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Showcasing research from Dr. Francesco Brandi of Institute of Chemistry of OrganoMetallic Compounds CNR-ICCOM (Italy) and Professor Bert F. Sels. the Center for Sustainable Catalysis and Engineering, KU Leuven (Belgium) *et al.*

The role of Beta zeolites in the selective single O-demethylation of alkyl-syringols to alkyl-methoxycatechols, a novel polymer building block class

This study explores the production of methoxycatechols from renewable lignin-derived syringols *via* selective single *O*-demethylation (ODM) using Beta zeolites in hot pressurized water. The usage of Beta zeolite enhances the selectivity for reaction of 4-methylsyringol to 4-methyl-6-methoxycatechol (MMC). Moreover, MMC is applied for the first time as a renewable building block in the synthesis of an epoxy thermoset.

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As featured in:



See Francesco Brandi, Bert F. Sels et al., Green Chem., 2025, **27**, 4512.



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