

Exposure Research Using Robotics to Measure Concentrations / Verify Exposure Model Predictions

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The Lower Olefins and Aromatics REACH Consortium will perform a set of exposure monitoring studies using robots to simulate human application of paints containing chemical products. The paint application and exposure monitoring is to be conducted in environmentally controlled/monitored test chambers. As a pilot project to explore the potential for this robotic technology to be used more broadly for verifying exposure model predictions, Stantec (as part of a technical services contract with ACC LRI) will use the data generated from this project to compare to various exposure models.

Implications: The ability to verify the predictions from exposure models is challenging. This pilot study is exploring the potential to use robotic systems to improve exposure modeling verification. Scientific confidence is increased when there is empirical data to verify an exposure model.

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