Celebrating the 60th Annual Conference of Metallurgists!

Share your memories of the past conferences or express your excitement for this year's event. For every post you share, we will be making a donation to a Canadian Charity!

METSOC OF CIM JUN 08, 2021 09:00PM

Celebrating the French-German-Infiltration of the Light Metals Committee during MS&T 2018

2018 was the first time I was participating in a COM conference outside of Canada. On the picture, you can see Julien and me celebrating (1) our personal fifth anniversary, i.e. meeting at a COM conference for the fifth time, and (2) our invitation¹⁾ to participate in the Light Metals Committee of MetSoc during a coffee break in Columbus.

¹⁾ According to my memory, there was no escape, right Mihaiela (and I am writing this with a big smile on my face!)? :)

Carsten & Julien



Copper 2019

After "dancing the evening away" at the awards banquet of COM/Cu2019 (see the post below), one of my most memorable moments of Copper 2019 was presenting the members of my organizing committee during the Opening Ceremony on Sunday afternoon.

Being chair of a conference means relying on the work of your team, the success of "your" conference depending on the dedication of every team member.

I certainly had an oustanding conference organizing team that did so much work in so much less time than normal. I still vividly recall how emotional I became during my

speech. Giving them visibility individually and together as a group was a way to celebrate the journey of hard work we had completed together all the way to the opening of our conference. In that moment, all the hardship evaporates and only the joy remains.

Joel Kapusta, Copper 2019 Chair MetSoc Past President (2007-2008)



Well said Joel, and what an amazing and exceptional group and an outstanding conference. Lets all hope we can continue the great events like this starting again in 2022...Phillip Mackey – ANONYMOUS

In memory of Dr. Xinjin Cao

Thank you to all the participants, I hope we could have properly honoured the memory of our dear friend and colleague, Dr. Xinjin Cao, by presenting part of his contribution to the science and technology through our presentations and collaboration work with him. He is truly missed! Catching up with Phillip Mackey at the Awards Banquet at COM 2017. Looking forward to being in person in 2022 and seeing everyone again!





Happy 60th Birthday COM

Happy 60th birthday to the Conference of Metallurgists! It is such a pleasant journey learning about these wonderful talks. This is my second time to attend COM. The warm, friendly, and professional atmosphere gives me a deep impression. Thank you to all the colleagues and wish COM better and better.

Best wishes from Fanmao Wang

Thank you Fanmao! So nice to hear and hope that we will "see" each other in person some day soon! $-{\tt BFARAH1}$

COM 2019 - Vancouver

COM 2019 was a great conference where I got to present my masters thesis. Highlights were reconnecting with old friends and new over post conference drinks and discussions. I also got to meet a lot of the international members of my former company at this conference which was fun.

- Arthur Stokreef

COM 2014 - Vancouver again!

Besides the fact that Vancouver definitely is a place to be visited twice, COM 2014 was one of my personal favorites as I made it into "La Dépêche de Trois-Rivières" (thanks to Franco, see picture).

By the way: Can you identify the most important item in the picture? :)

Just one hour to go!

Carsten Siemers, Germany

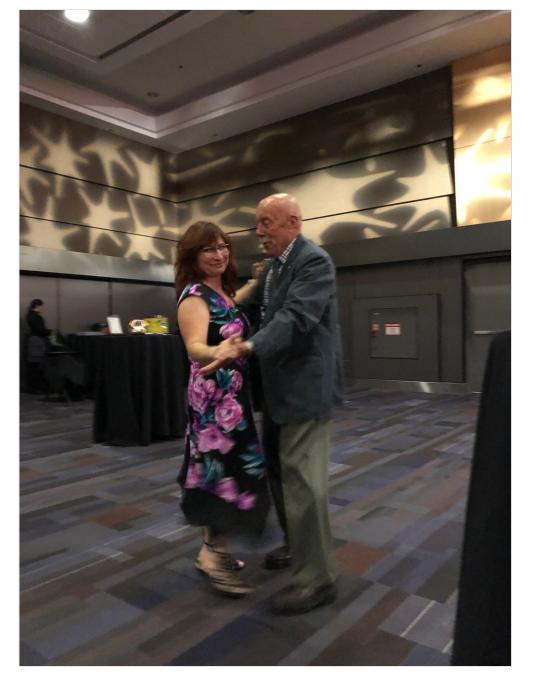


The coffee mug! I echo your feelings on Vancouver! - BFARAH1

... which was filled with tea :) - ANONYMOUS

COM is where old friends come together, and sometimes they even break into dance...

