1125-VC-677   **Jashmon Rana*** (`jr937963@cameron.edu`), 2800 W Gore Blvd, Lawton, OK 73505, **Gokul R Kadel** (`gkadel@cameron.edu`), 2800 W. Gore Blvd, Lawton, OK 73505, and **Narayan Thapa** (`nthapa@cameron.edu`), 2800 W. Gore Blvd, Lawton, OK 73505. *Comparison of Numerical Solutions of Advection-Reaction-Dispersion Model.*

Advection-Reaction-Dispersion model is instrumental to study transportation of chemical or biological contaminants through subsurface aquifer systems. To better understand the movements of contaminants in porous media, we develop an Initial Boundary Value Problem (IBVP) and solve both analytically and numerically. In particular, solutions from Forward Time Central Space scheme, Backward Time Central Space scheme, Crank-Nicolson scheme, and Finite Element method are implemented. Numerical experiments are presented and error analyses are carried out. (Received September 20, 2016)