



**Showcasing research led by Drs. Qiangu Yan and Zhiyong Cai with USDA Forest Service Forest Products Laboratory.**

#### Eco-foaming Lignin for Innovative Rigid Foam

Rigid lignin foams were prepared by a baking method using kraft lignin as the sole source. Both the adsorbed water and water generated from dehydration of hydroxyl groups in the lignin served as a blowing agent for eco-foaming a cold-pressed lignin block into an open-cell, rigid foam. With impressive mechanical and thermal insulation properties, the lignin foams have great promise in many applications especially for core insulation materials of structural insulated panels.

#### As featured in:



See Zhiyong Cai *et al.*, *Green Chem.*, 2024, **26**, 5194.