

Internal Webinar

Post Synthetic Modification of Metal Organic Frameworks (MOFs) and Porous Silicates for C-C, C-N and C-O Cross Coupling Reactions Under Heterogeneous Conditions

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Microporous MOFs, IRMOF-3 has been post synthetically modified (PSM) with pyridine-2-aldehyde and anchored Pd and Cu metals. Further those materials has been utilized for various C-C cross-coupling reactions (Pd@IRMOF-3) and C-N, C-O cross-coupling reactions (Cu@IRMOF-3) under heterogeneous conditions. Microporous MCM-41 and mesoporous SBA-15 have also been modified for several cross-coupling reactions. DMOF-1 is also modified by Cu metal and is used for N-arylation reactions through denitrative coupling of nitroarenes instead of haloarenes. Apart from that few new MOFs have been synthesized and characterized by Single crystal X-ray diffraction study for further applications.

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