Review of: "Hydrometallurgical process development to recycle valuable metals from spent SCR deNOX catalyst"

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spent SCR deNO_X catalyst that contains vanadium and tungsten oxide, is a kind of typical hazardous solid waste. In this paper, the authors reported a hydrometallurgical process through soda roasting and water leaching for the recovery of vanadium (V) and tungsten (W). The presented work is of significance in terms of scientific topic. Despite the limitation in this study the research work is novel and valuable, which is also interesting for readers. The following comments are some points that readers will be interested in, i.e.:

1. The effects of temperature at the time of roasting process was studied at the beginning of this article. However, it seems not supported to give a specific roasting temperature value to enhance leaching performance. It is accepted that roasting is useful to facilitate leaching based on the improvement of reactivity, while this article fails to reveal this point.
2. Morphology and XRD phase information of the samples at different metal recovery stages were studied as shown in the manuscript. It is a good methodology to present the mechanism based on characterization. It will be much better to give specific equation and reveal the deep theory.
3. I agree with authors that the proposed study is an eco- friendly hydrometallurgical process. Readers will be interested with its potential application in the actual production process. It is also necessary to evaluate the applied advantages compared with previous studies.