The Wisconsin Alumni Research Foundation (WARF) is seeking commercial partners interested in developing an efficient method for producing pulp from wood chips.

OVERVIEW

To make paper from wood, wood must first be transformed into pulp. Current pulping techniques require high amounts of electrical energy or large quantities of wood.

THE INVENTION

UW-Madison researchers have developed a method for producing pulp from wood chips by pretreating the chips with oxalic acid and sodium bisulfite. Prior to pulping, wood chips are cooked in a solution of oxalic acid and sodium bisulfite for a short period of time. This processing step requires little time and improves both the economics of the pulping process and the properties of the finished paper product, which exhibits greater strength and no loss in brightness.

APPLICATIONS

- Paper production

KEY BENEFITS

- Reduces energy input required for pulping
- No loss in brightness of the finished paper product
- Improves paper strength properties
- Decreases pollution
- Cheaper than standard pulping methods
- Pretreatment takes place at ambient pressure
ADDITIONAL INFORMATION

Tech Fields
Clean Technology - Energy & resource efficiencies
Materials & Chemicals - Paper

CONTACT INFORMATION

For current licensing status, please contact Joshua Carson at jcarson@warf.org or 608-960-9844.