ALBERTA INNOVATES

## ADVANCED MATERIALS AND CHEMICALS PROGRAM HIGHLIGHTS

# RADIENT TECHNOLOGIES
## AMC-11-009

***Interest around the world is growing for natural health products and functional foods that can improve well-being. Experts predict the global market for these products will triple to more than $600 billion by 2020. Radient Technologies can supply international pharmaceutical, nutraceutical, functional food and cosmetic companies with high-value ingredients for formulation into other products.***

From its 23,000 square foot contract manufacturing plant in Edmonton, Alberta, which opened in 2014, Radient can produce high quantities of extremely pure natural ingredients for a low cost. It uses the world's only microwave-assisted processing technology, purchased from Environment Canada. It can extract bioactive ingredients from a range of biological materials like hemp, flax, milkweed, valerian and rosemary. The plant can currently process five tonnes of biomass per day, is certified for Good Manufacturing Practices for natural health products.

> ***The support received, from financial assistance to technical expertise to international trade missions to investor and partner introductions, has been critical to our success.***
>
> **Denis Taschuk**
> President and CEO, Radient Technologies Inc.

The $12-million plant was built with $1.2 million funding support from Alberta Innovates' Advanced Materials and Chemicals program under Project AMC-11-009. Radient also received support from Agriculture and Agri-Food Canada, University of Alberta - Agri-Food Discovery Place, Alberta Agriculture and Forestry, Alberta Economic Development and Trade and Environment and Climate Change Canada. "The support received, from financial assistance to technical expertise to international trade missions to investor and partner introductions, has been critical to our success," said Denis Taschuk, President and CEO of Radient Technologies Inc.

In the last four years, Radient has secured $37 million in private funds to explore application of the technology to a range of industries like removal of nicotine for the tobacco industry, and opportunities to license the technology.

An additional $34 million in private funds has recently been raised to triple the size of its existing Edmonton plant with the aim of increasing production capacity by five times. It plans to start construction of a similar-sized plant in Germany with production anticipated by the end of 2019. Much of this outstanding growth stems from enactment of the federal Cannabis Act in fall 2018.

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*The Radient Technologies plant uses the world's only microwave-assisted processing technology to extract high-value ingredients from biomass like hemp for natural health products like medical cannabis oil.*
*Source: 123RF*

Radient plans to become a commercial licensed producer of medical cannabis oil from cannabis in fall 2018 and, within the next year, anticipates a 1,000 per cent increase in sales to $30 million. It already has two cannabis products developed and a contract with medical cannabis producer and distributor Aurora Cannabis Inc., which owns a controlling stake in HempCo Food & Fibre, one of the largest industrial hemp producers in the world. Taschuk says "Despite our challenges in hiring senior bioscientists and that our customers are mainly international, we pay homage to Alberta's investment in us and plan to keep a big presence in the province as we grow." As North America's largest producer of hemp, Alberta farmers are well-placed to supply Radient with feedstock. Edmonton's budding natural health products cluster will take a jump forward with Radient's expansion.


*Source: Marie Cusack*

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