Johnny Henderson* (johnny_henderson@baylor.edu), Department of Mathematics, Baylor University, Waco, TX 76798-7328, and Kadda Maazouz (mzkadda@gmail.com), Department of Mathematics, University of Tiaret, 14000 Tiaret, Algeria. Existence and uniqueness for a Caputo-Katugampola fractional thermistor problem.

A thermistor is a type of electrical device whose resistance is dependent on temperature. In this talk, existence and uniqueness results are obtained, using fixed point theory, for solutions of a Caputo-Katugampola fractional thermistor problem. (Received August 27, 2020)