On Locally ϕ-Symmetric β-Kenmotsu Manifolds

ABSOS ALI SHAIKH, SHYAMAL KUMAR HUI

Department of Mathematics, University of Burdwan, Burdwan – 713104,
West Bengal, India, aask2003@yahoo.co.in

Abstract: The present paper deals with a study of locally ϕ-symmetric β-Kenmotsu manifold with the existence of β-Kenmotsu manifold by an interesting example.

Key words: Conformally flat, weakly locally ϕ-symmetric, strongly locally ϕ-symmetric, β-Kenmotsu, Einstein manifold, scalar curvature.

AMS *Subject Class.* (2000): 53C15, 53C25.

REFERENCES

[1] D. E. BLAIR, Contact manifolds in Riemannian geometry, *Lecture Notes in Mathematics* 509, Springer-Verlag, Berlin-New York, 1976.

[2] K. KENMOTSU, A class of almost contact Riemannian manifolds, *Tôhoku Math. J.(2)* **24** (1972), 93 – 103.

[3] J. A. OUBIÑA, New classes of almost contact metric structures, *Publ. Math. Debrecen* **32** (3-4) (1985), 187 – 193.

[4] A. A. SHAIKH, K. K. BAISHYA, On ϕ-symmetric LP-Sasakian manifolds, *Yokohama Math. J.* **52** (2) (2006), 97 – 112.

[5] T. TAKAHASHI, Sasakian ϕ-symmetric spaces, *Tôhoku Math. J. (2)* **29** (1) (1977), 91 – 113.