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## 1. Europska GREEN konferencija



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## Catalysts based on red mud for catalytic removal of NO<sub>x</sub>, CO and VOC<sub>s</sub>

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### Abstract

Discovering efficient and effective techniques that will deal with increasing environmental pollutants, growing population and urbanization has become a major challenge for the entire scientific community. Red sludge, as a solid waste generated during production in the aluminum industry, can cause serious environmental pollution and problems with human health. For that reason, the catalytic removal of various organic and inorganic pollutants, through oxidation processes, has proven to be very successful in regards to many techniques in today's practice. This paper provides a comprehensive overview of already existing research and knowledge on the topic of catalysts based on red mud for the removal of typical air pollutants because of increasing interest from researchers. More precisely, special attention will be given to the catalytic reduction of nitrogen oxides (NO<sub>x</sub>) by NH<sub>3</sub>, and the catalytic oxidation of CO and volatile organic compounds (VOCs).

**Keywords:** catalysts, red mud, pollutants