nwmo news

Nuclear Waste Management Organization

Volume 16, Issue 3
2018

@nwmocanada

NWMO issues Reconciliation Statement collaboratively with Indigenous Elders and youth



Bob Watts, NWMO Vice-President of Indigenous Relations, and Laurie Swami, NWMO President and CEO, participate in a ceremony to finalize the NWMO's Reconciliation Statement.

The Nuclear Waste Management Organization (NWMO) is taking a significant step towards reconciliation by acknowledging historical wrongs in Canada's past and the need to create a better future by addressing the challenges of today.

This acknowledgment forms part of the NWMO's Reconciliation Statement, which was finalized through an Indigenous ceremony. Members of the Council of Elders and Youth, and NWMO Board of Directors and senior leadership took part in a Pipe Ceremony led by Elder Fred Kelly. They also participated in a traditional gift exchange.

"We are privileged to have many Indigenous voices – on the Council of Elders and Youth, in the communities with which we work, on our Board of Directors, and on our staff – guiding us in our journey towards reconciliation," said Laurie Swami, President and CEO of the NWMO. "Together, we are thinking deeply about reconciliation and have formed a statement that will give our approach meaning and direction."

See Reconciliation, p. 4

NWMO reaches more than 650 of Canada's future leaders through SHAD

Over the summer, more than 650 high school students from all across the country heard about Canada's plan for used nuclear fuel.

They were part of a four-week award-winning enrichment program called SHAD, for high-achieving high school students. SHAD focuses on science, technology, engineering, the arts, and mathematics (STEAM) disciplines, and is designed to help empower these young people to become change makers. Specialists from the NWMO conducted interactive presentations and workshops for SHAD students in 11 programs, answering their many questions about the safe, long-term management of used nuclear fuel.

See SHAD, p. 7

NWMO'S RECONCILIATION STATEMENT

In the context of reconciliation, the Nuclear Waste Management Organization (NWMO) recognizes historical wrongs in Canada's past and the need to create a better future by addressing the challenges of today. The NWMO Council of Elders and Youth speaks of this journey as a new era for humanity – a time of reconciliation with First Nation, Métis and Inuit peoples.

The NWMO is committed to contribute to reconciliation in all its work by co-creating a shared future built on rights, equity and well-being. In addition, the NWMO will establish a Reconciliation Policy with an implementation strategy that will be measured annually and publicly reported to contribute to the Truth and Reconciliation Commission's calls to action.

For more on the Pipe Ceremony and the NWMO's ongoing engagement with Indigenous communities, see pages 4 and 5.

MESSAGE FROM THE CEO

Action built on learning

It is a time of year for listening and learning. With autumn comes cooler air and the excitement of children returning to school, with new lessons awaiting. For the NWMO, fall 2018 is a time of action that builds upon our many learnings to date.

This issue of the newsletter provides a snapshot of some of our activities and achievements that illustrate this forward motion. This includes our ongoing commitment to supporting – through sponsorships, bursaries and donations – educational initiatives in science, technology, engineering, and mathematics. This year, we are building on that solid track record, reaching thousands of children and youth who are interested in these fields.

We also feature important work our Indigenous Relations team is doing in support of reconciliation. As you will read within, the NWMO's commitment to Canada's path towards reconciliation was recently punctuated by a powerful and moving Indigenous ceremony to finalize our unique Reconciliation Statement. While this is an important milestone in our Indigenous engagement program, there is much more work to be done.

To propel forward Canada's plan for the safe, long-term management of used nuclear fuel, we require both clarity of purpose and great humility. Guided by community knowledge holders, scientists, Indigenous Knowledge holders, interested Canadians, and those who govern us, we build and grow. We collaborate and share. We listen, and like the students of autumn, we learn.



