Canadian Mineral Processors 39th Annual Operators Conference

The Canadian Mineral Processors 39th Annual Operators Conference was held in Ottawa, January 23-25, 2007 at the Westin Ottawa. Chairman Colin Hardie welcomed 416 delegates from 13 countries, another record attendance.

- Technical Program:

An outstanding technical program, organized by Vice Chair, John Folinsbee featuring 36 presentations including CIM Distinguished Lecturer and this year’s plenary lecturer Paul Hébert who spoke on “Prospecting the Future: Meeting Human Resources Challenges in the Canadian Minerals and Metals Industry”. A brief summary of the technical program is given below.

New Projects and Operating Improvements: Papers on the Voisey’s Bay Mill, grinding mill design for the Tenke Project, the Paracatu gold mine, ore characterization of the Aqqaluk deposit at Red Dog and the Improvement of circuit performance at BHP-Billiton’s Minera Escondida. Session Chairs – Paul Hampton and Ken Major

Comminution: Papers on grinding circuit modeling and design, SAG mill operation at Cortez, matching motor to mill torque, interactions between slurry density and grinding media size, replacement of diatomaceous earth filter aid with alpha-cellulose at the Laronde Refinery and the Turbo Pulp Lifter (TPL™). Session Chairs – Steve Wilson and Rob Edwards

Precious Metals: Papers on Reduction of free gold losses at the Kemess Mine, lead nitrate control in cyanidation, effect of operating variables in Knelson concentrators, Kelsey centrifugal jig, Gekko’s gold ore treatment plants, the gravity recoverable gold test. Session Chairs: Rob Henderson and Fraser Bringeland

Process Applications I: Papers on Underground milling of uranium ores, infrared recognition of high sulphide and carbonaceous rocks after microwave heating, iron control in mineral processing, frother analysis,
development of new frothers, the Derrick Stack Sizer™, and application of passive sonar. Session Chairs: Tom Lafreniere and Guy Deschênes

**Process Modelling and Mineralogy:** Papers on Validation of high fidelity simulation wear, the use of computational fluid dynamics and discrete element, flotation circuit design for Adanac Moly Corp., mineralogical evaluation of Au-Sb-As mineralization from the AD-MW Zones, Clarence Stream Property, New Brunswick, principal components analysis of ToF-SIMS data and MLA. Session Chairs: Stuart McTavish and Norm Lotter

**Process Applications I:** Papers on the El Mochito Mine, developments and new applications for biogenic sulphide reagent in hydrometallurgy and mineral processing, analytical surface chemistry, and improvement of mass and value balance data from the statistical benchmark model. Session Chairs - Erin Legault-Seguin and John Folinsbee.

### 7th East/West Hockey Challenge Players and Coaches

The 7th East/West Hockey Challenge took place following the Technical Sessions on the Tuesday evening, January 23rd. Hockey enthusiasts from near and far squared off to play for the coveted Kilborn Cup at the Ottawa Civic Centre. After almost two hours of very fast and exiting hockey, the game ended in the East edging out the West and retaining the title with a score of 4-3.

![Image of the 7th East/West Hockey Challenge Players and Coaches](image)

### Chairman’s Reception

Colin Hardie hosted the Chairman’s reception on the Tuesday evening. This always lively reception provided delegates an opportunity network and get reacquainted.

### Annual CMP Business Meeting

At the Annual CMP Business Meeting, held on the Wednesday morning, nominees for officers of the CMP for 2006/2007 were as follows:

- **Past Chair**    Colin Hardie
- **Chair**         John Folinsbee
- **1st Vice-Chair** Ian Orford
- **2nd Vice-Chair** Robert Henderson
- **Secretary**     Janice Zinck
- **Treasurer**     Ray MacDonald

The CMP Regional Representatives are as follows:

- **Maritime**      Jodi Passmore
- **Superior**      Erin Legault-Seguin
- **Toronto**       Stuart McTavish
- **Central Ontario** Dominic Fragomeni

The CMP Executive thanked the following corporate sponsors of the meeting:

