

Abstract: Schnakenberg Model Analysis

One of the models that can be used in order to describe the behavior of chemical components in an chemical reaction is the Schnakenberg model. The Schnakenberg model is a nonlinear system that models certain chemical networks and has a dependence on a parameter. For the Schnakenberg system we will use the Hopf Bifurcation theorem in order to prove the existence of a limit cycle for that range of values of this parameter.