

SE&T Colloquium Series-Winter 2012

Speaker	Dr. Jason Pagano Department of Chemistry
Title	<i>Silica gardening at SVSU</i>
Abstract	<p>Silica gardens consist of hollow tubular structures that form from metal salt crystals seeded into silicate solution. The Pagano group at SVSU investigates the growth dynamics, microstructure, and composition of these tubes in the framework of an experimental model that allows quantitative analyses based on preselected reactant concentrations and flow rates. In these experiments, aqueous metal salt solutions are injected into large volumes of silicate solution. The tube fragments and powdered tube material are characterized by scanning electron microscopy and chemical detection techniques. Lastly, our experiments may show similarities toward the tubular structures encountered in geochemical and biological systems such as hydrothermal vents on ocean floor and mineralized shells of marine algae.</p>
Date	Tuesday, February 28
Time	4:10-5:00pm
Place	Pioneer 240
	Refreshments will be served at 4:00pm.