



Showcasing research from Dr Zhongtian Du and Prof. Changhai Liang's laboratory, School of Chemical Engineering, Dalian University of Technology, Dalian, China.

Selective oxidation of substituted phenols with Co-N-C catalysts fabricated *via* low temperature heat treatment

Selective oxidation of mono-phenols into the corresponding benzoquinones with molecular oxygen over heterogeneous catalysts is rather challenging and desirable. Efficient Co-N-C catalysts were fabricated for oxidation of mono-phenols after undergoing pyrolysis at 250-400 °C, rather than generally at 600-1000 °C. E.g. 2,3,6-Trimethylphenol could be easily oxidized into 2,3,5-trimethylbenzoquinone under mild reaction conditions. This work provides a new approach for the design and preparation of oxidation catalysts.

Zhongtian Du, Changhai Liang *et al*; Acknowledgement: The colorful furnace was hand-drawn by Du Kaixuan (杜开轩).

As featured in:



See Zhongtian Du, Changhai Liang *et al*, *Catal. Sci. Technol.*, 2023, **13**, 6126.