Smarandache Curves Obtained from Salkowski Curve

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ABSTRACT

Salkowski curve is a special curve whose first curvature variable, second curvature constant. Similar type Anti-Salkowski curve is the first curvature variable, second curve constant is a special curve. In this paper, tackled Salkowski curves that were gained to science thanks to studies DNA on the spiral of German a chemist Ernst Leopold Salkowski (1844-1923). First, *{T,N,B}* the Frenet frame obtained when received as a position vectors the Frenet vectors of the Salkowski curve, Smarandache curves were obtained using this Frenet frame. Tangent vector *T* with principal normal vector *N* for *TN*-Smarandache, tangent vector *T* with binormal vector *B* for *TB*-Smarandache, binormal vector *B* with principal normal vector *N* for *NB*-Smarandache, tangent vector *T* the binormal vector *B* principal normal vector *N* for *TNB*-Smarandache and this of Smarandache curves calculated second curvature with first curvature for each. Second, *{T*,N*,B*}* the Frenet frame obtained when received as a position vectors the Frenet vectors of the Salkowski curve, Smarandache curves were obtained using this Frenet frame. Tangent vector *T** with principal normal vector *N** for *T*N**-Smarandache, tangent vector *T** with binormal vector *B** for *T*B**-Smarandache, binormal vector *B** with principal normal vector *N** for *N*B**-Smarandache, tangent vector *T** the binormal vector *B** principal normal vector *N** for *T*N*B**-Smarandache and this of Smarandache curves calculated second curvature with first curvature for each.

Key Words: Salkowski curve, smarandache curve.

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