



 WWW  This Site

[CMP'S MISSION STATEMENT](#)
[ANDRÉ LAPLANTE MEMORIAL SCHOLARSHIP](#)
[REGIONAL MEETINGS](#)
[CALL FOR PAPERS FOR THE 41ST ANNUAL OPERATORS CONFERENCE](#)
[STUDENT ESSAY COMPETITION](#)

- [ENGLISH](#)
- [FRANÇAIS](#)

[EXECUTIVE/REGIONAL REPS](#)
[CMP SPONSORED EVENTS](#)
[PUBLICATIONS](#)
[AWARDS](#)
[ARCHIVES](#)

## Canadian Mineral Processors 36th Annual Operators Conference

The Canadian Mineral Processors Division (CMP), held their 36th Annual Operators Conference in Ottawa, January 20-22, 2004. Chairman Steve Wilson of Inco welcomed approximately 350 delegates to the meeting noting that they came from many parts of the world including some 13 countries and five continents. Among countries represented were, Canada, United States, Mexico, Nigeria, Brazil, the Netherlands, Chile, Australia, South Africa, Sweden, Finland France and the United Kingdom.

### Technical Program

An outstanding technical program was put together by the 2003/04 Vice Chair, Jennifer Abols that featured some 36 papers and two plenary lecturers including CIM Distinguished Lecturer Chuck Edwards (Figure 1). A brief summary of the technical program and the session chairs is given below.



FIGURE 1: Chuck Edward, Cameco Corporation, giving his Distinguished Lecturer presentation entitled "The Role for Uranium and Nuclear Power in Combating Global Climate Change".

Operations I: Papers on Cu/Ni separation, tailings disposal and the Gekko InLine Pressure Jig. Session Chairs: Art Winckers and Eric Konigsmann

Industrial Minerals: Papers on oil-sands, talc, kaolin and, incongruously, PGMs. Session Chairs: Bern Klein and Carlos Perucca

Process and Predictive Tools: Papers on process mineralogy of PGM and gold ores, geometallurgical mapping, on-stream analysis for chemical composition and pulp reactivity. Session Chairs: Colin Hardie and Jan Nessel

New Technologies: Papers on comminution, methods to control acid mine drainage, real-time performance management, dust control technology and speciation of sorbed gold. Session Chairs: Paul Semple and Pierre Julien

Operations II: Papers on gold, uranium and zinc operations in Canada. Session Chairs: John Starkey

and Stuart McTavish

Flotation: The four papers in this session included two from the JKMRC in Australia. Session Chair: Mike Smith

### **Process Mineralogy Short Course**

Dogan Paktunc, CANMET-MMSL, organized a full day short course on Process Mineralogy on the Monday prior to the conference. Over fifty participants attended the short course, which featured presentations on various topics including the tools, techniques, methodologies and state-of-the-art developments in the use and applications of mineralogy in metallurgical processing. Eleven presenters from industry, academia and government helped make the short course such a success.



FIGURE 2: Process Mineralogy Short Course Lecturers (from left to right) Dogan Paktunc, Steven Chrissoulis, Glenn Poirier, Bill Petruk, John Dutrizac, Bruce Jago, Peter Whittaker, Tom Kotzer, Allen Pratt absent Dr. Louis Cabri, Dr. Gerhard Heinrich, and Dr. T.T. Chen.

### **Sponsors**

A vote of thanks to the corporate sponsors of the meeting: Ashland, Barrick Gold Corporation, Canadian Process Technologies, CANMET-Mining and Mineral Sciences Laboratories, Ciba, COREM, Dorr-Oliver Eimco, FFE Techniquip, GE Water Technologies, Gekko Systems, INCO Ltd., Kinross Gold Corporation, Knelson, Magotteaux, Minerals Engineering International, MinnovEX Technologies Inc., Moly-Cop Canada, Nalco, Norcast, OSISOFT, Outokumpu, Placer Dome Canada, Quadra Chemicals, Sandvik Mining and Construction, SGS Lakefield Research, The Westin Hotel. Their sponsorships supports the Student Program.

