

# Environmental Science journals

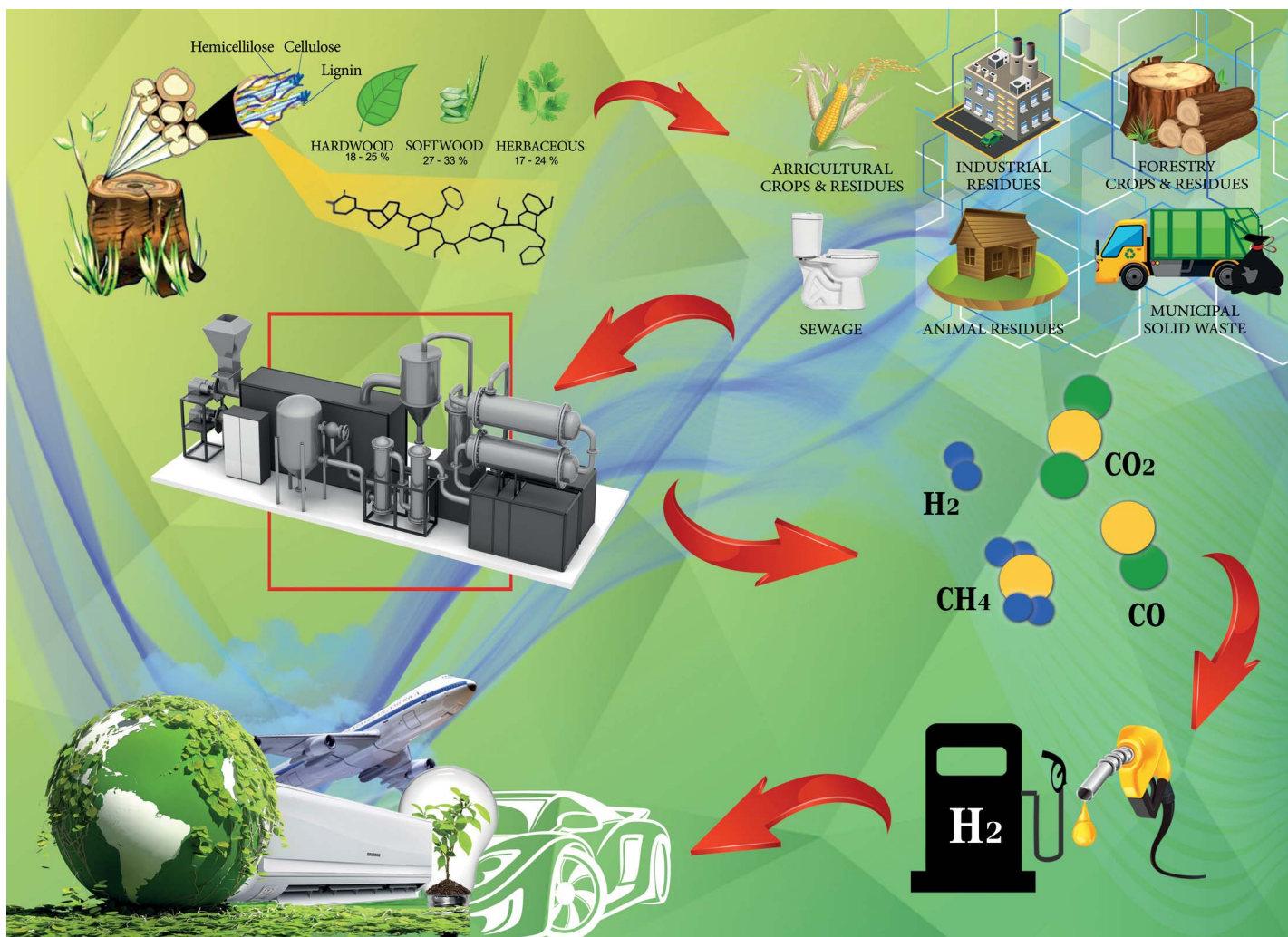
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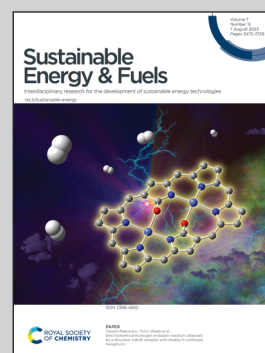


Showcasing research from Dr Jude A. Onwudili's laboratory, Energy and Bioproducts Research Institute, Aston University, Birmingham, United Kingdom.

A review of the thermochemistries of biomass gasification and utilisation of gas products

This present work has focused on the underpinning thermochemistries involved in the use of various gasifying agents to convert biomass to syngas under suitable reaction conditions. It covers the application of kinetic and thermodynamic analyses to improve the understanding of the gasification processes as well as the roles of gasifier designs and catalysts (in-situ and ex-situ) to enhance biomass conversion efficiency. The use of the resulting gas products to make renewable fuels and chemicals highlights the defossilisation and decarbonisation potentials of this technology towards the attainment of Net Zero.

### As featured in:



See Jude A. Onwudili *et al.*, *Sustainable Energy Fuels*, 2023, 7, 3505.