1051-37-96 **Youssef N Raffoul*** (`youssef.raffoul@notes.udayton.edu`), Dayton, OH 45469-2316.
Existence of resolvent for Volterra integral equations on time scales.

This research is the first of its kind in which we establish sufficient conditions for the existence of the resolvent for the Volterra integro-dynamic equation on time scales

$$x(t) = f(t) + \int_0^t a(t,s)x(s)\Delta s.$$

The paper will serve as the foundation for future research on the qualitative analysis of solutions of Volterra integro-dynamic equation on time scale, using the notion of the resolvent.