Laurie Swami
President and CEO

In this issue

1 NWMO issues Reconciliation Statement collaboratively with Indigenous Elders and youth

1 NWMO reaches more than 650 of Canada's future leaders through SHAD

2 Message from the CEO

2 What we do

3 Viewpoint

3 Minister's statement on our 2017 Annual Report

3 Ignace region welcomes new Community Liaison Manager

4 Standing shoulder to shoulder

5 Focus on reconciliation stems from a strong foundation

6 We ❤ science!

6 Science camp comes to Ignace

6 Robot fun in Huron-Kinloss and South Bruce

7 Students in Hornepayne and Manitouwadge enjoy Robotics Learning Fair

7 Meet the experts: Carol Barnes and Karen Robinson

8 NWMO scientist travels to Taiwan to share geoscientific details of Canada's plan

8 NWMO scientist attends World Nuclear University in South Korea

WHAT WE DO

The NWMO is responsible for implementing Canada's plan for the safe, long-term management of used nuclear fuel.

The plan, known as Adaptive Phased Management (APM), emerged through dialogue and was selected by the Government of Canada in 2007.

APM involves constructing a deep geological repository in which to contain and isolate the used fuel. The repository must be located in an area where communities, including First Nation and Métis communities, are willing hosts, working in partnership with the NWMO to implement it.

We are currently working with communities in a number of siting areas and expect to identify a preferred site by 2023.

INDIGENOUS KNOWLEDGE SCIENCE ENGAGEMENT CORPORATE

Minister's statement on our 2017 Annual Report

In June, Canada's then-Minister of Natural Resources, the Honourable James Gordon Carr, provided his comments on the NWMO's most recent annual report, *Moving towards partnership – Annual Report 2017*. The report was submitted to the minister in March 2018, as required by the *Nuclear Fuel Waste Act* (*NFWA*).

The statement noted that the NWMO plays a central role in efforts to find solutions for the long-term management of radioactive waste. These efforts, it said, are critical to the safety and environmental integrity of nuclear energy, and to maintaining public confidence in the nuclear industry as part of Canada's low-carbon future.

The minister lauded the NWMO for continuing to build strong relationships with Canadians, including Indigenous peoples, throughout all phases of implementation. "In fact," the statement said, "[the NWMO] is one of the first organizations in North America to implement an Indigenous knowledge policy to inform and guide its work. Bringing together western science and Indigenous knowledge plays a central role in shaping and implementing a plan that is responsible, safe and secure for Canadians."

In conclusion, the statement said that the Government of Canada believes strongly in the importance of the NWMO's mandate and will continue to ensure that the organization fulfils its responsibilities under the *NFWA* as it implements Canada's plan for nuclear fuel waste.

The NWMO's annual report and a link to the minister's full comments can be accessed at www.nwmo.ca/annualreport2017.

The Honourable Amarjeet Sohi took over the role as Minister of Natural Resources in July. The Honourable James Gordon Carr is now Minister of International Trade Diversification.

Viewpoint

Bob Watts,
Vice-President of Indigenous Relations



RECONCILIATION IN ACTION

At the NWMO, we are working to implement Canada's plan for the safe, long-term management of used nuclear fuel. I am very proud of how, in so doing, we are walking in partnership with Indigenous peoples, and doing what we can on a journey towards reconciliation.

I say "a journey" because reconciliation is not an exact science or a nearby destination; it is a long-term passage that begins with acknowledging historical wrongs in Canada's past, and ends with – well – more reconciliation.

Our route has been illuminated for us by Call to Action #92 of the Truth and Reconciliation Commission of Canada's calls to action. It calls upon the corporate sector to engage in a number of initiatives, including to build respectful relationships with Indigenous peoples, and provide education for managers and staff on the history of Indigenous peoples, and the history and legacy of residential schools.

These steps help form a road map for how we can create a different future for our children and our grandchildren from the past we have inherited.

It is my firm belief that in order to truly reconcile, you have to manifest reconciliation along the way. And the NWMO is doing that.

