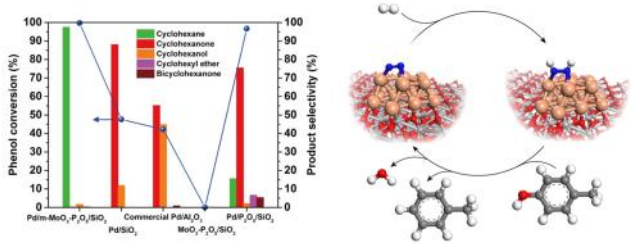
PROJECT NUMBER

12830, 13102, 15816

Hydrodeoxygenation catalysts

Oxford scientists have developed novel multifunctional catalysts and processes for hydrodeoxygenation (HDO) & direct deoxygenation (DDO) reactions.

Applications: Catalysts, Bio-oils, Biomass, Biofuels



Features	Benefits
Novel catalysts	High hydrogenation and deoxygenation activity within the same catalyst
Novel processes	Overcomes very weak deoxygenation associated with standard catalysts
Tailored reactions	Increased catalytic activity and/or increased selectivity in presence of nitrogen gaseous mixture for aromatic reaction products
Significant improvement over existing/alternative catalysts and processes	Ability to greatly inhibit transalkylation reactions that give rise to coke accumulation
Promotes circular economy	Overcomes NiMo and CoMo sulfite issues; sulphur contamination / coke accumulation

Features	Benefits
	Lower temperature and pressure requirements for reaction means lower cost
	Carbon net zero

Patented and Available for

- Co-development
- Consulting
- Licensing

To find out more, contact enquiries@innovation.ox.ac.uk and quote the project number.