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Authors: Amrita Chatterjee, Xijun Hu, Frank Leung-Yuk Lam

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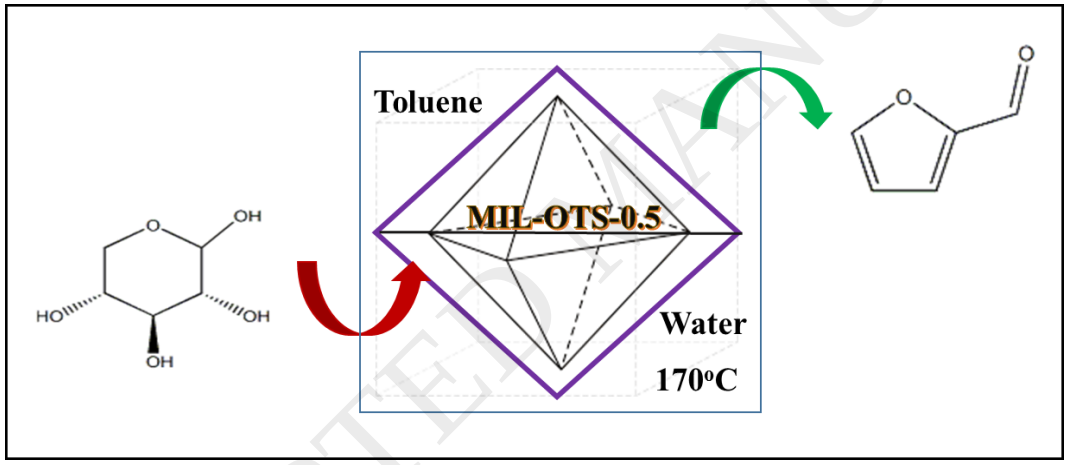
Towards a recyclable MOF catalyst for efficient production of furfural

Amrita Chatterjee[1], Xijun Hu[1] and Frank Leung-Yuk Lam[1]*

[1]Department of Chemical and Biological Engineering, The Hong Kong University of Science and Technology, Sai Kung, Hong Kong SAR, China
*Corresponding author. Fax: +852 2358 0054
E-mail address: kefrank@ust.hk (F. Lam)

Graphical abstract



Highlights

- MOF has been studied as a potential catalyst for xylose dehydration reaction.
- MIL-101 (Cr) is coated with OTS to improve hydrothermal stability.
- The coating procedure is conducted at room temperature.
- Coated MOF can be recycled minimum of 8 times, while pristine MOF for 4 times.