- Barrick
- Canadian Process Technologies Inc.
- CANMET (NRCan)
- CIBA Specialty Chemicals Canada Inc.
- CVRD INCO
- CYTEC Industries
- FFE Minerals - Technequip
- G & T Metallurgical Services
- GE Water and Process Technologies
- GL&V Dorr-Oliver Eimco
- Heath & Sherwood (1964) Ltd.
- Kinross Gold Corporation
- Lochhead Haggerty Engineering & Manufacturing
- Magotteaux Canada
- MinnovEX Technologies Inc
- MOLY-COP Canada
- Metso
- Norcast
- Minerals Engineering International
- Multotec Canada
- Outokumpu Technology
- Starkey & Associates
- Quadra Chemicals
- SGS Lakefield Research Ltd
- Shell Canada
- SNF Canada
- Univar Canada Limited
- Westin Hotel
Annual Reception and Awards Banquet

On Wednesday evening, Colin Hardie welcomed delegates in the Westin Confederation Ballroom for the annual reception, dinner and presentation of awards. Colin introduced the 24 students, sponsored by the CMP and selected from each of the Universities and Technical Schools across Canada offering studies in the Mineral Processing field as well as the winner of the Student Essay Contest John Burchell.

<table>
<thead>
<tr>
<th>Educational Institution</th>
<th>Students</th>
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<tbody>
<tr>
<td>DalTech</td>
<td>Bradford Ernst, David Walker</td>
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<tr>
<td>Laval</td>
<td>Marc André Leblanc, Mathieu Desnoyers</td>
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<tr>
<td>McGill</td>
<td>Shirley Chang, Daniel Brehin-Reichelson</td>
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<td>Queen's</td>
<td>Katherine MacKenzie, Alexander Burns</td>
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<tr>
<td>Laurentian</td>
<td>Michelle L. Pare, Alice J. Born</td>
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<td>University of Alberta</td>
<td>Donna Reimchen, Chi Wing Chan</td>
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<td>University of British Columbia</td>
<td>Andrew Lee, Adam Miller</td>
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<td>CEGEP de L'Abitibi-Temiscamingue</td>
<td>Michel-Andre Girard, Jean-Daniel Latour</td>
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<td>CEGEP de Thetford Mines</td>
<td>Jean-Felix Lepage, Tomy Cloutier</td>
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<td>Haileybury School of Mines, Northern College</td>
<td>Brian Nuttall, Andrew Hewlett</td>
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<tr>
<td>University College of the North</td>
<td>Yogesh Patel, Venkat Nishtala</td>
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<tr>
<td>British Columbia Institute of Technology</td>
<td>Dal Dhaliwal, Paul Makowsky</td>
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<tr>
<td>Student Essay Winner</td>
<td>John Burchell</td>
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Presentation of the Awards

Each year the Canadian Mineral Processor's recognizes the best of the best in the Mineral processing community at its annual awards banquet.

**CIM Fellowship Award**

On behalf of CIM, MetSoc and CMP Colin Hardie and John Starkey presented Manqiu Xu of CVRD INCO with the CIM Fellowship Award. Dr. Xu was not able to attend CMP 2007 so colleague and friend Dr. Peter Wells accepted the award on his behalf.

Best Presentation Award (38th Annual Meeting)

The winners of the CMP 2006 Best Presentation Award were Jan Nesset, NesseTech Consulting Services Inc. and Peter Radziszewski, McGill University for their presentation entitled “Assessing the Performance and Efficiency of Fine Grinding Technologies”.

Colin Hardie, CMP Chair and John Starkey, Past Chair presenting the CIM Fellowship Award to Dr. Peter Wells on behalf of Manqiu Xu of CVRD INCO.
Colin Hardie, CMP Chair and John Starkey, Past Chair presenting Jan Nesset and Peter Radziszewski with the Best Presentation Award.

**CMP Annual Student Essay Contest Winner**

The winner of the CMP Student Essay Contest was John Burchell from Laurentian University his essay entitled “The Start Up and Testing of an Air Classifier at INCO’s Nickel Refinery”. This is the first time in the 19 year history of the CIM-CMP Student Essay Contest a Laurentian Student ever won this contest. For his efforts John was awarded a $1,000 cash prize, a Certificate of Recognition and an all expense paid trip to attend the annual CMP conference.

Colin Hardie, Prof. Lucky Amaratunga (CMP Education Coordinator and Contest Organizer) and John Starkey presenting the Student Essay Contest Award to John Burchell.

