## **Chemicapacitive Sensors for Gas Mask Cartridges**

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All filter canisters will eventually fail if not replaced. The smell, taste, or irritation of the contaminant is often used as an indicator that a canister is not working. This can be dangerous because some gases and vapors do not have a noticeable smell or taste below dangerous levels and give no warning even at deadly concentrations. Seacoast Science is developing chemical sensors that can be embedded into the cartridge filter bed to act as universal end of service lifetime indicators by accurately tracking contamination through the absorbent bed of the canister.