1125-34-1280 **Seshadev Padhi** and **Jaffar Ali***, Dept. of Mathematics, Fort Myers, FL 33965. *Positive Solutions of first order boundary value problems with nonlinear nonlocal boundary conditions.* Preliminary report.

We consider the existence of positive solutions of the nonlinear first order problem with a nonlinear nonlocal boundary condition given by

$$x'(t) = r(t)x(t) + \sum_{i=1}^{n} f_i(t, x(t)), t \in [0, 1]$$

$$\lambda x(0) = x(1) + \sum_{j=1}^{n} \Lambda_j(\tau_j, x(\tau_j)), \tau_j \in [0, 1]$$

where $r : [0, 1] \to [0, \infty)$ is continuous and nonlinear functions f_i and τ_j are continuous mappings from $[0, 1] \times [0, \infty) \to [0, \infty)$ for $i = 1, 2 \ldots, m$ and $j = 1, 2, dots, n$. Here $\lambda > 0$ is a parameter and nonlocal points satisfy $0 \leq \tau_1 < \tau_2 < \cdots < \tau_n \leq 1$. We use Leray-Schauder theorem and Leggett-Williams fixed point theorem to prove our results. (Received September 15, 2016)