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**Martin Bohner\*** (bohner@umr.edu), University of Missouri-Rolla, Department of Mathematics, Rolla, MO 65409-0020, and **Christopher C Tisdell**. *Oscillation and nonoscillation of forced second order dynamic equations*. Preliminary report.

Oscillation and nonoscillation properties of second order Sturm-Liouville dynamic equations on time scales attracted much interest. These equations include, as special cases, second order self-adjoint differential equations as well as second order Sturm-Liouville difference equations. In this talk we consider a given (homogeneous) equation and a corresponding equation with forcing term. We give new conditions implying that the inhomogeneous equation inherits the oscillatory behavior of the homogeneous equation. We also give new conditions that introduce oscillation of the inhomogeneous equation while the homogeneous equation is nonoscillatory. Finally, we explain a gap in a result given in the literature for the continuous and the discrete case. A more useful result is presented, hence improving the theory even for the corresponding continuous and discrete cases. Throughout, relevant examples illustrating the theoretical results are supplied. (Received August 29, 2005)