Rob Stephens



What a nice memory! Glad you have the photo-Brigitte - BFARAH1

The plenary address by Professor Donald Sadoway from MIT was inspirational!

Roki Fukuzawa

Plenary Address on Electrochemical Pathways Towards Sustainability - Donald F. Sadoway by Metallurgy and Materials Society of CIM YOUTUBE

COM2011_Once Upon a Time

COM2015 Plenary Speech by Donald Sadoway



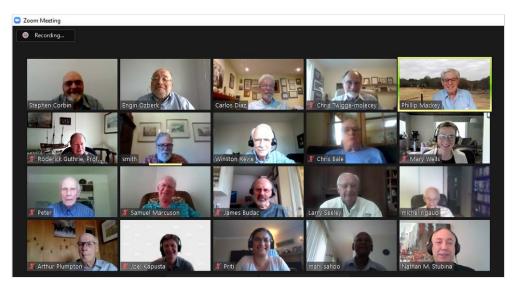


Horne colleagues with Phillip Mackey at the P.J.Mackey Symposium, Copper 2019/COM 2019, Vancouver, August 2019



METSOC Passion and Inspiration in Action!

On August 16th, Monday afternoon, celebrating 60th Anniversary, 21 METSOC presidents came together at the First Virtual Social replacing the traditional "Past Presidents Dinner" which usually happens at the beginning of the Conference of Metallurgists on Sunday evenings. Building on some five decades of friendship, professional association and collaboration, discussion on METSOC's future was as lively as ever. METSOC Passion and Inspiration dominated this 90 minute of virtual get together with many ideas being proposed. Remembered our colleagues and friends who no longer with us, missed the friends who could not join in due to other commitments and as usual teased each other some as well. Those present were: Michel Rigaud, (1975-1976); Peter Tarassoff, (1977-1978); Gordon Smith, (1980-1981); Phillip Mackey, (1984-1985); Samuel Marcuson, (1986-1987); Larry Seeley, (1987-1988); Chris Bale, (1988-1989); Arthur Plumpton, (1989-1990); Engin Ozberk, (1991-1992); Roderick Guthrie, (1993-1994); Chris Twigge-Molecey, (1996-1997); Carlos Diaz, (1997-1998); Winston Revie, (2001-2002); Mahi Sahoo, (2002-2003); Joel Kapusta, (2007-2008); Nathan Stubina, (2009-2010); Priti Wanjara, (2013-2014); Boyd Davis, (2014-2015); Mary Wells, (2015-2016); James Budac, (2017-2018); Stephen Corbin, (2021-2022)



COM means meeting up with old friends.

At COM 2015 the David S. Wilkinson Honorary Symposium brought together friends from Grad School at McMaster University, some of whom hadn't seen each other for over 15 years!-Steve Corbin



Celebrating the 60th COM

Who else is excited for this year's Conference? † 😐 - Victoria Di Woo



Celebrating the 60th COM



Help us to Celebrate 60 Years of the Conference of Metallurgists!

It is a wonderful title indeed! Being a member of METSOC is a privilege. Being able to enjoy 60th Anniversary is a great feeling. After serving at the Silver 25th Anniversary at the Toronto COM, enjoying the 40th Anniversary celebrations in Toronto, living through the 50th COM with "Inspiration and Passion", here we are celebrating the 60th COM. The location is virtual! We are surviving through a major pandemic humanity never seen before. Climate change and its impact is all around us. We are interested in innovation. We are conscious of equity, diversity and inclusivity. We are open to change in every aspect of our lives. More than one and a half years we have been working from our home. Virtual is part of our lives! Virtual is real! and making things happen!

60th Anniversary! It is a celebration of the past; while remembering our much loved and respected friends and colleagues who have contributed so much to our METSOC but no longer with us, acknowledging our successes and continuous growth of our METSOC despite all the hurdles and challenges.

60th Anniversary! It is a celebration of the present and recognizing the new generation with their innovative new ideas, their passion and their energy. It is a pleasure watching them actively participating in making our society better and stronger.

