Canadian Mineral Processors 38th Annual Operators Conference

The Canadian Mineral Processors 38th Annual Operators Conference was held in Ottawa, January 17-19, 2006 at the Westin Ottawa. A record number (384) of delegates from 18 countries were welcomed by Chairman John Starkey.

Technical Program:

An outstanding technical program, organized by Vice Chair, Colin Hardie featured 37 technical papers including CIM Distinguished Lecturer and this year's plenary lecturer Gordon Peeling from the Mining Association of Canada. A brief summary of the technical program is given below.



Gordon Peeling, Mining Association of Canada CIM Distinguished Lecturer with John Starkey, CMP 2006 Chairman

<u>Precious Metals</u>: Papers on gold recovery, flotation and leaching and the use of dye penetration techniques to determine heap leach potential. Session Chairs - Nancy Duquet-Harvey and N. McKay

New Ideas and Technologies: Papers on H₂S as a fuel, biological sulphide production for process and environmental applications, long distance slurry pipelines in mountainous regions, real time data reconciliation for process control, integrated underground mining and processing of massive sulphide ores. Session Chairs - Donald and Domenic Fragomeni.

Comminution: Papers on the performance of large low and high aspect ratio sag mills transforming flowsheet design with inert grinding, fine grinding using the Metso Vertimill and the Metso Stirred Media Detritor (SMD), Millpebs[™] testing at the Brunswick concentrator, assessing the performance and efficiency of fine grinding technologies. Session Chairs - Stuart McTavish and Rob McIvor.

<u>Flotation</u>: Papers on performance enhancement of semi-autogenous grinding, the use of gas dispersion measurements to improve flotation performance, ultrasound use in copper-nickel sulphide flotation, and flotation control based on froth textural characteristics. Session Chairs - C. Ciriello and André LaPlante

<u>New Projects and Operating Improvements:</u> Papers on concentrate dewatering modernization, the Tulawaka Mine, water management design for Cigar Lake uranium mine, MgO rejection circuit upgrade, equipment and flotation improvements. Session Chairs - Bern Klein and John Paul Portelli

Laboratory and Pilot Testing: Papers on flotation feed size distribution, scale up of new CVRD grinding and flotation projects, design of experimentation, hydromet piloting, flotation performance of stockpiled and fresh ore samples. Session Chairs - Jodi Passmore and Ken Dyck.

6th East/West Hockey Challenge Players and Coaches

The 5th East/West Hockey Challenge took place following the Technical Sessions on Tuesday. 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 regaining the title with a 7-4.



6th East/West Hockey Challenge Players and Coaches

Chairman's Reception

The chairman's reception on Tuesday evening this year was hosted by Chairman John Starkey and featured a String Quartet. During the reception, Ray MacDonald's dedication and valuable assistance to the CMP annual hockey challenge was formally recognized with a gift and a CMP hockey jersey presented by Ken Roberts.





This year's Chairman's reception included a string quartet and a presentation to Ray MacDonald by the CMP hockey players represented here by Ken Roberts

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 - John Starkey Chair - Colin Hardie 1st Vice-Chair - John Folinsbee 2nd Vice-Chair - Ian Orford Secretary - Janice Zinck Treasurer - Ray MacDonald

The CMP Regional Representatives are as follows:

Maritime: Jodi Passmore N.W. Quebec: Paul Cousin Montreal: Denis Cotnoir N.E. Ontario: Nancy Duquet-Harvey Toronto: Stuart McTavish Central Ontario: Dominic Fragomeni N.W. Ontario: Mike Timmins Manitoba: Keith Merriam Saskatchewan: Ken Dyck B.C./Yukon: Ish Grewal Alberta/N.W.T/Nunavut: JohnPaul Portelli Regions with vacant regional representative positions - Superior, Newfoundland & Labrador



CMP Executive 2005/2006 (L to R - Front Row: Jennifer Abols, Lucky Amaratunga, John Starkey, Ray MacDonald, Colin Hardie; Back Row - Janice Zinck, Gilles Tremblay (CANMET), Nancy Duquet-Harvey, Fraser Bringeland, Jodi Passmore, Ken Dyck, Stuart McTavish, John Folinsbee, Chuck Edwards, Mike Smith.

