

Realize. It starts with you.

Consider how many coffee cups, cup sleeves, plates and other disposable food containers you use in a week, a month or a year. Where do they go? Millions of tons of waste are generated from such disposable products. Many of them are made from materials that don't decompose well, like plastics and polystyrene (Styrofoam™).

Meanwhile, a drive in the country after harvest in any of the Prairie provinces shows how much crop material is left over. Many of the crop residues can be tilled into the soil or used for a variety of purposes, but one in particular, flax straw, is especially difficult to incorporate into the soil. With nearly 2 million acres of flax seeded annually, about a million tons of this tough, fibery straw remains after harvest. In Saskatchewan, the majority of the flax straw is bunched and burned.

Dr. Denise Stilling of the Faculty of Engineering and Applied Science has been leading the research and development to transform this crop residue into value-added products. One innovation is the development of biodegradable dinnerware such as plates, trays, coffee sleeves and other food containers.

"The goal of this research is to be sustainable," says Stilling. "Developing products that meet our demands for convenience with throw-away products that are not harmful to the environment and are compostable is an adaptive solution to our accumulating waste problem."

Having proven the ability to produce biodegradable, single-use dinnerware, the next opportunity is to mass produce and fully commercialize these Green, paper-like products. This would provide additional revenue from crops and give farmers a value-added alternative to burning large amounts of straw. In addition, it will provide a safe, sustainable alternative that will allow people to retain the convenience of single-use, throw-away products without generating unnecessary waste.

The project was initiated in collaboration with Urban Forest Recyclers (UFR) of Swift Current and funded by Saskatchewan Agriculture and Crown Investments Corporation. Using the developed technology for producing moulded, flax-based containers along with a distributed, cottage industry production model, the potential for investment success can be realized. Flax straw processing can be located in rural areas, close to the farms that produce the crop residue, and final production manufacturing can be located in urban locations, close to the consumers of the products.

"Decreasing today's carbon footprint based on my research, these products will contribute to a sustainable future both locally and globally."

Other value-added products that use flax straw currently being developed at the University of Regina include biocomposites composed of reclaimed rubber and plastics with flax fibre for the construction industry, biocomposites involving resins and non-woven flax fibre for sporting equipment and nonwoven flax fibre for filter media. This research is sponsored by the Saskatchewan Ministry of Agriculture through the Agricultural Development Fund.

"Being from Saskatchewan, doing research in Saskatchewan, using Saskatchewan resources for producing made-in Saskatchewan products with immediate and practical benefits for Saskatchewan and with immense potential global impacts is truly living the dream."

In 2009, Stilling won the Regina Chamber of Commerce Paragon Business Excellence Award of Innovation.

To read about other research conducted at the University in the Faculty of Engineering and Applied Science, visit: www.uregining.ca.



- Denise Stilling -

WHAT'S HAPPENING

June 8-10

2011 University of Regina Spring Convocation

Location: Conexus Arts Centre

Students will walk across the Conexus Arts Centre stage and become alumni of the University at the 38th annual spring convocation.

For more information, visit: www.uregina.ca/convocation

September 29 – October 1

Homecoming

In 1911, 27 students began their education at Regina College. Today, the University of Regina is home to more than 12,000 students and an alumni base of over 57,000. The University of Regina and the University of Regina Alumni Association invite all alumni, family and friends to join us in celebrating 100 Years of Excellence in Education by attending Homecoming 2011!

Homecoming 2011 is a once in a lifetime occasion in which the extended community of the University of Regina and alumni can pause to remember the past, celebrate the present and engage in dialogue about the future.

Activities include:

Reception

Pancake Breakfast

Pep Rally/Barbeque and Rams Football Game against University of Manitoba

College Avenue Lunch and Campus Tours

Alumni Crowning Achievement Awards

For more information and to register, visit: www.uregina.ca/alumni/homecoming or call Leone Bechard at (306) 337-3346.

Photos by University of Regina Photography Department.

CENTENNIAL SPOTLIGHT



Regina College theatre group in the 1940s. Photo courtesy of University of Regina Archives and Special Collections.



Dr. Vianne Timmons
President and Vice-Chancellor
University of Regina

Realize. You are part of the University of Regina community.

Congratulations to our spring 2011 graduates. Thanks to your hard work and dedication to your studies you are now a member of one of the largest communities in Saskatchewan – the community of approximately 57,000 who are graduates of the University of Regina.

University of Regina graduates come from every corner of the globe to earn degrees, certificates and diplomas. They become leaders in all fields and contribute in myriad ways to the well-being of our communities. For more information, visit our website.

University
of Regina

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