60th Anniversary! It is a celebration of the future with optimism based on the past and present for the next decades to come, knowing the torch of "Inspiration and Passion" will continue burning as bright and strong as ever.

I started getting to know METSOC in 1974, I was a newly minted engineer at Noranda Research Center, in Pointe Claire, Quebec which became a history now. Going through the memory lane of some 47 years, out of many wonderful experiences I thought of sharing two on this occasion: Light Metals Section Formation and Copper 91 AGM Luncheon Success. Read them as separate postings.

I cherish my experiences and memories of being active at METSOC. I encourage every young professional to get active. The friends you gain, the experiences you have, the memories you develop, networking ability you are provided are priceless.

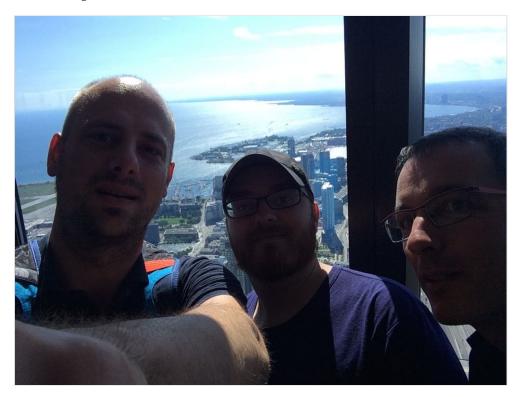
Engin Ozberk, FCIM, Past President of METSOC

thank you Engin for those inspiring words. I, myself cannot believe the 60th is here already! I remember fondly Saskatoon and Uranium in 2010- Brigitte – ANONYMOUS

COM 2015

I attend my first COM in 2015 in Toronto. I had a wonderfull time and met many wonderfull people (some of them became good friends). Since 2015 I try to come back every year and look forward to attending such a nice conference. Happy anniversary!

Julien Zollinger, France.



More about the Light Metals Section of MetSoc of CIM

I thank Engin for his nice words about the history of the Light Metals Section, kindly mentioning that "it became one of the stronger sections of our MetSoc, contributed some major symposia to our conferences and proceedings inventory". Yes, since its inception in 1986, with a **"Conversazione"** prepared to celebrate the centennial of the Hall-Heroult Cell patents, up until now, the Light Metals Section has organized, almost annually, Light Metals Symposia, that bring together professionals from the Light Metals Industry, not only from Quebec, but also other parts of Canada, and the world. In fact, our Symposia became INTERNATIONAL events. In 2013, when I had the honour to be Chair of the Light Metals Section, we first started organizing the "Light Metals for the Transportation Industries" Symposia, that has become our annual, customary Symposium. The Light Metals Section also organized Short Courses on the latest fundamental and applied research on light metals. Professionals from RTIT Alcan, Alcoa, Silicon Becancour, NRC Laboratories, and academic representatives from McGill, Laval,

Ecole Polytechnique, and Sherbrooke, offered their knowledge on primary production and downstream transformation of light metals for our attendees.

The Light Metals Section initiated the Light Metals Best Paper Award that also become a customary event, awarding annually the best-of-the-best paper & presentation to our Symposium. I had been myself the pleased winner of this initiative of the Light Metals Section Committee.

Finally, Last, but not Least, the Light Metals Section has organized field trips for COM events. For instance, in connection with the COM & MS&T joint conference held in Montreal 2013, the Light Metals Section Committee organized a tour of the McGill Metals Processing Centre, where an exhibition of products and services offered by the McGill Metals Processing Centre (MMPC), the Centre de Métallurgie du Québec, and the Centre de Transformation d'Aluminium, together with other research and industrial partners, was made.

The tour of the McGill Metals Processing Centre (MMPC) Melting, Casting, and Characterization Facilities located at its off-campus Stinson Laboratories included the Horizontal Single Belt Casting pilot-scale equipment, and associated melting, casting, and product characterization facility, plus the visit of the 288 core High performance Computer cluster for CFD modelling. The event, which took place on the 31st of October 2013, was attended by about 60 participants to the conference.

For all these events, the MetSoc personnel directed by Brigitte Farah always encouraged, supported, and assisted these events, to promote the importance of the Light Metals sector of Quebec, Canada, and the world.

