

Meeting: 1006, Lubbock, Texas, SS 2A, Special Session on Differential Geometry and Its Applications

1006-53-107 **Vladimir Balan*** (vbalan@mathem.pub.ro), University Politehnica of Bucharest, Department of Mathematics I, 313 Splaiul Independentei, RO-060042 Bucharest, Romania. *CMC surfaces in Finsler spaces*. Preliminary report.

After a brief introduction in Finsler geometry, are presented several ways of defining the notion of mean curvature for submanifolds of Finsler manifolds. For the case when the ambient manifold is the Euclidean 3-dimensional space endowed with a deformed-Euclidean Finsler metric and the submanifold is a Riemann surface, are discussed examples of CMC (in particular minimal) surfaces. Differences towards the class of CMC surfaces of the flat Euclidean framework are emphasized. (Received February 10, 2005)