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**Rakesh Kumar\*** (dr\_rk37c@yahoo.co.in), Rakesh Kumar, Department of Applied Sciences, Faculty of Engineering, Punjabi University, Patiala, Punjab 147002, India. *Every totally umbilical  $GCR$ -lightlike submanifold of an indefinite nearly Kaehler manifold is totally geodesic.*

Due to the significant applications of  $CR$  structures in relativity and growing importance of lightlike submanifolds in mathematical physics and relativity, the notion of  $CR$ -lightlike submanifolds of indefinite Kaehler manifolds were introduced, which have direct relation with physically important asymptotically flat space time which further lead to Twistor theory of Penrose and Heaven theory of Newman. But  $CR$ -lightlike submanifolds do not include complex and totally real lightlike submanifolds. Therefore  $SCR$ -lightlike submanifolds of indefinite Kaehler manifolds were introduced which contain complex and totally real subcases but there was no inclusion relation between  $CR$  and  $SCR$  cases. Thus further  $GCR$ -lightlike submanifolds of indefinite Kaehler manifolds were introduced. In present paper, we prove that there do not exist totally umbilical  $GCR$ -lightlike submanifolds of indefinite nearly Kaehler manifolds other than totally geodesic  $GCR$ -lightlike submanifolds. (Received September 18, 2013)