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**Emre Tokgoz\*** (Emre.Tokgoz-1@ou.edu), 229 Overton Drive, Norman, OK 73071. *On the Theory of Mixed Convex Functions.*

In the queueing systems theory, there are systems where the convexity and minimization of functions with real and integer variables are considered. The developed theories on convexity of both real variable and integer variable functions were not enough to give a precise answer to the convexity of 2-smooth mixed functions. In this paper, improvements in the theory of mixed convexity will be given with applications. (Received September 22, 2009)