How do I know? Since our inception in 2002, we have worked hard to engage respectfully with Indigenous communities. We continually seek and receive advice from the Council of Elders and Youth in regards to our mandate. We have a strong foundation of interweaving Indigenous Knowledge into decision-making. And we train our staff and contractors to be knowledgeable and respectful of Indigenous history and viewpoints.

Perhaps most importantly, we recently underscored our commitment to supporting reconciliation by finalizing a Reconciliation Statement through an Indigenous ceremony. Senior leaders of the NWMO, the Council of Elders and Youth, and the NWMO Board of Directors came together to join hands and hearts in this moving and powerful way.

Building on the statement, we are now working on establishing a Reconciliation Policy. This will not just be a piece of paper. It will be a yardstick against which we will measure our progress, and the NWMO's commitment to Indigenous peoples and their future.

Bob Watts has been deeply involved in reconciliation for many years. He helped to establish Canada's Truth and Reconciliation Commission, and was a member of the team that negotiated the historic Indian Residential Schools Settlement Agreement.

Bob is a former CEO of the Assembly of First Nations, and a former Assistant Deputy Minister for the Government of Canada. A graduate of Harvard University, he is an adjunct professor and distinguished fellow in the School of Policy Studies at Queen's University. He has Mohawk and Ojibway ancestry, and is a member of the Six Nations of the Grand River.



Rachelle Davenport, NWMO Relationship Manager (left), and new Community Liaison Manager Chantelle Gascon are focused on engagement and social research activities in Ignace and the region.

Ignace region welcomes new Community Liaison Manager

The NWMO recently hired Chantelle Gascon as the Community Liaison Manager for the Ignace region. Chantelle brings a great deal of local and regional experience to the position, as she previously held several positions with the Township of Ignace, as well as other volunteer roles. "I look forward to contributing to our community and surrounding area as we continue learning and working together," she said.

Standing shoulder to shoulder

With the many colours of the traditional Indigenous ceremony glinting in the July sun and a circle of people gathered around a sacred fire, the NWMO's Reconciliation Statement was finalized. In attendance were members of the Council of Elders and Youth, and the NWMO Board of Directors and senior leadership.

Words and images from the day tell the story.









Top left: Elder Debbie Plain performs a smudge.
Top right: The Reconciliation Statement was signed by members of the Council of Elders and Youth, and the NWMO Board and senior leadership.
Bottom left: Elder Billie Schibler (foreground, left) and Elder Diane Longboat (foreground, right) sign the Reconciliation Statement.
Bottom right: Elder Fred Kelly performs a drum song.

> *I call on the ancestors to guide us in the work we do and decisions we make to keep Mother Earth safe.*
>
> **Elder Billie Schibler**

Reconciliation

Continued from p. 1

The statement recognizes the NWMO's ongoing involvement, collaboration and discussions with Indigenous (First Nation and Métis) communities and all those involved with implementing Canada's plan for the long-term management of used nuclear fuel.

It is also part of the NWMO's response to calls to action by the Truth and Reconciliation Commission of Canada in 2015. It is the organization's initial response to Section 92, which calls for the corporate sector to build respectful relationships with Indigenous peoples, and provide education for management and staff on the history of Indigenous peoples, including the history and legacy of residential schools.

"The NWMO is demonstrating leadership by interweaving First Nation and Métis voices and Indigenous Knowledge systems into its ongoing work," said Elder Diane Longboat. "Taking an active role in reconciliation and responding to the recommendations of the Truth and Reconciliation Commission will serve the NWMO well as it works to build meaningful relationships founded on mutual trust and collaboration with First Nation and Métis peoples, their organizations and communities."

Building on the statement, the NWMO is now working on a Reconciliation Policy. The policy will include an implementation strategy to measure annually the organization's progress and commitment to Indigenous peoples and their history and future.