Mihaiela Isac, FCIM, Past Chair of the Light Metals Section

1993 President of MetSoc of CIM

Hi, this is Rod Guthrie. I became President of MetSoc, in 1993, when I ran the Quebec Conference from the large hotel on the Heights of Abraham, where Generals Montcalm and Wolff did battle, on behalf of the French vs English invaders of Turtle Island!

I was coerced into becoming President by my former graduate student Engin Ozberk, and by Jerry Bolton, the immediate Past President. After the Hamilton fiasco, run by a good friend of mine, who was an academic, the two of them were very worried about me dropping another 30-40K deficit on MetSoc.

Jerry and I spent hours, arguing about the price of coffee in the 20minute breaks between our sessions. Fortunately, with the help of Janet Peace, and Andre Galibois, of Laval University, we came out with a 30K profit!!

To my surprise, the presidential experience was well worth it. I can honestly say that I have always enjoyed working within MetSoc, ever since I arrived in Canada, more than 50 years ago!

So, I am still working at McGill, doing exciting research on a new way to make steel sheet via HSBC (Horizontal Single Belt Casting), and to make all liquid metals much cleaner, through producing sized **microbubbles** to float out all foreign objects before they are cast.

Rod Guthrie, FCIM Past President of MetSoc

Socializing at COM 2021

Our emerging Professionals are inviting you to the Annual Trivia Challenge and other activities

audio 1:04 audio PADLET DRIVE

🥮 I can't wait to see you all! - Victoria Di Woo 🛛 – METSOC OF CIM

25th Annual Conference of Metallurgists, Toronto, 1986

I was the chair of the 25th COM. To celebrate 25 years, we had beer steins prepared which were a gift when you registered. I still have mine. As well, we invited the organizers to attend the banquet gratis. The "old guys" and their spouses showed up, had their own table and seemed to have a great time. After the dinner and entertainment we had draws for silver ingots. In those days, we had speeches to honor the award winners. This worked as long as the speaker was good and brief! Engin

Ozberk was the Technical Program chairman, and he did a great job at soliciting papers. (I was later told that he was quite aggressive at this endeavor.) In the 1980's, if you got enough bedrooms sold, the hotels would not charge for the conference rooms. We were a bit short and the hotel wanted to charge us \$30 k. I was in a conference room when two small pieces of trim feel from the ceiling. I picked these up, carried them to the assistant hotel manager, put on a "mad face" and acted "semi-belligerent." The hotel agreed to drop the charges. The \$30K thus saved were our total profits and sufficient to meet Society expenses for the next year!

Sam Marcuson

Copper 91, Ottawa, AGM Luncheon Success!

There were so many incidents and memorable events, one can write a book about that one significant event, Copper 91 COM. We had record breaking attendance, number of papers and revenue. We were co-managing the conference with good friends Dr. John Dutrizac (very sadly as we all know he is no longer with us, but he is with us always in our memory) and Dr. Carlos Diaz (I hope your ears are ringing dear Carlos!). In those days one of the topics was trying to keep the formal part of the dinners and banquettes short. We had been commenting and complaining about the long speeches, introductions and covering too many items. We were trying to keep them as short as possible. We had the sit-down luncheon of some 1000 plus people for the Copper 91 AGM. I was the MC and we had timed 30-35 minutes for the formal part of the meeting. It was the first time I was addressing that big of an audience. I was excited and nervous. Despite all that I managed to go through the material in about 15-20 minutes. In those days, we used to have Head Tables, I am sitting together with John and Carlos, returned to my seat all proud and accomplished! They both were looking at me somewhat questioning and surprised. Then, I noticed this person in front of the head table where I was sitting, he was one of the managers at the Westin Hotel assigned to us. We had developed a very good working relationship since we had so many challenges and he had been a very good help, with good sense of humor. He was fuming and telling me things "in a language not very pleasant!" that they were following the agenda and the next serving was not ready yet. There would be 20 minutes or so gap! He was asking me how to fill the gap again "in a not very pleasant language!" My feeling of success did not last long! John with his usual humorous and quick thinking, he said "fill their glasses with wine!" We had a lot of wine from Chile, thanks to Carlos and his connections in Chile, on the occasion of Chilean Minister of Mines coming to the conference, there was huge amount of wine donated to the Conference. The Hotel Manager was hesitant, he said "are you sure", we said "yes". We were only paying the hotel the cork fee. So, they did and kept filling the glasses till next course was ready to be served. We joked among us that at the sessions in the afternoon, we would have many "happy, joyful delegates!" or people would sleep through the sessions. I could not check on the sessions how people did. Because again in those days when you get in the executive of the METSOC

you could not go to the sessions, you had to go to many organizational meetings. I learned a lesson, when we make a decision, we should always assess the impact on the other connected actions, events and people. Good will and success may cause issues to others.

