Designing the Forest Biorefinery: Using Systems Analysis to Identify Sustainable Bioeconomy Opportunities and Create Competitive Advantage

Speaker: Paul Stuart, PhD
Professor
Polytechnique Montréal
Department of Chemical Engineering

About the Presentation
The generic approach being considered by many forestry companies for setting biorefinery strategy and producing “green” biorefinery, pulp, and paper products will be presented. So-called “generic” biorefinery strategies also will be presented and how these can be used to organize and distinguish between emerging biorefinery technologies to balance critical issues The importance of manufacturing flexibility and supply chain management to mitigate risk due to market price volatility will be identified. Finally, several success stories will be presented where this methodology has been used to assist forestry companies embark on their transformation to the bioeconomy.

About the Speaker
After a career in engineering design and consulting, Paul Stuart joined the chemical engineering department at Polytechnique Montréal in 2000 to become a chairholder in design engineering of the Natural Sciences and Engineering Research Council of Canada. In his research program, he addresses industry-driven problems using product and process design methodologies and systems analysis tools, targeting the forest products industry and its transformation to new business models such as the biorefinery. In 2010, he co-founded and is now principal consultant to EnVertis Consulting, a global consultancy seeking to assist forest product companies with business transformation. Dr. Stuart is also a founding fellow of the Pulp and Paper Technical Association of Canada, a past president of the Canadian Society for Chemical Engineering, and a fellow of the Canadian Academy of Engineering.