Focus on reconciliation stems from a strong foundation

The NWMO's commitment to reconciliation is built on a strong foundation of honouring Indigenous perspectives. Since our inception in 2002, the NWMO has worked hard to engage respectfully with Indigenous communities and grow towards interweaving Indigenous Knowledge into decision-making. The organization continually seeks and receives advice from the Council of Elders and Youth.

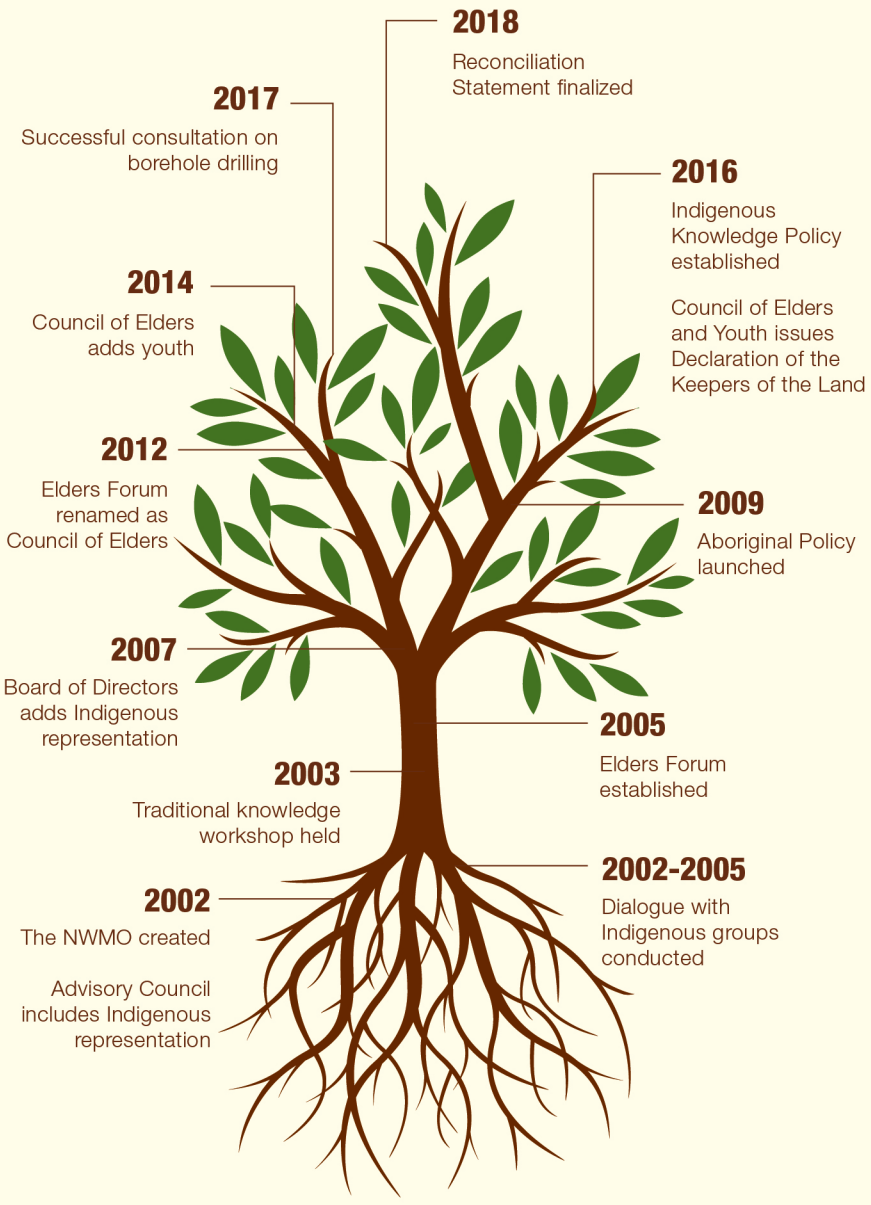
The NWMO's Aboriginal Policy and Indigenous Knowledge Policy, adopted in 2009 and 2016 respectively, provide guidance and inform our work.

