



Corporate Headquarters: Thesis Chemistry, LLC, 7533 Tyler Boulevard, Suite C, Mentor, OH 44060 USA
R&D Centre: Thesis Chemistry Inc., 1200 Franklin Boulevard, Cambridge, ON N1R 6T5 Canada
Web site: www.thesischemistry.com

MEDIA RELEASE

FOR IMMEDIATE RELEASE

August 10, 2011

THESIS CHEMISTRY ANNOUNCES R&D COLLABORATION WITH THE UNIVERSITY OF WATERLOO

Cambridge – Thesis Chemistry (THESIS) announces R&D collaboration with the University of Waterloo for development of green chemicals from bio-renewable feedstock.

Approximately 95% of all chemicals manufactured today are derived from petroleum. Since 2007, THESIS has invested in the development of cutting-edge, differentiating technologies that allow for the unprecedented transformation of biomass into green chemicals that are identical to petroleum-based substances in all respects with the exception of a bio-renewable, sustainable origin. Experts predict the green chemical industry is poised to witness vibrant growth under a bio-based economy as the world seeks to lessen its dependence on crude oil.

Waterloo biology professor Kesen Ma recently discovered a thermostable alcohol dehydrogenase enzyme from the hyperthermophilic archaeon, *Thermococcus guaymaseni* (Tg). This highly active, zinc-containing enzyme exhibits significant potential for use in the production of stereo-specific chemicals. Professor Ma also developed a recombinant over-expression system for production of large quantities of this enzyme.

The production of fuel-grade biodiesel yields approximately 10% w/w of a crude bio-glycerin. The high salt content of bio-glycerin has limited its commercial applications. THESIS holds proprietary technology to cost-effectively transform crude bio-glycerin into a low-salt, sustainable feedstock for chemical production. The initial R&D collaboration between THESIS and Waterloo will focus on producing green chemicals from this material through two distinct projects. These projects have been supported by the Federal Economic Development Agency for Southern Ontario's Applied Research and Commercialization Initiative and the Natural Sciences and Engineering Research Council of Canada (NSERC).

"FedDev Ontario and NSERC's support is exemplary of the manner in which Canada helps promote the commercial development of early stage, breakthrough technologies", said Dr. John Peterson, Chief Technology Officer at THESIS. "We are extremely pleased to collaborate with Waterloo in developing Tg

alcohol dehydrogenase. A temperature tolerant enzyme is likely to show improved function under typical conditions required in the bio-refinement of green chemicals. “

“The opportunity to partner with THESIS on these projects demonstrates the collaborative and innovative approach at the core of Waterloo’s research. We look forward to working together to commercialize this important green chemistry technology,” says Scott Inwood, Director of Commercialization, Waterloo Commercialization Office, University of Waterloo.

***Thesis Chemistry** is a leader in developing innovative, green technologies for cost effective and environmentally responsible chemical manufacturing from sustainable forest and agricultural biomass. THESIS is currently in the process of commercializing its technology platform with the intent of becoming a world-renowned, green chemical company and producer of sustainable chemical products. This effort is expected to create numerous manufacturing and employment opportunities in communities harbouring a rich supply of biomass, while simultaneously lessening the world’s reliance on crude oil for chemical production.*

***University of Waterloo**, located at the heart of Canada's Technology Triangle, is one of Canada's leading comprehensive universities. Waterloo is home to 30,000 full- and part-time undergraduate and graduate students who are dedicated to making the future better and brighter. Waterloo, known for the largest post-secondary co-operative education program in the world, supports enterprising partnerships in learning, research and discovery. The Waterloo Commercialization Office (WatCo) supports Waterloo’s research community by offering a range of business and legal assistance to help transform Waterloo research-based innovations into commercially viable products and services.*

For more information about Waterloo, visit www.uwaterloo.ca.

For further information contact Mary Tso at (519) 620-1289 or mtso@thesischemistry.com