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R. N. Mohapatra* (ram.mohapatra@ucf.edu), Department of Mathematics, University of Central Florida, Orlando, FL 32816, and **R. U. Verma** (r_v124@txstate.edu), Department of Mathematics, Texas State University, San Marcos, San Marcos, TX 78666. *Generalized Hybrid Inxivities with Second-Order Parametric Optimality Criteria for Discrete Minmax Fractional Programming.*

First, a class of second order hybrid $(\phi, \zeta, \rho, \theta, m)$ invexities is introduced, and then a set of second-order parametric necessary optimality conditions are obtained. Different sets of second-order sufficient optimality conditions for a discrete minmax fractional programming problem using various second-order hybrid invexity assumptions are established. These classes not only generalize many known generalized invexities in the literature, but also are more suitable for applications. (Received August 06, 2014)