1020-46-14   **Lai-Jiu Lin*** (`maljlin@math.ncue.edu.tw`), 1,Gin Der Street, Department of Mathematics, National Changhua University of Education, Changhua, Taiwan 50058, Taiwan. *Parametric variational Inclusions Problems With Applications to Ekeland's Principle,Fixed Point and Optimization Problems.* Preliminary report.

In this paper,we study the existence theorems of two types of systems of parametric variational inclusions problems.From these existence results,we establish Ekeland's variational principle on topological vector space,existence theorems of common fixed point,existence theorems of feasible points for the vector mathematical program with equilibrium constraints,vector mathematical program with variational inclusions constraints.We also show that one of our variational inclusions problems is equilibrium to Himmelberg fixed point theorem. (Received June 25, 2006)