi, A. Gholidahneh, T. Do\_senovi\_c, J. Esfahani, S. Radenovi\_c, Common fixed point of four maps in *b*-metric spaces, J. Linear Topol. Algebra, 05 (02) (2016), 93-104.
- [13]. S. Sedghi, M. M. Rezaee, T. Do\_senovic, S. Radenovic, Common fixed point theorems for contractive mappings satisfying k-maps in *h*-metric spaces, Acta Univ. Sapientiae, Mathematica, 8 (2) (2016), 298-311.
- [14]. M. Shahraki, S. Sedghi, S. M. A. Aleomraninejad, Zoran D. Mitrovic, Some fixed point results on S-metric spaces, Acta Univ. Sapientiae, Mathematica, 12, 2 (2020) 347-357.
- [15]. V. Todorovcevic, Harmonic Quasi conformal Mappings and Hyperbolic Type Metrics, Springer Nature Switzerland AG 2019.