The Bill Moore Special Achiever Award

This award is presented in memory of Bill Moore, a very active CMP member for many years, to recognize special achievement to our industry and organization. Typically the award is presented to a younger member of the CMP Community.

This year’s winner of the Bill Moore Special Achiever Award is no stranger to the CMP; she is none other than Jennifer Abols.

Jennifer received her Bachelor Metallurgical Engineering from Laurentian University in 1996. She went on to complete an MBA in 2002 from Sir Wilfred Laurier University. As a student she was assistant metallurgist at three properties. She was project metallurgist at Placer Dome and Manager for Milling Products for Metso. After joining Gekko she became VP of Canadian Operations in Gekko 2002. Currently Jennifer is working for Gekko in Australia. She has published several papers and conducted workshops on various mineral processing topics.

Jennifer first got involved with the CMP through their student program in 1995 and she was a CMP regional representative for Sudbury and Toronto branches. She served on the CMP Executive for four years and was Chair of the CMP in 2005.
Past Chair John Starkey and Colin Hardie, CMP Chair presenting Jennifer Abols with the Bill Moore Special Achiever Award.

**CMP Mineral Processor of the Year Award**

The prestigious CMP Mineral Processor of the Year Award is presented annually to recognize meritorious service or an outstanding contribution to CMP or industry. This year's recipient of the award was Ron Colquhoun, VP Technical Services, Centerra Gold Inc.

Ron is responsible for the evaluation, engineering, construction and commissioning of new and expansion projects. He has more than 25 years of international experience in mine operations, project development, design and construction in the mineral resource industry. Most recently, he was Vice President of Technical Services with Crystalline International with primary responsibility for project permitting, design and construction of the Las Cristinas Project in Venezuela. Prior to that Ron was with Barrick Gold where he participated in the development and enhancement of the Balyanhulu and Tulawaka projects in Tanzania, participated in the development of the Holt-McDermott Mine in Ontario, the Goldstrike Mine in Nevada and managed the Barrick El Indio – Tambo projects in Chile. Prior to that Ron was with Dome Mine, where he was the youngest ever mill superintendent and oversaw the milling operations and participated in the modernization of the mine.

Ron is a graduate of the Haileybury School of Mines and was the recipient of the Special Achievement Award (currently know as the Bill Moore Award), a national award presented by the CMP Division of the Canadian Institute of Mining – Metallurgy.

Past Chair John Starkey and Colin Hardie, CMP Chair presenting Ron Colquhoun with the Mineral Processor of the Year Award. Ron is accompanied by Ken Thomas principal nominator.

**Art MacPherson Comminution**

The Art MacPherson Comminution Award was a presented to John Russell for his significant contribution to the advancement of comminution. John has greatly contributed to the safety of the working man and his work has directly resulted in a large reduction in accidents and injuries in the relining of large SAG (and other) mills. The liner changing equipment that he invented and developed saves considerable time and money for the plant.

John holds a Bachelor in Mechanical Engineering from QIT (Queensland Institute of Technology, 1979). He spent five years at Mount Isa Mines Ltd. and founded RME Pty Ltd. He olds eight patents and has published numerous papers. He was the recipient of eight previous awards.
Past Chair John Starkey and Colin Hardie, CMP Chair presenting John Russell with the Art MacPherson Comminution Award

Past Chairs’ Award

John Starkey accepting Past Chair’s Award from Chairman Colin Hardie

Conference Information and Proceedings

The proceedings (CD + text) are available for $75 Cdn. (S&H incl.) from Wesley Griffith, Registrar (wesgriff@nrcan.gc.ca, 613-996-8985) or through our secure site at https://www.anadynesystems.com/client/fhtml20061124115510312000.htm. For further information on the CMP please contact Janice Zinck (jzinck@nrcan.gc.ca, 613-995-4221).

CMP Organizing Committee:

Back Row (L to R) – Wesley Griffith (Registrar and publications), Janice Zinck (Secretary), Gilles Tremblay (Hospitality), Al Kuiper (AV and photography).

Front row (L to R) - Dave Hardy (students), Ray MacDonald (Treasurer), Louise Madaire (Asst. Registrar).