

# Lignin Utilization Strategies: From Processing to Applications

## Background

- Lignin is the most abundant non-carbohydrate component of plant cell walls and the largest aromatic source on earth.
- Successful utilization of lignin can broaden the spectrum of renewable resources in producing chemicals, fuels, and materials.

## Approach

- This book introduces recent lignin utilization strategies with experts from agricultural science and engineering, biotechnology, biology, catalysis, chemical engineering, chemistry, wood science, and other related fields.

## Outcome

- Updates from the recent advances in each lignin valorization strategy are reviewed.
- Lignin depolymerization strategies include thermochemical, biological, photocatalytic depolymerizations and tailoring of lignin structures as well as applications in wastewater treatment, thermosets, hydrogels, nanoparticles, and others.

## Significance

- This book provides a comprehensive review of recent lignin utilization strategies with experts in each field.

Yoo and Ragauskas, **Lignin utilization strategies: From processing to applications**, ACS Symposium Series, Vol. 1377, 2021, American Chemical Society, ISBN13: 9780841298453

