Sounding out ultrasound for making chemicals from lignin

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Summary

The feasibility of a novel lignin conversion technique using ultrasound and heterogeneous catalysis to produce high value-added lignin types was researched.

Aims

- Make a novel heterogeneous catalyst using ultrasound.
- Test the catalyst in combination with ultrasound to convert model-lignin compounds.
- Research the use of ultrasound for lignin valorisation pathways.

Outcomes

- The catalyst could support novel oxidation pathways of model lignin compounds.
- Ultrasound enhanced lignin extraction.
- Small gains were made, these were unlikely to overcome the cost of an additional processing stage.
- The new collaboration led to work on starch conversion

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