Engin Ozberk, FCIM, Past President of METSOC

Did you know how Light Metals Section was formed!

I was a member of the Non-Ferrous Pyrometallurgy Section Executive committee while working at the SNC Group, then called. I was part of the project transferring Pechiney's aluminum smelting technology to Reynold's aluminum smelter at Baie Comeau, Quebec. Learning about the history of aluminum smelting in Canada and its importance, I started noticing that light metals were not being covered at our annual COM meetings. However, it was a major program at the annual TMS meetings. Through the Non-Ferrous Pyrometallurgy Section, I had organized the first light metals session at the 24th Annual Conference of Metallurgists, Vancouver, August 1985. Late Prof. Keith Brimacombe was the Conference Chair, he made a brief congratulatory speech at the opening. We had papers from Reynolds Aluminum. Later on, we applied to METSOC Board, with the support of my good old Prof. Rod Guthrie of McGill University and Don McMillan of Alcan. With the approval of the METSOC Board, we founded the Light Metals Section. Well in a way, we may say, Light Metals Section was an "offspring of non-ferrous pyro". It became one of the strongest sections of our METSOC and contributed some major symposia to our conferences and METSOC proceedings inventory. I can observe, the Section is still going strong.

Engin Ozberk, FCIM, Past President of METSOC

COM 2010 - COM 2021

After attending my first COM conference in 2010 in Vancouver without knowing anybody, it's now more like coming home, meeting old and new friends, having fun during the presentations and discussions and especially enjoy the evenings. So you must be doing something right about 6000 km west. Congratulations to your 60th anniversary!

Fr: Carsten Siemers, Germany



Thanks Carsten, what a nice memory! To 2022 when we can shake hands again-Brigitte – ANONYMOUS

COM 2010 was my first COM conference too! I cannot believe it has already been 10 years. – ANONYMOUS

My Second Conference

Cobalt 80 was the second CIM conference I ever attended. I believe it was a standalone Hydromet conference, which was held in Edmonton and sponsored by Sherritt. As it is now, cobalt was a very big thing in 1980, with prices rising up to US\$30/lb. Solvent Extraction was still a relatively new technology for base metals then, and there was a rivalry between Canmet (Alan Ashbrook and Gordon Ritcey) and Warren Spring in the UK (Doug Flett and Archie Fletcher). Both groups were working on Co/Ni separation using D2EHPA, and Warren Spring had developed a process for Matthey Rustenburg (MRR) in South Africa, which MRR presented at this conference. The plant is still operating. Anyway, this prompted one of the most extraordinary Q/A sessions I have ever witnessed. Alan Ashbrook stood up and really laid into the poor presenter (John Hill, I believe), claiming that they stolen Canmet technology, that Canmet had done all the development on this system, and then he stormed out of room. There was a stunned silence thereafter. I have never seen the like of it since. Bryn, looks like you have not been at some of the technical sessions in 70's and 80's and the Q/A 's after the presentations of Falconbridge, Inco, Noranda, Kennecott, Lurgi, Cominco and Sherritt Gordon Mines Limited. They used to be fun to watch. Ironically all those became a history. They no longer exist! Sherritt does but not SGML! E. Ozberk – ANONYMOUS

Engin – I was at some of those, but Alan Asbrook is the one that sticks in the memory. - $\ensuremath{\mathsf{ANONYMOUS}}$

FIRST-EVER CONFERENCE!

COM represents career milestones and fond memories all the way back to 1999 when as undergraduate students, four of us piled in to a small car and drove from Kingston to Quebec City to participate in my first conference! -André Phillion Memories of the 35th COM in Montreal, August 1996.

By Chris Twigge-Molecey

The 35th COM had a few unusual challenges. Fortunately to deal with them, we had a fantastic team pictured below.



