W. Edwin Clark, Masahico Saito\* (saito@usf.edu) and Leandro Vendramin. Quandle Invariants of Composite Knots and Extensions.

Quandle colorings and cocycle invariants are studied for composite knots, and applied to chirality, cocycle invariants and abelian extensions. Formulas are given for computing the cocycle invariant from the number of colorings of composite knots. Relations to corresponding abelian extensions of quandles are studied, and extensions are examined for the table of small connected quandles, called Rig quandles. Summaries of computer calculations are presented. (Received September 19, 2014)