



RESEARCH2REALITY

Shining a light on research & innovation.

We Can See the Future for the Trees

An Interview with Professor James Olson, Forest Bio-Products Engineer
University of British Columbia

What's the state of modern forestry?

It's actually never been a better time to be a forest products researcher. Forestry has gone from the image of being very unsustainable to the reality of being extremely sustainable, that it's one of the most sustainable industries human beings engage in. We know that the world is changing. We know that we need to change the world. We know we need to transition from our current fossil fuel-based economy to a much brighter, greener bio-economy. And that bio-economy is really going to see where we go from using oil to using biomass to create the things we use in our world: whether that's fuel, or whether those are advanced chemicals or pharmaceuticals, raw materials that are really going to revolutionize the world.

What is the forestry revolution?

If you look deep into a tree, what you'll see is it's made of nanofibres and microfibrils and chemical polymers that are really going to be the essential components of advanced materials and advanced products. And so you could imagine that you could reduce a tree into these nano-constituents and then rebuild those back up into things like impenetrable coatings for armour, to lightweight windmill turbines, to even low-cost water filters that will eliminate water-borne diseases that will actually save millions of people in developing countries. And so that revolution is really where forestry is headed. It's great to be part of that exciting future.

TODAY'S RESEARCH. TOMORROW'S REALITY.