1065-35-251 **Shanshan Chen*** (chenshanshan221@gmail.com), Harbin Institute of Technology, Harbin, 150001, Peoples Rep of China, **Junping Shi**, College of William and Mary, Williamsburg, VA 23187, and **Junjie Wei**, Harbin Institute of Technology, Harbin, 150001, Peoples Rep of China.
Hopf bifurcation of a delayed diffusive predator-prey system with Holling type-II predator functional response.

A delayed diffusive predator-prey system with Holling type-II predator functional response subject to Neumann boundary conditions is considered here. The stability/instability of coexistence equilibrium and associated Hopf bifurcation are investigated by analyzing the characteristic equations. By the theory of normal form and center manifold, an explicit formula for determining the stability and direction of periodic solution bifurcating from Hopf bifurcation is derived. (Received September 14, 2010)