ALBERTA INNOVATES

ALBERTA BIO FUTURE PROGRAM HIGHLIGHTS

COMPOSITE LAMINATED PANELS

Building designers are interested in construction materials with a lower environmental impact than conventional steel and concrete materials. Researchers at the University of Alberta are developing a new engineered wood product that meets this need, storing and not emitting carbon dioxide. It also offers a high degree of prefabrication and design flexibility, desired attributes in remote communities.

British Columbia has the world's tallest wood building, with 18 storeys, completed in 2016. Dr. Ying-Hei Chui, of the University of Alberta, is developing a product, composite laminated panel (CLP), that will take wood buildings even higher.

Alberta Innovates has funded two of Dr. Chui's projects, including one through the ABF program under Project BIO-16-014. "Alberta Innovates is to be commended for its foresight," said Dr. Chui. "Unlike other provincial funders I've experienced, it funds projects on research merit and potential to have downstream benefit for the province. I was at the University of New Brunswick for my first project and now for my second, I'm at the University of Alberta."

Two Alberta mills have supplied the materials for Chui's project: Norbord and Tolko. Dr. Chui is working to get the CLP product accepted into building codes. It's already part of the product standard.

This composite laminated panel is stronger than any other wood product and alternates layers of structural composite with dimensional lumber.
Source: Dr. Ying-Hei Chui

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