

Realization of a low carbon society through game changing technologies

Cleanly separation, application, and return of plant for its recycling usage

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Summary :

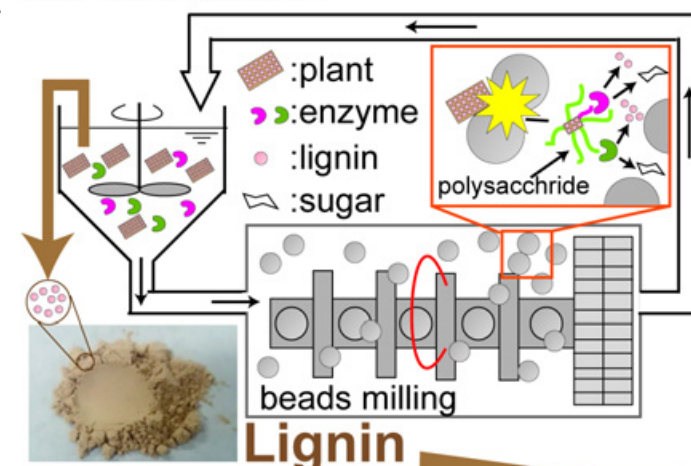
We will perform cleanly separation, application, and return of plant aromatic polymer "lignin" for its recycling usage.

Firstly, coloring of lignin extracted by simultaneous enzymatic saccharification and communiton (later denoted as SESC lignin) is controlled by its chemical modification.

Secondly, a biodegradability of SESC lignin is estimated for its utilization as environmental circulation-type polymeric materials.

Thirdly, we demonstrate a large-scale simultaneous enzymatic saccharification and communiton for large-scale extraction of SESC lignin.

Simultaneous enzymatic saccharification and communiton



Lignin
Control of coloring
Estimation of biodegradability
Large-scale production
→ Creation of environmental circulation-type polymeric materials

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