Different versions of the equivariant degree were constructed to study symmetric variational problems, existence and multiplicity results in symmetric differential equations, bifurcation and Hopf bifurcation problems in equivariant dynamical systems etc. The developed methods, based on the most recent advances in the equivariant degree theory allow computerization of the symbolic computations, even for large symmetry groups, and consequently effective applications of these methods in applied models. Although these methods are still peaceful, there is a clear potential for applications in drone technology and robotics. (Received February 24, 2015)