1083-34-51 **John R. Graef** (`john-graef@utc.edu`), **Lingju Kong** (`lingju-kong@utc.edu`), **Qingkai Kong** (`kong@math.niu.edu`) and **Min Wang*** (`min-wang@utc.edu`), Department of Mathematics, University of Tennessee at Chattanooga, Chattanooga, TN 37343. *Positive solutions of nonlocal fractional boundary value problems.*

The authors study a type of nonlinear fractional boundary value problem with nonlocal boundary conditions. An associated Green's function is constructed. Then a criterion for the existence of at least one positive solution is obtained by using fixed point theory on cones. (Received August 10, 2012)