

## **ON $P$ -SASAKIAN MANIFOLDS**

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### **Abstract**

The object of the present paper is to study Para-Sasakian manifold admitting a projective curvature tensor.

**Keywords and phrases:**  $P$ -Sasakian manifold, projective curvature tensor, concircular curvature tensor.

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### **References**

- [1] T. Adati and T. Miyazawa, On  $P$ -Sasakian manifolds satisfying certain conditions, *Tensor (N.S.)* 33 (1979), 173-178.
- [2] T. Adati and T. Miyazawa, On  $P$ -Sasakian manifolds admitting some parallel and recurrent tensors, *Tensor (N.S.)* 33 (1979), 287-292.
- [3] U. C. De and A. Sarkar, On a type of  $P$ -Sasakian manifolds, *Math. Rep. (Bucur.)* 11(10) (2) (2009), 139-144.
- [4] U. C. De and A. A. Shaikh, Differential geometry of manifolds, Alpha Science International, Ltd., Oxford, U. K., 2007, pp. 259-272.
- [5] J. P. Jaiswal and R. H. Ojha, On generalized  $\phi$ -recurrent  $LP$ -Sasakian manifolds, *Kyungpook Math. J.* 49 (1977), 779-788.
- [6] K. Matsumoto, S. Ianus and I. Mihai, On  $P$ -Sasakian manifolds which admit certain tensor fields, *Publ. Math. Debrecen.* 33 (1986), 61-65.
- [7] C. Özgür and M. M. Tripathi, On  $P$ -Sasakian manifolds satisfying certain conditions on the concircular curvature tensor, *Turk. J. Math.* 31 (2007), 171-179.
- [8] G. P. Pokhariyal, Study of a new curvature tensor in a Sasakian manifold, *Tensor (N.S.)* 36(2) (1982), 222-226.
- [9] B. Prasad, A Pseudo projective curvature tensor on a Riemannian manifolds, *Bull. Cal. Match. Soc.* 3 (2002), 163-166.
- [10] I. Satō, On a structure similar to almost contact structures, *Tensor (N.S.)* 30 (1976), 219-224.

- [11] I. Satō, On a structure similar to almost contact structures, II, *Tensor (N.S.)* 31 (1977), 199-205.
- [12] Sh. Shu and A. Yi Han, Hypersurfaces with constant scalar or mean curvature in a unit sphere, *Balkan J. Geom. Appl.* 14 (2009), 90-100.
- [13] S. S. Shukla and M. K. Shukla, On  $\varphi$ -symmetric  $P$ -Sasakian manifolds, *Int. J. Anal.* 16 (2010), 761-769.
- [14] A. Taleshian and N. Asghari, On  $LP$ -Sasakian manifolds satisfying certain conditions on the concircular curvature tensor, *Differ. Geom. Dynam. Syst.* 12 (2010), 228-232.
- [15] A. Yıldız and M. Turan, A class of Lorentzian  $\alpha$ -Sasakian manifolds, *Kyungpook Math. J.* 49 (2009), 789-799.