

## Value-added Chemicals from Lignin Extracted from Agriculture Wastes

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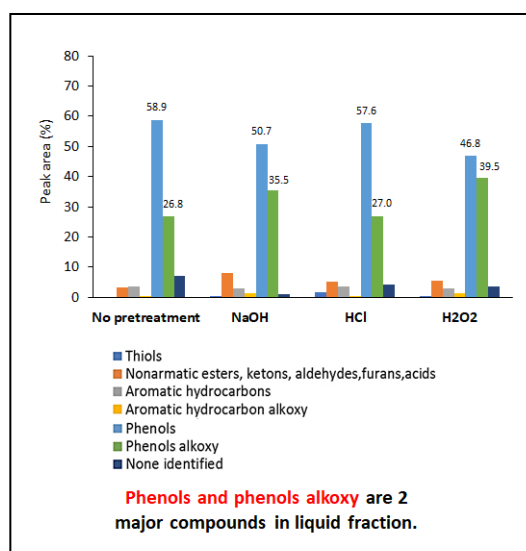
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A trend to convert lignin to valuable chemicals, as aromatic derivatives, is noticeably increased owing to its high content of aromatics. In this talk, two different techniques, fast pyrolysis and microwave-assisted extractions, to generate lignin from agricultural wastes are discussed. Softwood (from Switzerland) and water hyacinth (*Eichhornia crassipes*, from Thailand) were used as raw materials for both techniques, respectively. It was found that lignin high yields (61 and 94%, respectively) were obtained. However, the latter technique required a catalyst to decompose lignin into aromatic derivatives while there is no catalyst needed for the other. The aromatic products were characterized using gas chromatography connected with mass spectrometer (GC-MS).

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### Fast pyrolysis of soft wood

**Author Biography:** Sujitra Wongkasemjit has her expertise in advanced material synthesis and passion in improving environment. Her research goal is to support the environmental protection policy. With 30 years of her career, more than 130 publications in international peer review journals, two books, and more than 200 international presentations have been achieved. At least 10 research awards were given to her. She has built experiences in both research and teaching in university.

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Research Interest: Synthesis and Applications of Metal Oxides in Renewable Energy Area

