Green Chemistry for Ketones and Aldehydes Production

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Principal investigator

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Overview

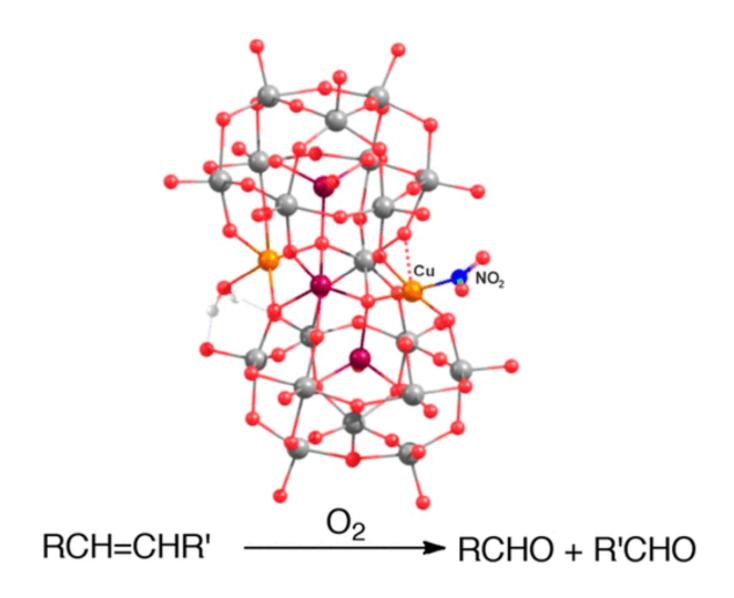
A novel green chemistry approach for producing ketones and aldehydes through an oxidative cleavage reaction. The process utilizes polyoxometalate (POM) catalysts to achieve aerobic cleavage of carbon-carbon double bonds in alkene.Â

Applications

- Industrial organic chemistry processes for oxidation reactions.
- Renewable feedstock processing, such as unsaturated fatty acid derivatives.
- Stand-alone catalysts for laboratory or individual use.

Differentiation

- Scalable
- · Use renewable resources as feedstock
- Environmentally Friendly
- · Easy catalyst regeneration



Development Stage

A proof of concept was demonstrated on a lab scale.

Patent Status

USA Granted: 9,815,757