1116-49-1524 **R N MOHAPATRA** (ram.mohapatra@ucf.edu), Department of Mathematics, University of Central Florida, 4000 Central Floida Blvd., Orlando, FL 32816, and **Rachid Ait Maalem** Lahcen* (rachid@ucf.edu), Department of Mathematics, University of Central Florida, Orlando, FL 32816. A study of Mathematical Programming Problems under different types of invexity. Preliminary report.

Convexity, Invexity and Univexity have been used to study multi-objective mathematical programming problems. In this talk we will discuss some of these topics and their relationships. The intent of this talk is to seek methods that can handle smooth and mon-smooth mathematical programming problems under generalized invexity. The research is at its explorative stage. (Received September 23, 2015)