

New 'scrubber' speeds removal of powerful anthrax clean-up agent

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Researchers in New Jersey report discovery of a fast, efficient method for removing a powerful pesticide used to sterilize buildings and equipment following anthrax attacks.

Their chemical "scrubber" removes 99 percent of the pesticide following fumigation and could pave the way for its broader use in anthrax clean-up efforts, the scientists say. Their study is scheduled for the July 18 issue of *ACS' Organic Process Research & Development*.

In the new study, Roman Bielski and Peter J. Joyce note that the commonly used pesticide, methyl bromide, is superior to chlorine dioxide for destroying anthrax-causing bacteria and their spores. However, it is highly toxic to humans and may harm the environment by destroying the ozone layer. Researchers thus have sought an efficient method for removing this promising anthrax decontamination agent.

Bielski and Joyce documented the effectiveness of their removal method in experiments with an empty office trailer filled with air containing methyl bromide. They treated air exhausted from the trailer with a solution of sodium sulfide combined with a powerful catalyst. This chemical "scrubber" removed more than 99 percent of the methyl bromide from the air.

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