

Optimality Conditions and Duality for Nonconvex Semi-Infinite Multiobjective Optimization Problems

Do Sang Kim
Department of Applied Mathematics
Pukyong National University
Busan 608-737, Korea
E-mail: dskim@pknu.ac.kr

Abstract

In this talk, we establish optimality conditions for a nonconvex semi-infinite multiobjective optimization problem by using the scalarization method due to Chankong-Haimes. Based on this method, duality theorems are presented via a pair of primal-dual scalar problems. In addition, these results are applied to approximate solutions for the nonconvex semi-infinite multiobjective optimization problems.

Keywords and phrases: KKT condition, weakly Pareto solution, duality theorem, approximate solution.