## Expanding the P2OASyS Hazard Assessment Tool to include updated GHS Classifications

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## Presenter Biography

Samantha Couture is graduating this May from the University of Massachusetts Lowell with a B.S in Environmental Health. She has participated in research at the Toxics Use Reduction Institute by helping to expand the P2OASys Hazard Assessment Tool. In addition to this, she spent last summer at the University of Montana researching the regulation of multinucleated giant cells. Currently, she is employed by the Environmental Protection Agency in the Toxic's and Pesticide Enforcement Unit in Region 1. Starting this fall, she will continue her education and start her master's degree.

## **Presentation Abstract**

The Pollution Prevention Options Assessment System (P2OASyS) is a tool developed by the Massachusetts Toxics Use Reduction Institute in the 1990s to compare chemical and process change options for toxics use reduction. The tool was developed during a period in which more than 51 chemical ranking and scoring systems were developed. During the past decade a number of comparative chemical hazard assessment tools have been developed, many incorporating endpoints and criteria from the Globally Harmonized System of Classification and Labeling (GHS). The purpose of this project was to conduct a comparison between P2OASyS and other comparative chemical hazard assessment tools in terms of their endpoints evaluated and cut off criteria. The value of this research to hazard communication is the application of hazard assessment tool. P2OASyS will then be updated based on GHS categories and wording, to enhance the usability of the tool, particularly for small and medium sized companies. The benefit of using the P2OASyS system for small and medium sized businesses is because it does not require expertise in the field of hazard assessments. The P2OASyS system can be used by simply inserting the necessary information. The concrete deliverable from this is an updated P2OASyS tool, which will help to increase the user friendliness of this system.