Title: On contact CR-warped product submanifolds of a quasi-Sasakian manifold

Author(s): Tran Quoc Binh and Avik De

In the present paper we study contact CR-warped product submanifolds of a quasi-Sasakian manifold. We obtain a necessary and sufficient condition for a contact CR-submanifold of a quasi-Sasakian manifold to be a contact CR-product or a contact CR-warped product submanifold. We estimate the squared norm of the second fundamental form in terms of the warping function. Equality cases are also investigated. As a particular case, we obtain some further results for Sasakian manifolds.

Address:
Tran Quoc Binh
Institute of Mathematics
University of Debrecen
H-4010 Debrecen, P.O. Box 12
Hungary

Address:
Avik De
Department of Pure Mathematics
University of Calcutta
35, B.C.Road, Kolkata-700019
West Bengal
India