### **Student Program**

The CMP student program was a success again this year. Twenty-six students from universities and colleges across Canada attend the 36th Annual CMP conference due to the gracious financial support of our sponsor. This year's students include:

University of British Columbia - Harold Lu and Stephan Wozniak  
British Columbia Institute of Technology - Shalini Devi and Erika Kloess  
University of Alberta - Crystal Bunnell and Carol Mak  
Keewatin Community College - Sabrina Anderson and Richard Olver  
Laurentian University - Sylvain Brunet and William C. Quesnel  
Haileybury School of Mines - Dallas Mann and Jamie Power  
University of Toronto - Jason DeVellis and Eliza Ngai

Queen's University - Gabriela Rappell and William McCombe  
McGill University - Patrick Heroux and Jason Doucet  
CEGEP de Thetford Mines - Frederic Bergeron and Bruno Gamache  
CEGEP de L'Abitibi-Temiscamingue - Kevin Morin and Karine Dion  
Université Laval - Christine Fillion and Nadia Ouellet  
DalTech - Tracey Whitehead and Ryan Mueller



FIGURE 3 - CMP 2004 Sponsored Students

### **4th East/West Hockey Challenge**

The 4th East/West Hockey Challenge took place after the Technical Sessions on Tuesday. Hockey enthusiasts from near and far squared off to play for the coveted Kilborn Cup at Ottawa's Barbara Ann Scott Arena. For the first time in the history of the challenge Team West, with coaching excellence from Ray (Whipper) MacDonald and his assistant Ernie Marcotte came out triumphant in the exciting and hard fought battle winning by a score of 5-3. Coach of Team East, Willard Thomas was proud of the effort of his team.



FIGURE 3 - Team West - Champions 2004



FIGURE 4 -Team East

### **Annual CMP Business Meeting**

At the Annual CMP Business Meeting, held on the Wednesday morning Steve Wilson, reviewed highlights of the year's activities, including the following:

- The continuous support of the CMP by CANMET was acknowledged and appreciated and hoped that the long-standing relationship continued.
- Well deserved thanks were extended CMP Executive for their hard work through the year. A special thanks was extended to Jennifer Abols, who assembled a timely and interesting Technical Program, and with the assistance of John Starkey coordinated the sponsor program.
- As well special thanks was extended to Ray MacDonald and Lucky Amarutunga for putting together the Student program this year.

Nominees for officers of the CMP for 2004/2005 were as follows:

Past Chair - Steve Wilson  
 Chair - Jennifer Abols  
 1st Vice-Chair - John Starkey  
 2nd Vice-Chair - Colin Hardie  
 Secretary - Janice Zinck  
 Treasurer - Ray MacDonald

The CMP Regional Representatives are as follows:

Atlantic - Ian Orford	N.W. Ontario - Pending
Toronto - Eric Herbst	Central Ontario - Renée Barrette
N.W. Quebec - Paul Cousin	Manitoba - Pending
Montreal - Jacques Boivin	Saskatchewan - Ken Dyck
N.E. Ontario - Andrew Cormier	Alberta/N.W.T. - Zhenghe Xu
Lake Superior - Pending	B.C./Yukon - Bern Klein
Labrador - Pending	



FIGURE 5 - CMP 2004/2005 Executive

John Starkey, Technical Program Chairman for 2004/2005 issued the 1st Call For Papers for the 37th Annual Canadian Mineral Processors Operators Conference to be held January 18-20, 2004, in Ottawa, Ontario

### **Chairman's Reception**

Late Tuesday evening, Steve Wilson hosted the always lively Chairman's Reception in the Les Saisons Room at the Westin Hotel.

### **Annual Reception and Awards Banquet**

On Wednesday evening, delegates assembled in the Westin Hotel's Confederation Ballroom for the annual reception, dinner and presentation of awards. Prior to dinner, Steve Wilson opened the evening by welcoming the delegates. He went on to thank the conference organizing committee Ray MacDonald, Janice Zinck, Jean-Francois Fiset, Al Kuiper, Dave Hardy and Wesley Griffith and members of the Executive specifically Jennifer Abols for organizing an outstanding technical program and Past Chair Jan Nessel for coordinating the Award winner selection process.

