

Existence theorem and optimality conditions for a class of convex semi-infinite problems with noncompact index sets

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Abstract: The paper is devoted to study of a special class of semi-infinite problems arising in nonlinear parametric Semi-infinite Programming, when the differential properties of the solutions are being studied. These problems are convex and possess noncompact index sets. In the paper, we present conditions guaranteeing the existence of

optimal solutions, and prove new optimality criterion. An example illustrating the obtained results is presented.

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