"Upon this good track record, we are contributing to reconciliation," said Bob Watts, Vice-President of Indigenous Relations at the NWMO. "This means co-creating a different future based on fairness, equality and respect. The Reconciliation Statement says we are going to jointly hold that pen; we are going to jointly imagine and design how to move into the future together. There is a power and energy associated with that that is going to be really profound."

In addition, all NWMO staff and contractors receive training in Indigenous cultural awareness, and important corporate occasions and milestones are celebrated through ceremony.

> *"This Reconciliation Statement is a significant document for the NWMO and for Canada. It says there is a way we can try to put hands together, and move forward in collaboration, peace, and harmony, epitomized by the word reconciliation."*
>
> **Elder Fred Kelly**

NWMO MILESTONES
IN INDIGENOUS RELATIONS



WE ♥ SCIENCE!

The NWMO supports several organizations that are dedicated to enhancing science learning among young people. These include:

- Scientists in School – a charity providing science workshops for students in kindergarten to Grade 8;
- Science North – an interactive science program for elementary students in northern Ontario; and
- SHAD – an enrichment program for high-achieving high school students.

In addition, the NWMO funds community science initiatives through its Early Investments in Education and Skills (EIES) program.

Science camp comes to Ignace

Science North came to Ignace to run a science camp in the summer of 2018, for the first time. The funding was made possible through the NWMO's EIES program, with direction from the local Ignace Community Nuclear Liaison Committee.

Science North's highly trained staff sparked an interest in science through fun activities that played into children's natural curiosity. Through hands-on activities and games, kids discovered and explored the world around them. Science North reached more than 3,700 students in the 2017-18 school year through the NWMO's support.



Ignace children in science camp.

Robot fun in Huron-Kinloss and South Bruce

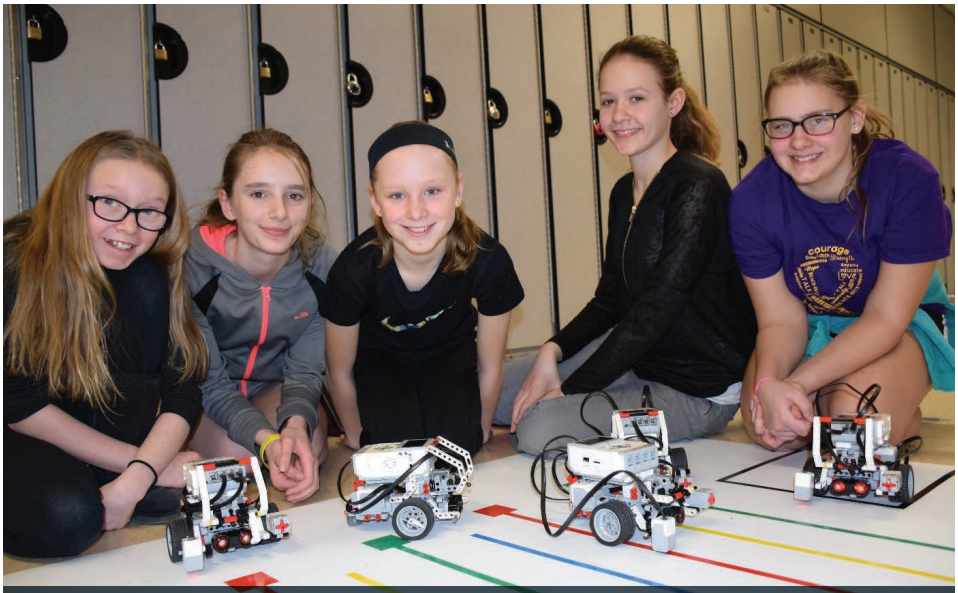
Many children in Bruce and Huron Counties participated in fun science programs, thanks to NWMO support.

Scientists in School ran 70 NWMO-funded workshops for kindergarten to Grade 8 students in the 2017-18 school year.