John Folinsbee, Technical Program Chairman for 2006/2007 issued the 1st Call For Papers for the 39th Annual Canadian Mineral Processors Operators Conference to be held January 23-25, 2007, in Ottawa, Ontario.

A vote of thanks was called by John Folinsbee to the corporate sponsors of the meeting:

- <u>Ashland Specialty Chemical Company</u>
- Barrick
- <u>Bioteq</u>
- Canadian Process Technologies Inc.
- CIBA Specialty Chemicals Canada Inc.
- <u>CYTEC Industries</u>
- FFE Minerals Technequip
- Gekko Systems Inc.
- GE Water and Process Technologies
- GL&V
- Kinross Gold Corporation
- Knelson Group
- Lochhead Haggerty Engineering
- <u>Magotteaux Canada</u>
- Minerals Engineering International

- <u>MinnovEX Technologies Inc</u>
- MOLY-COP Canada
- Natural Resources Canada (CANMET)
- Noranda / Falconbridge FTC
- <u>Norcast</u>
- Outokumpu Technology
- Placer Dome
- Quadra Chemicals
- Sandvik Mining and Construction
- SGS Lakefield Research Ltd
- Shell Canada
- SNF Canada
- Univar Canada Limited
- Westin Hotel

Annual Reception and Awards Banquet

On Wednesday evening, John Starkey welcomed delegates in the Westin Hotel's Confederation Ballroom for the annual reception, dinner and presentation of awards. John 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:

Educational Institution		Students	
DalTech	Chris Boland	Clyde Cooper	
Laval	Marc André Harbec	Jean François Deshaies	
McGill	Silvia Del Carpio	Jean-Charles Sztuke	
Queen's	Charlotte Braun	Bradely Jewson	
Laurentian	John Burchell	David Salvatore	
University of Alberta	Dana Wiart	Nan Lu	
University of British Columbia	Jeff Drozdiak	Blair Woodhurst	
CEGEP de L'Abitibi-Temiscamingue	Yves Bouchard	Michel André Girard	
CEGEP de Thetford Mines	Cynthia Plante	Frederic Paradis	
Haileybury School of Mines, Northern College	Robin Forsyth	Matt Larivee	
University College of the North	Walter Costa	Patrick Hayes	
British Columbia Institute of Technology	Behzad Soltani	Jing Yu	

Note: University of Toronto did not send students this year as they no longer have a mineral processing program.



CMP 2006 Sponsored Students

Presentation of the Awards

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

CIM Fellowship Award

On behalf of CIM and CMP Jennifer Abols and John Starkey were honoured to present Mike Smith with the CIM Fellowship Award.

- The CIM Fellowship award recognizes members who have distinguished themselves through outstanding contributions to the mining, metallurgical and petroleum industries.
- CMP nominated Mike Smith for outstanding service to the Canadian Mineral Processors Division over a distinguished career and for excellence and enthusiasm in recruiting, training and coordinating regional representatives for the CMP all across Canada.

Best Presentation Award (37th Annual Meeting)

The winner of the CMP 2005 Best Presentation Award was Dan Curry from Xstrata Technology Pty Ltd for his presentation entitled "The Application of Large Scale Stirred Milling to the Retreatment Of Merensky Platinum Tailings".

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 Peter Wells of Inco, introduced this year's winner of The Bill Moore Special Achiever Award - Johnna Muinnonen of Inco.

Johnna received a Bachelor of Science in Mining Engineering from Queen's University in 1998. From 1998-2000 ahe was a metallurgist providing Technical Support at Baort-Longyear/ She joined Inco Technical Services in 2001 as an Engineer and progressed rapidly to Mill Superintendent at Thompson in 2005.

