

Some Results on Frenet Ruled Surfaces Along the Evolute-Involute Curves, in E^4

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ABSTRACT

In this paper we consider eight special Frenet ruled surfaces along to the involute-evolute curves α^* and α respectively, with curvature $k_1 \neq 0$. First we find the explicit equation of Frenet ruled surfaces along the involute curves in terms of the Frenet apparatus of evolute curve α . Normal vector fields are also examined. Further we give all results for sixteen positions of Normal vector fields of four Frenet ruled surfaces in terms of Frenet apparatus of evolute curve α . These results also give us the solutions of the questions that in which condition we can produce orthogonal surfaces or surfaces with constant angle.