Bhuvaneswari Buna Sambandham* (buna.sambandham@dixie.edu), Aghalaya S Vatsala and Vinodh K Chellamuthu. Numerical Results for Linear Sequential Caputo Fractional Boundary Value Problems with Mixed Nonhomogeneous Boundary Conditions. Preliminary report.

In our recent work, we developed the numerical results for linear sequential Caputo fractional boundary value problems with mixed homogeneous boundary conditions. We used Green’s function representation to compute the solutions for linear sequential Caputo fractional boundary value problems. In this work, we plan to develop the numerical code for the boundary value problems with general nonhomogeneous terms with mixed nonhomogeneous boundary conditions. This will be useful in solving the nonlinear Caputo fractional boundary value problem with Caputo mixed boundary conditions by monotone method. (Received September 04, 2019)