

Greening Our World Through Automation

An interview with Project Ada researchers:

Curtis Berlinguette, Professor, UBC Chemistry, Stewart Blusson Quantum Matter Institute

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Curtis Berlinguette

I am co-leading Project Ada, where we are developing the world's first selfdriving robot for accelerating and optimizing thin film materials.

Thin film materials are important to the clean tech industry because you require thin films in solar cells, you require them in batteries, you need them in more efficient windows. But the challenge right now is that it takes a really long time to take these technologies to market, typically over 20 years. And so we're building up this robot that will hopefully accelerate the timelines for taking a laboratory discovery out into the marketplace.

Experiments that would have taken us a year do to just a short time ago, we can now do in a period of hours or maybe a couple of days at most. So we're really accelerating the development process with these materials.

Fraser Parlane

So in five years' time, these robotic tools and automated platforms are going to allow us to take a step back and ask bigger picture questions on what that next material is going to be.