

ENGINEERING & GEOSCIENCE WEEK

Discover your place in engineering

March is National Engineering and Geoscience Month, Canada's largest celebration of engineering excellence. Throughout March, volunteers from the provincial and territorial regulators host over 500 events that show Canadians what an exciting and fun career choice engineering can truly be. It's an opportunity for youth to learn about the many disciplines of engineering, and allow them to see where their skills and interests can fit in.

THERE'S A PLACE FOR YOU
Engineering is a place for you. A place where you can find your niche. It doesn't matter where you're from or who you are – all you need is enthusiasm and passion. The rest we can teach you. With engineering's many disciplines and uses, you can find something that speaks to you. Whether you'd like to stay close to home or explore far and wide, you have choices along your engineering path. From our National Engineering and Geoscience Month events, to your education and into your career, engineering pathways can be found from coast to coast to coast and across the world.

can't reach once you discover what engineering has to offer! Think about what you like to do and what kind of impact you want to make – engineering is the foundation of a fulfilling career if you like being creative, working with great people, travelling, solving problems and being rewarded for your work.

Becoming an engineer is not only an investment in yourself, but also an investment in the world in which you live. Do you feel passionate about making a difference? Many engineers do – being an engineer gives you the skills you need to solve the issues that you're passionate about.

As an engineer, you can shape the future by applying your skills to almost everything you can think of, from medicine to renewable energy, food technologies to sustainable mining, from being prepared for natural disasters to running a Fortune 500 company.

National Engineering and Geoscience Month is a great time to discover your place in engineering!

To discover the world of engineering, visit www.exploreengineering.ca.

Source: Engineers Canada



Engineering provides meaningful solutions ranging from climate change to clean water to health technology to communications and more.
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Petroleum Technology Research Centre keeps Saskatchewan's energy future bright

PTRC's projects offer local benefits, provincial increases in royalty revenue, and international impacts on climate change

The last week of January, just outside Estevan, the Petroleum Technology Research Centre (PTRC) employed dozens of local and Canadian-based engineers, geophysicists and Saskatchewan oil patch workers to help its Aquistore project conduct its sixth seismic shoot. The data gathered in this "shoot" will be used to create a picture of the CO2 stored in the Deadwood Formation, a very deep sandstone and brine formation.

"Aquistore is the storage project that receives CO2 from SaskPower's Boundary Dam capture facility," notes Dan MacLean, the PTRC's President and CEO. "The amount of CO2 that we have permanently stored there has surpassed 275,000 tonnes. That's the same as taking 68,000 cars off the road for a year."

But why should Saskatchewan care about what PTRC does? Because the world cares.

International research organizations like the Commonwealth Scientific and Industrial Research Organization (CSIRO) in Australia, the IEA Greenhouse Gas Research Program, the United States Department of Energy have all played an active part in PTRC's projects. Countless more research and private sector partners in Japan, Korea, Europe, Africa, Kuwait and the United Arab Emirates have sought out the PTRC's operational expertise to assist in carbon sequestration and low energy fossil fuel extraction technologies in their own countries.

Yet despite the international attention, and international funding that PTRC projects attract, the direct impact of



Geoscience students have been hired to test the soil and ground water around the Aquistore site. SUPPLIED PHOTO

its projects remains squarely focused on Saskatchewan.

"All of our field projects – whether in CO2 storage, or enhanced oil recovery – have been based in Saskatchewan," notes Erik Nickel, the Director of Operations. "And our focus remains on two things – lessening the environmental impacts of hydrocarbon extraction, and improving efficiencies and recovery rates from Saskatchewan's oil reserves, while employing as many Saskatchewan-based workers and companies as we can."

Aquistore is just one of the field projects that have led directly to reductions in Saskatchewan's CO2 emissions. PTRC is working with its heavy oil research network (HORNET) partner companies – along with organizations like the Saskatchewan

Research Council and the province's two universities – to develop heavy oil recovery processes that reduce the amount of energy and water. Cyclic solvent injection, the use of polymers and surfactants, and the use of CO2 in enhanced oil recovery are all lessening the environmental footprint of production.

"We're proud that our field projects have a direct impact in terms of environmental sustainability, employment and businesses development in parts of the province that are experiencing challenges right now," noted MacLean. "But we're also delighted to see our local research has a global impact, and attracts investment and world-leading researchers to Saskatchewan who help in the training of qualified people."

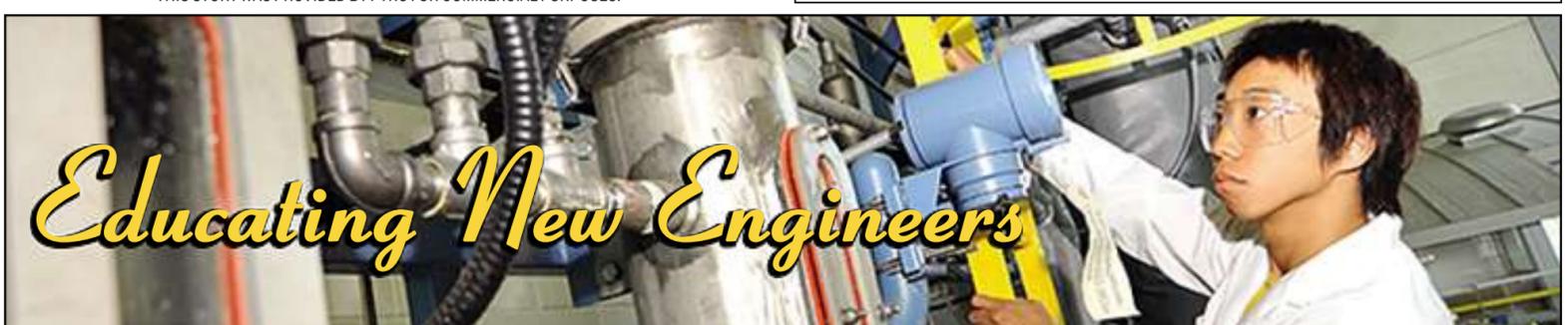
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