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**R. N. Mohapatra\*** ([ramm1627@gmail.com](mailto:ramm1627@gmail.com)), Mathematics Department, University of Central Florida, 4000 Central Florida Blvd., Orlando, FL 32816, and **Ram U Verma** ([verma99@msn.com](mailto:verma99@msn.com)), Mathematics Department, Texas A & M University, Kingsville, TX 32817. *The  $\epsilon$ -Optimality conditions for Multiobjective Fractional Programming Problems.*

Consider a multiobjective fractional programming problem (based on the generalized  $(\rho, \eta)$ -invexity of non-differentiable functions)

(P)

$$\text{Minimize } \left( \frac{f_1(x)}{g_1(x)}, \dots, \frac{f_p(x)}{g_p(x)} \right)$$

subject to  $x \in R^n$  such that  $h_j(x) \leq 0$  for  $j=1, \dots, m$ ,

where  $f_i, g_i, i = 1, \dots, p$  are real-valued functions, and  $\epsilon = (\epsilon_1, \dots, \epsilon_p)$  with  $\epsilon_i \geq 0$  for  $i=1, \dots, p$ . We explore parametric and semiparametric sufficient conditions for  $\epsilon$ -efficient solvability of (P) based on the generalized  $(\rho, \eta)$ -invexity. (Received August 14, 2011)