Examining Wax Chemistry through Encaustics

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Chemically, waxes are composed of mixtures of esters in that the acyl and alkyl groups are non-branched and usually have a dozen or more carbon chains. Waxes have been used since 100AD to create encaustic paintings, also known as hot wax paintings. During this exercise, properties of waxes were explored and through this process, the students were able to create their own, unique art piece. This lab is well suited for an introductory chemistry course; thus, students would require a high school understanding of chemistry. Students coated a glass jar in gesso and paint the container with colored hot waxes. This activity takes 1 hour and can be completed individually. The exercise allows students to learn the chemistry of waxes, while simultaneously handling and designing a unique piece of art which they can take home. In this workshop, there was a short presentation regarding the overall exercise and then participants had the opportunity to complete part of the lab exercise.

Keywords: waxes, encaustics

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