In addition, he thanked the corporate sponsors, which provide the funding for the very successful CMP student program. He then introduced the 26 students, sponsored by the CMP and selected from each of the Universities and Technical Schools across Canada offering studies in the Mineral Processing field:

Presentation of the Award winners followed the culinary delights provided by the Westin Hotel.

CIM President Howard Stockford presented Rene del Villar with the coveted CIM Fellowship Award. This award was announced in May 2003, however Dr. del Villar asked to receive it at the CMP annual meeting.



FIGURE 7 - Rene del Villar receiving CIM Fellowship Award from President Howard Stockford

### **Best Presentation Award**

Rene went on to accept the Best Presentation Award (2003) on behalf of award winner Carl Duchesne of COREM for his presentation on "Application of Multivariate Image Analysis To Predict Concentrate Grade In Froth Flotation Process".

### **The Bill Moore Special Achiever Award**

Chairman, Steve Wilson introduced this year's winner of The Bill Moore Special Achiever Award Manqiu Xu of INCO.

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.

Manqiu Xu of INCO is one of those individuals who, in his own words "was born to be a mineral processing researcher". After obtaining his Bachelors degree in China he came to McGill to study with Jim Finch and obtained his Masters and PhD degrees in short order.

He joined INCO soon after graduating in 1991 and set about becoming a flotation expert in the field of copper and nickel flotation. He has several patents and many publications to his credit and has been a frequent contributor to CMP conferences.

Highlights of two of his achievements which qualify him for this award are:

Firstly, the development of the Feed Aeration Concept in column flotation, an approach which was patented in 1995 and which has been adopted into several newly created flotation devices. One example being for bitumen recovery from oil sands. Dr Xu was invited to write a chapter on "The Pre-aeration of Feed" for the volume Encyclopedia of Separation Science in 2000.

A second achievement of note has been his championing of a portable mini-pilot plant to duplicate the Cu-Ni flotation and separation process. The mini-plant demonstrated that additional regrinding, circuit reconfiguration and the use of TETA and sodium sulfite would significantly improve Ni recoveries. The changes were made and the Clarabelle mill has since been consistently achieving 4-5% higher recoveries.

For his outstanding contributions to the team leading the process redesign at INCO, the Canadian Mineral Processors are pleased to award Manqiu Xu the Bill Moore Special Achievement Award.



FIGURE 8 - Manqiu Xu accepting the Bill Moore Special Achiever Award from Past Chairman Jan Nessel

### **Art MacPherson Comminution Award**

Jan Nessel then introduced this year's winner of the Art MacPherson Comminution Award, John Starkey

This award is presented in memory of Art MacPherson, a Canadian pioneer in the development of autogenous and semi-autogenous grinding. The award is sponsored by SGS Lakefield and was first presented to Andy Mular at the SAG 2001 Conference held in Vancouver.

John Starkey has dedicated much of his working career to improving crushing and grinding circuits. He has been involved in the mineral processing side of the mining industry for most of his working career. From his early days at the Kam Kotia mine in Timmins to his recent involvement with the Voisey's Bay project grinding design; John's involvement with grinding circuits has spanned 5 decades. During his time with Kilborn, from 1977 to 1989, he was a driving force in many grinding circuit projects including East Kemptville Tin, the Williams Mine, Les Mines Selbaie, and the Campbell expansion as well as optimization of the Campbell crushing circuit. John has demonstrated his detailed methodical approach to all aspects of a grinding circuit design that leaves no stone unturned.

This approach and dedication to the understanding of grinding was evident in his quest to develop a simple test that would enable engineers to design a grinding circuit that is right the first time. He was instrumental in developing the SAG Power Index or SPI test, which has proven to be a reliable and relatively low cost tool that can be used to predict mill power, throughput and fineness of grind. He contributed to the advancement of grinding technology through his work with MinnovEX from 1994 until 2001.

John initiated the concept of using a small SAG mill for testing on drill core so that tests could be done on small samples that were readily available. He constructed a one-foot diameter mill and developed a full test protocol. He then ran three tests on some samples in Iran. He brought this idea to MinnovEX in 1993 in an effort to find a company that could help develop the idea into a meaningful commercial tool to use for process design of SAG/AG mills.

