

## **EFFECT OF DOPANT ON THE PHYSICOCHEMICAL PROPERTIES OF THE Sb-V CATALYSTS FOR PROPANE AMMOXIDATION TO ACRYLONITRILE**

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### **ABSTRACT**

In the present work, the influence of Ti, Zr-Ce and Fe-Zn as dopant in Sb-V catalyst for propane ammoxidation to acrylonitrile was investigated. These catalysts were prepared by slurry method, dried and later calcined in air at 350-600 °C for a total of 10 h. The activity of all catalysts was tested in a fixed-bed microreactor with online gaschromatography at 420 °C with reaction feed (%v/v) of 5.8:7:17.4 (propane, ammonia, oxygen). Doping of Sb-V with Ti, Zr-Ce and Fe-Zn was found to improve the conversion of C<sub>3</sub>H<sub>8</sub> but decreases the selectivity to ACN due to changes in the physicochemical properties of the Sb-V catalysts.

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