

## Oundre'-A Smith Synopsis

Glazes are typically applied to ceramic works to enhance the piece's aesthetic and functional quality.<sup>1</sup> Due to the complicated nature of the glazing composition and firing process, glaze results can vary. Factors to consider include: the use of different kilns (electric or gas), the kilns internal environment (oxidation or reduction) and their firing time.<sup>2</sup> Analysis of the chemistry behind the behavior of the ingredients in the glazes will be examined. The resulting characteristics as a glaze both before and after the firing process will further aid in the design of new glaze recipes. An important focus for the formulation will be the use of common materials other than manganese, which can be problematic due to its high toxicity and low viscosity when producing a glaze. By applying chemical principles to the creation of the ceramic glazes, students will be able to further enhance glaze production here at MSSU to be used on pieces sold during events in which MSSU's Clay Club partakes.