35th Annual Conference of Metallurgists August 24-29, 1996

35th COM Word document PADLET DRIVE

> Very nicely said Chris! You will be glad to know that you can make that reservations to Gibbys for COM 2022...we will be returning to Montreal! Brigitte – ANONYMOUS

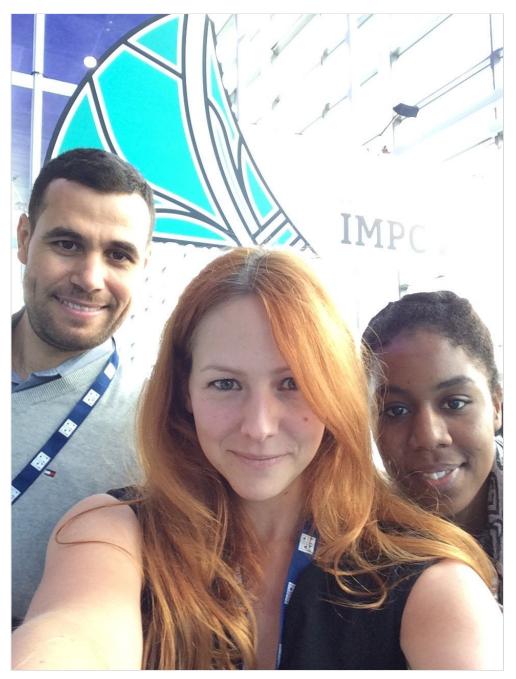
COM can mark career milestones. My first international conference presentation was as a PhD student at COM 1989 in my Home Town of Halifax. Fast forward to COM 1998, where my very first MASc student presented her 1st International talk, I was very proud of her!

Steve Corbin

COM2016 - IMPC in Québec city

With Walid Jomaa (now at CTA) and Kadiata Ba (now at UQAC). The COM where I met Mihaiela Isac, who later asked me to chair the Light Metals section, and many other MetSoc members. Great networking there! À bientôt pour COM 2021!!!

Fr: Julie Lévesque



1962-First Conference of Metallurgists

Can someone help me identify the gentlemen in the photo? from Brigitte Farah

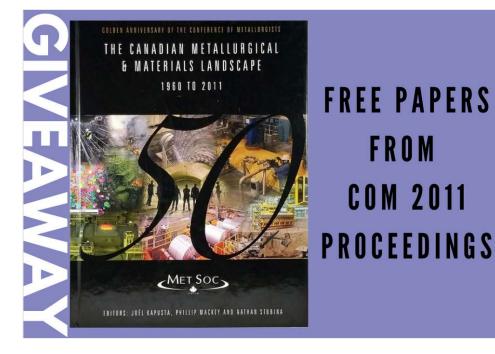


This same image is from the 50th anniversary book on page 4 (Figure 2). Left to right: R. D. Hindson, Dr. John Convey, J. R. Bradfield and Dr. J. S. Kirkaldy. – ANONYMOUS

FREE papers from the past!

As part of our 60th COM Celebration, we are sharing papers from our 50th-anniversary book!

<u>Read it here</u>



Was this supposed to happen?

By their reaction, something tells me .. NOT!



Copper 2019

Dancing the evening away....



Thank you to who ever posted this photograph ... this is undoubtedly my greatest achievement in my 25 years of involvement at METSOC: fulfilling my promise to Angele Mackey that Phillip would invite her to dance at the COM-Copper2019 awards banquet! And several couples joined in the celebration on the dance floor. Joel Kapusta, Cu2019 Chair – ANONYMOUS

Pre-Covid days...

Remember packed meeting rooms? seems so odd now. fr: Brigitte Farah



SIGN ME UP!

