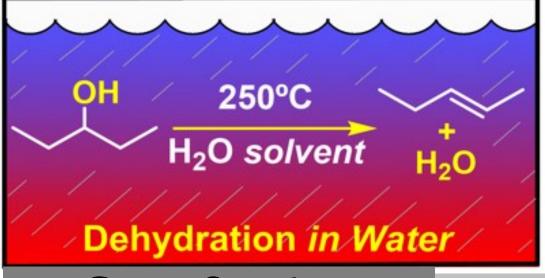
ORGANIC SEMINAR





Guest Speaker:
Professor Ian Gould
Arizona State University
School of Molecular Sciences

Friday, April 27th, 9:00 am
473 Hutchison Hall
University of Rochester
Department of Chemistry

Title: "Hydrothermal Organic Chemistry. The Truly Universal Organic Chemistry?"

Abstract: The vast majority of organic chemistry on Earth takes place within the crust, in water as the solvent at elevated temperatures and pressures. Functional group transformations take place under these conditions using Earth abundant catalysts and reagents, and many reactions are surprising compared to expectations from traditional ambient organic chemistry. In this talk I will describe mechanistic studies on some representative reactions, show how reactions under these conditions can be selective and new useful reactions developed based on geomimicry, the geology analogue of biomimicry. Finally, it seems likely that organic chemical reactions throughout the rest of the universe may occur under hydrothermal reactions, and insights into origins of life and habitable world chemistry will be discussed.

Host: Professor Joe Dinnocenzo • email: jpd@chem.rochester.edu