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## **NITROUS OXIDE DECOMPOSITION OVER Fe-ZSM-5 CATALYSTS PREPARED BY DIFFERENT METHODS**

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### **Abstract**

Two different methods of preparation (solid state exchange and aqueous exchange) with two different iron precursors (ferrous chloride, respectively ferric oxalate) have been used to introduce iron species in the zeolite ZSM-5. A special attention was devoted to the aqueous exchange method. The catalysts thus prepared were tested for direct N<sub>2</sub>O decomposition. The results of catalytic tests show that the Fe-ZSM-5 catalyst prepared by aqueous exchange in ferric oxalate solutions is much more active than the one prepared by solid state exchange.

*Keywords:* iron precursors, aqueous exchange, solid state exchange, Fe-ZSM-5, N<sub>2</sub>O

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