

**'We want to have mining methods that reduce the risk, and we have so much technology and capability to do this.'**

— Peter Kaiser, executive director, CEMI



**Peter Kaiser (right), the founding executive director of the Centre for Excellence in Mining Innovation, shares a laugh with Fred Stanford, president of Ontario Operations for CVRD Inco, and Mike Romaniuk (left), vice-president of Sudbury Operations for Xstrata Nickel, at Kaiser's induction ceremony at Laurentian University in February 2007.**

THE SUDBURY STAR

# Mining innovation sets path

## Centre for excellence has started several projects

BY JANICE LEUSCHEN  
For The Sudbury Star

With funding in place, the Centre for Excellence in Mining Innovation (CEMI) has hired faculty and started several small projects, as well as, two larger ones. But deciding which projects to tackle first and finding researchers is a challenge.

During a mining innovation strategies forum at the Prospectors and Developers Association of Canadian, an international mining conference held the first week of March in Toronto, a panel of representatives of various mining companies, research organizations and the Ontario government discussed how CEMI should proceed and came up with two strategic areas of importance.

"One is building on geophysics exploration technology, which comes with the

geophysics chair," said Peter Kaiser founding executive director of CEMI. "Another is Mining Methods for Hazard and Risk Mitigation When Mining at Depths."

CEMI is putting together network solution teams — the users, the mine planners and designers, consulting companies, equipment manufacturer and academics — that will study past mining disasters and look for ways of reducing the probability of future problems.

Risk Mitigation project is a high-priority project that is underway.

"Largely, we are looking at case studies to see what went wrong in the past so that we

can learn from them," Kaiser said. "We hope to develop a strategy to look at geological influence factors so that we can better foresee. We want to have mining methods that reduce the risk and we have so much technology and capability to do this."

The second major project is the Rapid Development project — increasing tunnelling speed.

"Let's say we were able to double the speed of tunnelling, you'd get access to the ore body much faster, which means you get return on your investment much faster and that, of course, pays back big time."

Kaiser said some estimates

suggest an increase in tunnelling speed of 10 per cent could bring a \$50 million value to a project.

The centre has also started a number of small projects studying smart rocks, ventilation, blast tunnelling advance, insulation, wireless monitoring of underground equipment, mine design alternatives, energy recovery and how to bring immigrants to Northern Ontario. Each project involves a graduate student, PhD or master's student, or even a post-doctorate fellow who work on these projects.

But there is a problem. In Canada, and around the world, there is shortage of

researchers for mining. So part of CEMI's mandate is to produce quality researchers through the projects they work on.

"We have a serious need to develop capability and that starts with graduate students. It starts with younger university faculty. So it's really a capability development initiative."

Kaiser said there are about 250 researches across Canada related to mining in comparison with 250 in one single university in fields such as mechanical engineering.

In terms of the donors' expectations, Kaiser said, "They would like us to work on innovation processes that

work in the long term — not just solve today's problem.

And one of them is to help develop the skills in human resources that actually can run the operation in a better way, have the skills and the knowledge of technology to do their job very well."

Kaiser said the centre hopes to develop two major projects every year or so.

"The strategy is to build at a steady rate."

## Celebrating 20 years in the community



Thank you to our residents and their families for making the past 20 years an enjoyable experience.

We take pride in providing friendship, companionship, variety and independence to our residents.

We invite all to come and visit our wonderful home.

**CHARTWELL**  
Senior Housing Expert  
www.chartwellreit.ca

**WESTMOUNT**  
RETIREMENT RESIDENCE  
599 William Ave., Sudbury, ON  
Call 705-566-6221

THE "WOW" FACTOR

Take your look from beautiful to breathtaking with the right outfit and accessories

Spring lines are arriving!!!

**SIRKKA**  
Fashions

Rainbow Centre • Downtown  
566-3232

## Inco tour



**David Pearson, a professor at Laurentian University, takes part in a tour last year of Inco's wet gas cleaning plant at the smelting complex in Copper Cliff.**

THE SUDBURY STAR