

Environmental Science: Advances

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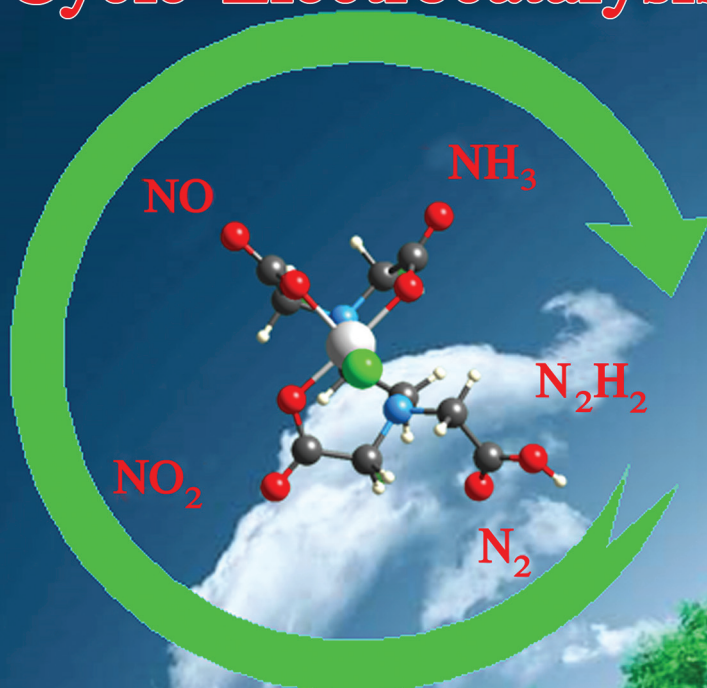
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Fundamental questions
Elemental answers

Ru(edta) in Nitrogen Cycle Electrocatalysis

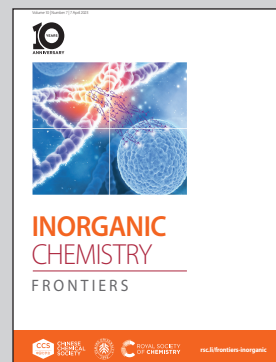


Showcasing research from Dr Debabrata Chatterjee's laboratory, CSIR-Central Mechanical Engineering Research Institute, Durgapur, India and Professor Rudi van Eldik's laboratory, University of Erlangen-Nuremberg, Germany.

Prospect of Ru(edta) complexes in nitrogen cycle electrocatalysis: a mini review

The Ru^{II/III}(edta) complexes catalyzed small molecules activation has been studied by these groups for the last two decades. The research contributions compiled in this review reveal the enzyme mimicking ability of the Ru^{II/III}(edta) complexes (edta⁴⁻ = ethylenediaminetetraacetate) in electrochemical transformation of nitrogen cycle reactions, viz. nitrogen fixation, denitrification and reversal of nitrogen fixation, elucidating the complex mechanistic schemes.

As featured in:



See Debabrata Chatterjee, Rudi van Eldik *et al.*, *Inorg. Chem. Front.*, 2023, 10, 1958.

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