Johnna has a long list of significant achievements during her relatively short time with Inco. She demonstrated that extremely high grade concentrates could be produced from Voisey's Bay concentrate using TETA and sulphite, investigated ore sorting, various gravity techniques and flotation for rejecting magnesium from Birchtree concentrate for Thompson Mill, conducted plant baseline tests and tests of froth washing on rougher-cleaners In plant and pilot plant testing on Flotation Separation for MgO rejection. The latter led to full-scale commissioning and start-up.

CMP Mineral Processor of the Year Award



Ken Stowe (left) receiving the 2006 Mineral Processor of the Year Award from CMP Chairman Colin Hardie at the SAG 2006 Conference

the Raglan Concentrator of Falconbridge.



prestigious
nna Muinnonen accepting the Bill Moore Award from Peter Wells
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 Ken Stowe, Northgate Exploration Limited. This award was formally presented to Ken at the SAG 2006 conference in Vancouver this fall as he was out of the country.

Ken Stowe was nominated and selected for his outstanding contributions and achievements in the Mineral Processing Industry. During his career with Noranda he was instrumental in advancing the technology and metallurgical performance at many of Noranda's concentrators. He managed three of Noranda's concentrators and the mineral processing research group at the Noranda Technology Centre (NTC). Ken is an experienced mill operations manager and innovator, known for his hands on, pro-active style of management. His "keep it simple" approach to ore processing led to the introduction of simpler and more controllable flotation circuits in Noranda's concentrators resulting in significant improvements in metallurgy and in the bottom line. He led the way at NTC to change the research approach from academic to plant driven and results oriented.

As Chief Metallurgist he was a key player in the process design for the Collohluasi Concentrator and to some extent

He joined Diamond Field Resources as Vice President in 1995 and was responsible for managing the Voisey's Bay feasibility study.

Between August 1996 and September 1999 Mr. Stowe served respectively as Vice President and Senior Vice President Mining Operations for WestMin Resources and Boliden.

In September 1999 he joined Northgate Exploration Ltd to become President and eventually CEO of the Company. During his tenure with Northgate he has been responsible for significant performance improvements of the Kemess copper-gold concentrator by providing leadership and technical direction to the operation that resulted in significant improvements in throughput and metallurgy. These changes turned the operation around from a money loosing proposition to a profitable and successful world class operation.

Art MacPherson Comminution Award



Derek Barratt receiving the 2006 Art MacPherson Comminution Award from CMP Chairman Colin Hardie at the SAG 2006 Conference

Presenter, Jennifer Abols announced Derek Barratt as the 2006 Art MacPherson Comminution Award recipient. The award was formally presented at SAG 2006 this fall in Vancouver.

Derek is nominated for this award for his many contributions to the advancement in the area of comminution over a period of more than 20 years.

As a consulting engineer, initially with Wright Engineers, subsequently with Fluor Daniel and more recently as an independent consultant, Derek has been involved in the review, design of Greenfield's projects or expansions and commissioning of more than 60 grinding circuits, with up to 125,000 tonne per day capacity, world wide.

Derek has authored over 30 technical papers including 20 papers on Comminution.

He served on the Editorial Board and the Planning Committee of the 1989, 1996 and 2001 SAG Conferences. He was Vice Chairman and Co-editor in 1996 and Chairman and Coeditor in 2001.

He was Committee Secretary and Technical Advisor to the SME Mineral Processing Plant Design, Practice and Control Symposium held in 2002. I addition he has serves as lecturer at a number of Universities and Technical Institutes.

Past Chairs' Award



Jennifer Abols accepting Past Chair's Award from John Starkey

CMP Annual Student Essay Contest

<u>Winner</u>

The winner of the first ever CMP Student Essay Contest was Lindsay Rowland from McGill University for her essay entitled" Characterization of Bubble Films using FT-IR and UV-Visible Spectrophotometry" . Lindsay is currently employed as an EIT at INCO Ltd. For her efforts, she was awarded a \$ 1,000 cash prize, a Certificate of Recognition and an all expense paid trip to attend the annual CMP conference.



CMP Student Essay Contest award winner Lindsay Rowland with Prof. Lucky Amaratiunga (CMP Education Coordinator and Contest Organizer)

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 <u>https://page-secure.com/cmpontario/order.html</u>.