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"A Base Metal Catalysts for Vent Gas Emission Control from Purified Terephthalic Acid Plants"

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Catalytic oxidation is recognized as one of the most effective means to control the emission of volatile organic compounds (VOC). One of the distinctive challenges of controlling VOC emissions from purified terephthalic acid (PTA) plants is the inherent presence of methyl bromide (CH₃Br) in the vent gas. The presence of a brominated species presents challenges not encountered in other applications. While precious metal catalysts are effective in controlling these emissions and are widely used in commercial applications, a base metal catalyst would offer PTA manufacturers a lower cost alternative. This presentation will report on the recent progress that has been made with using a base metal catalyst for this application, with enhanced performance compared to the precious metal catalysts currently used.