

Showcasing research from Dr Véronique Bounor-Legare's laboratory, Polymer Materials Engineering Laboratory, Université Claude Bernard Lyon 1, Lyon, France

Novel sustainable synthesis of a formaldehyde-free thermosetting phenolic resin through solvent-free reactive extrusion

New non-toxic monomers derived from natural resources are used to prepare bio-based phenolic resins by the environmentally friendly reactive extrusion method. These resins present a very high thermal stability. The synthesized phenolic resins are expected to be suitable for traditional applications, such as adhesives in the wood industry, as well as coatings and organic binders for various composite materials in the building field for example.

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