Don't miss the Trivia Night

Of course i will be there! – BFARAH1

Prizes to be won! August 18 @ 17:15 EDT - <u>TRIVIA CHALLENGE HERE</u>

Congratulations to Jamie Noel, Bailee Johnson and Sheida Sarafan for winning the trivia game! - METSOC OF CIM

Thank you to everyone who joined! - METSOC OF CIM

FREE BOOK to download

All that Glitters: Readings in Historical Metallurgy 1989

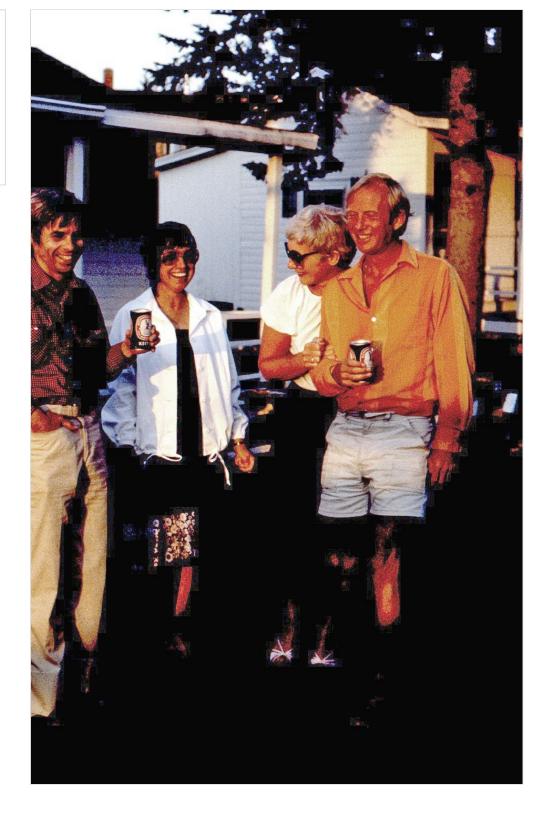
The 43 articles in this interesting collection have been selected from the regular Historical Metallurgy contributions to the Bulletin of Canadian Institute of Mining and Metallurgy.

- MetSoc of CIM



COM 1980 Halifax: PJ Mackey and D.Huggins

from David Huggins



Martin Bell- Sales Manager at CIM

Taking the time to talk to each sponsor & exhibitor. From: Laura Foley





I thought that this was 2011 in Montreal, 50 years? - ANONYMOUS

Bryn Harris – ANONYMOUS

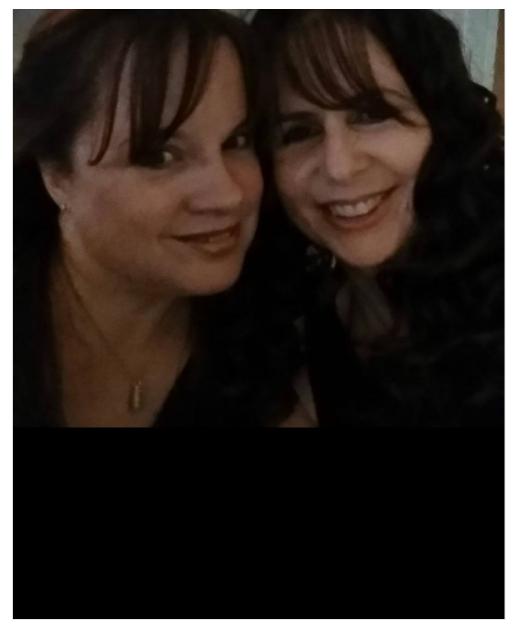
That is correct, Bryn! Joel Kapusta. – ANONYMOUS

MetSoc Past Prez

Year 2008? 2009? Who can tell me? Fr: Brigitte Farah

Laura Foley & Elaine Kinsella- Membership Department CIM.

Have attended over 20 COMs in a row? who can beat that? fr:Laura Foley

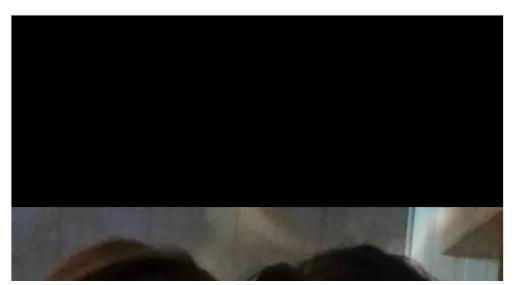


Probably only Elaine! – BFARAH1

and we totally didn't age!! – ANONYMOUS

Welcome new CIM member

@Copper-COM 2019 fr: Laura Foley





2010- Elaine and Laura, Saskatoon

My colleagues who have seen many COM in the 20+ careers at CIM! Couldn't have succeeded without you - Fr: Brigitte Farah



Annual Trivia Challenge

Who will win this year?



