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## EXISTENCE OF POSITIVE PERIODIC SOLUTIONS FOR TWO KINDS OF NONLINEAR NEUTRAL DIFFERENTIAL EQUATIONS WITH VARIABLE DELAY

Abdelouaheb Ardjouni<sup>1</sup> and Ahcene Djoudi<sup>2</sup>

<sup>1</sup>Department of Mathematics, Faculty of Sciences, University of Annaba, P.O. Box 12 Annaba, Algeria

<sup>2</sup>Department of Mathematics, Faculty of Sciences, University of Annaba, P.O. Box 12 Annaba, Algeria Corresponding author email:abd\_ardjouni@yahoo.fr

**Abstract.** In this article we study the existence for of positive periodic solutions for kinds of nonlinear neutral differential equations with variable delay. The main tool employed here is the Krasnoselskii's hybrid fixed point theorem dealing with a sum of two mappings, one is a contraction and the other is completely continuous. The results obtained here generalize the work of Luo, Wang and Shen [13].

**Keywords.** Positive periodic solutions, nonlinear neutral differential equations, fixed point theorem.

AMS (MOS) subject classification: 34K13, 34A34, 34K30, 34L30.

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