

## **Chemically Stable Room Temperature Carbon Monoxide Catalysis**

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### **Abstract**

In order to develop a filtration device that offers low pressure drop, minimal size and weight it is advantageous to be able to place all the components of the filter directly next to one another. When investigating a filter that offers CBRN protection and CO protection, research of typical materials demonstrated that these materials are often affected by the materials that are released from the activated carbon used to provide the CBRN protection.

This paper will provide details of a joint development between Johnson Matthey and Avon that has developed a catalyst system that is chemically inert to typical CBRN activated carbons and yet is still highly effective at converting CO to CO<sub>2</sub> over a wide range of environmental conditions whilst giving a modest exotherm.

The paper concludes by reviewing some potential applications of this material in filtering PPE .

We would like this to be considered as a presentation.