They were really fun. Thank you to the Emerging Professionsal for putting it together! - $\ensuremath{\mathsf{ANONYMOUS}}$

Digital Transformation in Mining and Metallurgical Industrial Complexes

Plenary session with:

• Osvaldo Bascur, OSB Digital, LLC. and Seeq Advanced Analytics

Learn more

Osvaldo Bascur

OSB Digital, LLC. Seeq Advanced Analytics



Clash of the Materials Technologies

Panel Discussion with special invited speakers:

- Mathieu Brochu, McGill University
- Priti Wanjara, NRC
- John Campbell, University of Birmingham

Learn more





Mathieu Brochu McGill University Priti Wanjara Joł National Research Council Canada

John Campbell University of Birmingham SPECIAL LIVE SESSION: CAREER COACHING

FROM STUDENT TO CONFIDENT PROFESSIONAL

> MIKE BIRD COACHOISEAU

This as a fantastic session and great advise from Mike Bird and special Guests Elvi Dalgaard and Boyd Davis $\,$ – BFARAH1

Looking forward to this panel talk! - ANONYMOUS Keynote Spotlight

August 17 - 13:00-13:45



Keynote Spotlight

August 17 - 14:00-14:45

COM 2021 Website

- MetSoc of CIM

Home V2

The 60th Conference of Metallurgists Virtual event | August 17-19, 2021 Current News Theme Advances in Metallurgy and Materials Engineering Technical Program Mineral processing,

COM 2021 | AUGUST 17-19, 2021

Keynote Highlight

Special Live Session: Career Coaching August 19 – 12:00-13:00 COM 2023 REGISTRATION



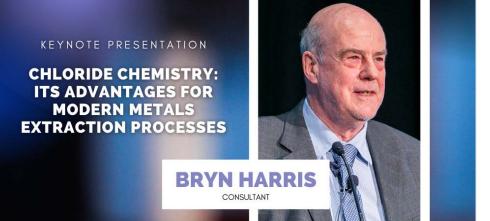
Keynote Spotlight

August 18 - 13:30-14:15



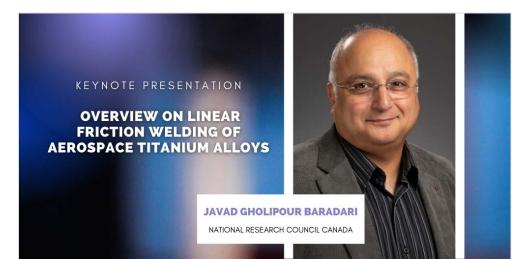
Keynote Spotlight

August 17 - 13:00-13:45



Keynote Spotlight

August 19 – 11:30-12:15



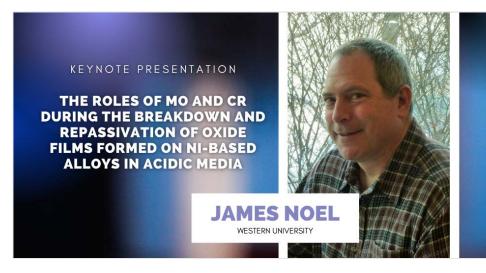
Keynote Spotlight

August 17 - 13:00-13:45



Keynote Spotlight

August 17 - 14:00-14:45



Keynote Spotlight

August 18 - 13:30-14:15



Keynote Spotlight

August 19 - 12:30-13:15



Keynote Spotlight

August 18 - 12:30-13:15



CRITICAL ASSESSMENTS OF SOME COMMON ASSUMPTIONS IN THE USE OF CONCENTRATION DEPENDENT INTERDIFFUSION **COEFFICIENTS OBTAINED BY STANDARD ANALYTICAL METHODS**

KEYNOTE PRESENTATION

OLANREWAJU OJO UNIVERSITY OF MANITOBA

Keynote Spotlight

August 18 - 12:30-13:15



Keynote Spotlight

August 19 - 10:30-11:15

Keynote Spotlight

KEYNOTE PRESENTATION

MECHANICAL

CHARACTERIZATION AND

ADDITIVE MANUFACTURING OF

METALS ACROSS SCALES

August 17- 14:00-14:45



YU ZOU UNIVERSITY OF TORONTO

About COM 2021

Celebrating 60 years of comprehensive technical programming at the Conference of Metallurgists

- MetSoc of CIM