This was the spark for the development of the MinnovEX SPI test and subsequent CEET technologies, which are now being used by most of the major mining companies around the world. Over 7000 SPI tests have been carried out to date.

John has, for some time, been recognized by his peers around the globe as an expert in the field of comminution, a fact that is evident by his many technical papers and speaking engagements throughout the world.

For his many innovative contributions to the development of comminution technology, and a dedicated and distinguished career spanning some 5 decades, the Canadian Mineral Processors are delighted to present John Starkey with the Art MacPherson Comminution Award.



FIGURE 9 - John Starkey thanking CMP for the Art MacPherson Comminution Award

### **CMP Mineral Processor of the Year Award**

The prestigious CMP Mineral Processor of the Year Award is made from time to time to recognize meritorious service or an outstanding contribution to CMP or industry. This year Marc Grondin on Metso Minerals presented the award to Bert Huls

Bert Huls could describe him as a tireless worker with high standards for achievement, committed to professional development, and passionate about the mineral processing discipline. He continually pushes the technical frontiers in the pursuit of advancements that deliver cost, revenue, and environmental benefits to operations. He is one of those rare characters who are equally at home in the theory or practice. Having elected to work mainly with operating companies, he has become a powerful channel for technology transfer from the research lab to the plant floor.

Bert's career clearly shows that he is very comfortable with the principles of mineral processing and related disciplines. He has worked at the highest technical levels in process and plant design involving copper, oil sands, diamonds, iron ore, industrial minerals, nickel, platinum, and many others. Along the way he has always demonstrated high technical and managerial leadership. He has been awarded a patent for his work in bio-processing of oil sands, and in an unprecedented move, Falconbridge awarded him their two major corporate awards for achievement and leadership, even though he was with the company a short six years. By virtually any measure, Bert is the complete professional. He is quite at home in the science and the art of mineral processing, but conscious of the issues related to the development of staff including the importance of teamwork and networks, and focused on bringing financial reward to his company through the application of technology. In short, he is an exemplary role model for any young mineral processing engineer.

Bert has consistently demonstrated an ability to assess new technologies, and to successfully migrate them into operations. Examples would include: (a) his early work with plant-wide automation and unique control algorithms for process optimization; (b) the early adoption of horizontal cycloning to improve comminution efficiency; (c) development of a novel magnetic separation device for diamond processing; and, (d) development of a novel pilot plant for bitumen treatment. However, the best example may be his work on column flotation, where he has an impressive publication record documenting novel methods in process analysis and control, as well as in design.

Bert has also assumed a leadership position with regard to the mineral processing profession.

For example, during his time with Falconbridge in the late 1980's and early 1990's, he made major contributions to the profession and to the CMP. In the former role, working with Gordon Agar he helped organize an international conference on column flotation, which brought together the leading theorists and practitioners to document the state-of-the-art for the benefit of the industry as a whole. True to form, Bert ensured there was a very strong emphasis on industrial practice. In addition to his organizational efforts, he was a co-editor of the Column '91 Proceedings, and chaired numerous sessions. As his involvement in Column '91 was winding down Bert accepted an invitation to get involved in CMP, and bring some of his organizational capabilities, enthusiasm around technology and professional development, and vision to this organization. He moved through the CMP hierarchy ultimately assuming the Chairman's role in 1993-1994.



Bert's career in mineral processing has spanned some 25 years. He has established his credentials as a technical innovator, as a proponent for technological advancement, as a committed champion of professional development, and in his usual understated way, he continues to be a strong force for change in our industry.



FIGURE 10 - Bert Huls with his Mineral Processor of the Year Award

For the final presentation, Steve Wilson called upon Jan Nessel to come forward and receive the Past Chairman's Award for his contributions to the Canadian Mineral Processors Division.



FIGURE 11 - Jan Nessel accepting Past Chairman Award from Steve Wilson

Following the awards banquet Chairman Steve Wilson welcomed everyone to join him in Bonaventure Suite to celebrate the award winners and CMP 2004.



[Top of Page](#)

[Who We Are](#) | [Regional Meetings](#) | [Awards](#) | [Publications](#) | [Links](#) | [Site Map](#)  
[2007 Annual Meeting Highlights](#) | [Archives](#)



This page last updated: May 13, 2008