The NWMO also partnered with the community liaison committees of Huron-Kinloss and South Bruce to provide scientific education that was fun and hands-on. For instance, the Township of Huron-Kinloss provided LEGO robot kits for Grades 7 and 8 students at F. E. Madill Secondary School in Wingham.

The kits gave students the power to build, program and command their own robots to perform specific manoeuvres and tasks, including driving, walking and spinning.

The NWMO also supported the Bruce County Public Library to fund the purchase of four special robots and four tablets to inspire curiosity, creativity and invention through connected play and coding.



Grades 7 and 8 students proudly display their robots.

Students in Hornepayne and Manitouwadge enjoy Robotics Learning Fair

More than 130 elementary and high school students from Hornepayne and Manitouwadge recently gathered at Manitouwadge High School for a Robotics Learning Fair.

Students spent the day at different coding centres before showing each other what they can do with their robotics kits. The kits were supplied through the local community liaison committees in both Hornepayne and Manitouwadge, and the NWMO's EIES program.



Students gather at Learning Fair.

SHAD

Continued from p. 1



Mehran Behazin (left), a corrosion expert at the NWMO, talks to SHAD students at Ryerson University.

Sufiyaan Nadeem, a student from Mississauga who took part in SHAD this summer, was fascinated by the scientific aspects of the Adaptive Phased Management project. "I think we really need to plan for the future and make sure it is safe and sustainable," said Mr. Nadeem, who is entering Grade 12 and wants to pursue software engineering after high school. "The NWMO is solving a major problem and helping society. I thought it was interesting to hear about plans that will protect used nuclear fuel from natural disasters. It's all science."

The NWMO has been a sponsor of the SHAD program since 2009, providing scholarships, bursaries and support of travel.

"It's important – and rewarding – to reach out to young people and inform them of Canada's plan," said Isaac Werner, Government and External Relations Analyst at the NWMO, who runs the organization's SHAD program. "Our project will take place over multiple decades, so it will really be up to tomorrow's leaders to carry it forward."

The universities where Mr. Werner and colleagues conducted SHAD sessions in 2018 were Carleton, Lakehead, McGill, McMaster, Mount Allison, Queen's, Ryerson, New Brunswick, Prince Edward Island, Waterloo, and Western.

MEET THE EXPERTS



Carol Barnes
Hornepayne



Karen Robinson
Manitouwadge

Canada's plan for the safe, long-term management of used nuclear fuel is powered by people in a wide variety of professions. People like Carol and Karen.

The NWMO has hired new Community Liaison Managers in Hornepayne and Manitouwadge, two of the five areas active in the site selection process. Carol Barnes and Karen Robinson will be focused on engagement and social research activities.

Carol, who was born in Elliot Lake and has spent most of her life in northern Ontario, is looking forward to her role in Hornepayne. "I want to thank the Hornepayne residents who have already welcomed me so warmly. I am truly excited to learn more with area residents as we proceed together," she said.

Carol started her career as a correctional officer and was an Ontario Provincial Police guard for 18 years. In addition, she has been a school trustee for the Superior North Catholic District School Board since 2008, and volunteers on numerous committees and boards in the region.

Karen Robinson has been named the Community Liaison Manager for the Manitouwadge area.

"I am happy to be joining the NWMO, and working with local residents and others in the region," said Karen. She brings a great deal of knowledge and experience as she was previously project manager with the Township of Manitouwadge Nuclear Waste Community Liaison Committee.

A well-known local event organizer and longtime volunteer, Karen moved to Manitouwadge from Hope, B.C., in 1985. She worked at the Manitouwadge Medical Centre for 17 years as clinic manager, and the Manitouwadge Economic Development Corporation as its office manager.

Both Carol and Karen will work in their local Learn More Centres, where they welcome community members to stop by for coffee and conversation.

NWMO scientist travels to Taiwan to share geoscientific details of Canada's plan



The NWMO's Manager of Geoscience, Sarah Hirschorn, works with staff from the Institute of Nuclear Energy Research in Taiwan.

