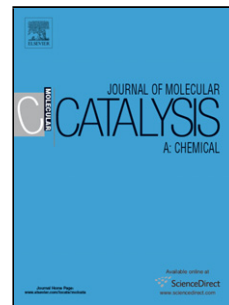


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Title: Conversion of xylose, xylan and rice husk into furfural via betaine and formic acid mixture as novel homogeneous catalyst in biphasic system by microwave-assisted dehydration

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Highlights

- Microwave activation for the dehydration of D-xylose to furfural.
- Water-CPME as biphasic system to limit the production of humin.
- Betaine-formic acid mixture is an efficient acid catalyst system for the synthesis of furfural.
- The reusability of the catalyst was efficient during ten cycles.
- Application to xylan and rice husk gave the furfural in good yields.

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