

Mission: Promote the development of advanced manufacturing technologies for transformational impact on pulp and paper manufacturing

Identify

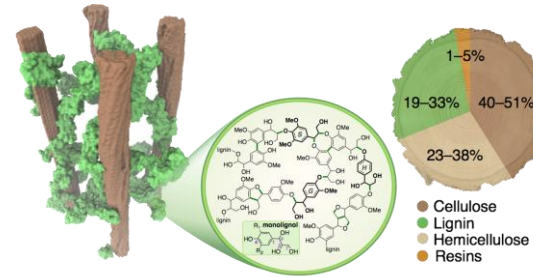
- Technology needs
- R&D priorities

Inform

- Government agencies, universities, research institutes

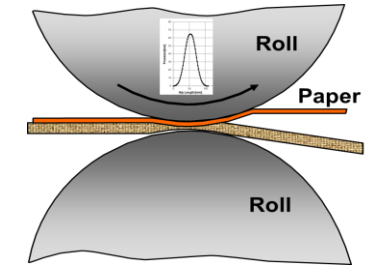
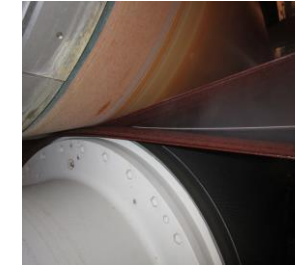
Promote

- Pre-competitive, collaborative R&D
- Public-Private Partnerships



Catalytic Pulping of Wood

- Small molecule catalysts offer alternative for lignin removal
Focus on cobalt-based oxidative catalysts
- Iterative design leverages experimental data and quantum mechanical simulations to screen leads
- Laboratory testing on model compounds and wood
- Increase yield, reduce energy



Model deformation and dryness of paper/felt to optimize wet pressing

- Develop integrated, multi-physics modeling framework as critical step to improve dewatering
- Information can only be obtained by computer simulation
- Provide industry with insights to inform the designs of more energy efficient processes and equipment