> *"Messages that really resonated in Taiwan were how we work collaboratively among disciplines, and how we ensure the quality and integrity of our geoscientific data."*
>
> **Sarah Hirschorn**

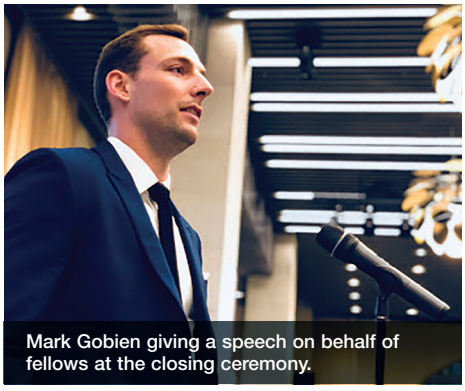
The NWMO is committed to fostering co-operation with other countries that are developing programs for managing used nuclear fuel. Sarah Hirschorn, the NWMO's Manager of Geoscience, travelled to Taoyuan, Taiwan, in early July to speak to scientists there about geoscientific aspects of Canada's plan.

Ms. Hirschorn conducted three days of presentations at the Institute of Nuclear Energy Research. Specialists from Industrial Technology Research Institute and Taipower were also in attendance. She shared with the Taiwanese audience of geochemists, geophysicists, geologists, hydrogeologists, engineers, and project managers the NWMO's experience to date in siting a deep geological repository.

"As an organization that is fairly advanced in the siting process, it is valuable for us to share the knowledge we have gained in understanding the subsurface and in conducting site characterization studies," said Ms. Hirschorn. "Messages that really resonated in Taiwan were how we work collaboratively among disciplines, and how we ensure the quality and integrity of our geoscientific data."

The NWMO also benefits from learning what systems and procedures other countries have in place.

NWMO scientist attends World Nuclear University in South Korea



Mark Gobien giving a speech on behalf of fellows at the closing ceremony.

Mark Gobien, Senior Scientist at the NWMO, recently joined a diverse group of future leaders in the nuclear industry to attend the prestigious World Nuclear University Summer Institute.

The six-week program, located in Busan and Gyeongju, South Korea, focuses on all things nuclear, including energy supply and demand, climate change, nuclear technology in sustainable development, safety, regulation, and waste management. There were 60 attendees from 20 countries; Mr. Gobien is the first person from the NWMO to attend.

"Attending World Nuclear University was a unique opportunity to learn and gain insight directly from the global leaders in the nuclear industry," said Mr. Gobien. "It was also very enlightening to work with and learn from other young professionals in the broader nuclear industry." A personal highlight for him was being asked to give a speech at the closing ceremony, on behalf of all the fellows.

Mr. Gobien, who has a B.Sc. in Physics from Queen's University, works in the NWMO's Safety and Technical Research group. He is responsible for the development, operation and quality assurance of computer models that are used in determining the long-term safety of a deep geological repository. These assessments contribute to the site selection process and will ultimately be used for licensing applications.

As he leads work to develop the organization's next generation of computer models, he brings back from South Korea new perspectives, new knowledge and a new network of international experts.

"The NWMO is an innovative leader in many aspects of nuclear waste management. World Nuclear University exposed me to a broad range of best practices and experiences, and I look forward to applying this knowledge to our own program."

nwmo

NUCLEAR WASTE MANAGEMENT ORGANIZATION
SOCIÉTÉ DE GESTION DES DÉCHETS NUCLÉAIRES

For more information, please contact:

Nuclear Waste Management Organization
22 St. Clair Avenue East, Sixth Floor
Toronto, Ontario M4T 2S3, Canada
Tel.: 416.934.9814 Toll Free: 1.866.249.6966
Email: contactus@nwmo.ca
Website: www.nwmo.ca

© 2018 Nuclear Waste Management Organization