



# MINERVA

## Safety Management Education

### *2021 - 2022 Newsletter*

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## **1. President's Message**

2021 was another year of the COVID-19 pandemic where Minerva Canada had to adjust its activities due to lack of in-person classes at Canadian post-secondary schools. The pandemic allowed Minerva to focus its efforts on advancing the development of its Health and Safety (H&S) online Course 400 and the planning of industry pilots in 2022 with some of Minerva's sponsors. We also saw many university and college students begin using Minerva's online modules; their very positive feedback about them, some of which is covered in this Newsletter, was extremely gratifying to all of us at Minerva. 2021 also allowed Minerva to advance its very popular webinar program and to revisit its student awards program with the introduction of a Minerva Rising Star Award during the Canada Safest Employer Awards competition this year.

Minerva was financially challenged in 2020 with the onset of the pandemic and we were very pleased to see a resumption of most of our sponsorship funding in 2021. Considerable efforts were also undertaken to strengthen Minerva's networks and partners including discussions with a couple of new partners on having future access to Minerva's online H&S courses.

You can get details and find out more of our 2021 activities and educational resources along with some of our 2022 plans in the following pages. Our continued success this year despite the pandemic is a reflection of the hard work, endless assistance and support from our many volunteers from industry, government, academia and H&S professional associations who make up our Board of Directors and Working Groups. I am also very grateful to our sponsors whose continued support and financial assistance make our initiatives at Minerva Canada possible. Without this support, Minerva would not exist as an organization.

As always, I welcome your comments and suggestions by contacting me at <https://safetymanagementeducation.com/contact-us/>

A. E. (Tony) Pasteris  
Chairman and President  
Minerva Canada Safety Management Education Inc.

## **2. Minerva Forges Ahead with More Online Courses**

### **2.1 Online Modules – Courses 300,400**

In 2021, Minerva successfully launched its third online Course 300 with 7 modules and saw students from the University of Toronto, Ontario Tech University and George Brown

College access many of Minerva's twenty modules. Their feedback was extremely positive and discussed later in this Newsletter.



Minerva also initiated development of its fourth online Course 400 and anticipates the course being launched in March 2022. The following is a summary of its 8 modules:

- In the **Process Safety management (PSM)** module, we discuss the four foundational pillars outlined in the Canadian Standards Association PSM standard with its 16 elements to identify and manage process risks found in many industries.
- The **Electrical Safety** module is a continuation from Course 100. A world without electricity is nearly impossible to imagine and this module explores effects of electric shock, static electricity, arcing and blast hazards along with prevention measures.
- The **Radiation Safety** module explores the types and effects of radiation, the regulations governing radiation, methods for identifying radiation related hazards and lessons learned from radiation type incidents.
- The **Robotics Safety** module discusses the hazards associated with robot, safety requirements and safeguards, safety standards and lessons learned from incidents.
- Many organizations will experience a crisis incident in the workplace. The **Crisis and Risk Communications** module will highlight methods that can be used in a crisis and how to effectively communicate risk to different groups of people.
- The **Health and Wellness** module discusses how workplace wellness, psychological and occupational health and safety programs can lead to healthy employees and contribute to a distinguished safe and healthy organization.
- Change is inevitable and necessary for continuous improvement. The **Management of Change** module highlights what is needed to effectively manage new or unknown risks brought about by change in technology, facilities, procedures and within organizations.
- **Managing Excellence in Health and Safety** explores several important factors that are needed to excel including leadership behaviors, organizational safety culture, personnel safety, contractor and project management, auditing programs and corporate social responsibility.

Considerable progress was also made to see new schools and organizations accessing Minerva's online modules in 2021 which included Laurentian University - Goodman School of Mines, University of Saskatchewan and the Ontario Society of Professional Engineers. More discussions are underway with several other schools and new partners to access the Minerva modules in 2022. It's anticipated that over 7,000 students will have accessed one or more of Minerva's online modules by May 2022.

## **2.2 Leadership Certificate Course – Minerva Industry Pilots**

Minerva Canada will be initiating pilots with some employees from its corporate sponsors and small to medium sized firms as well as College students in Trades programs. Participants will access all or some of Minerva's 28 online modules. The pilots have been designed to receive employee and/or student feedback on which modules are best suited for industry and trades training and also to identify the modules that can be incorporated into a Leadership Certificate course in H&S. The following are some of Minerva's existing modules being considered for the Leadership Course being launched for Fall, 2022.

- The Business Case for Health and Safety
- Health and Safety 101
- Overview of Codes, Standards and Regulations
- Leadership and Management Systems
- Mental Health in the Workplace and Academia
- Hazard Analysis, Identification
- Risk Assessment and Management
- Managing Excellence in Health and Safety (from Course 400)
- Change Management (from Course 400)
- Managing Health and Wellness in the Workplace (from Course 400)
- Human Factors
- Incident Investigation and Causal Analysis
- Professional Ethics (from Course 200,300)
- Case Studies

## **3. Student Testimonials on Minerva's Online Course**

Minerva Canada is especially appreciative of the continuing support received from the University of Toronto. Although engineering students were the initial primary focus on students accessing the Minerva online courses, through the leadership of Stephanie Halldorson, the courses have been made available to multi-disciplinary students in other areas such as the Arts, Architecture, Computer Science and Business. In her extensive research and survey use, Stephanie has provided Minerva with exceptional qualitative information that validates and informs the direction that Minerva has taken. It is particularly noteworthy that although students were only asked to take a certain

number of courses, a number of students returned to take additional courses of their own volition. A couple of notable quotations from students are:

*“Without health and safety, there is no way of conducting a project. **Health and safety training lay the foundation of everything we do** and they both must be regarded with the utmost importance.”*

*“**My attitude changed.** Before I thought it was not that important but now health and safety are always number one in my mind.”*

#### **4. Minerva’s Webinar Series**

Minerva’s successful webinar series continues to draw praise from speakers, participants and partners alike. A special note of gratitude is warranted by acknowledging Minerva Board member, Lisa Hallsworth’s leadership, professionalism and project management skills in coordinating the various webinar programs. She advises that:



*"While Minerva's audience is always seeking continuing education around technical skills, we also see that people are craving information about human skills - the skills that enable employees to be resilient and to thrive at work and home. With this in mind, Minerva's 2022 webinar series will focus on sharing best practices to manage changes that directly impact people."*

The actual 2021 series as delivered was as follows:

- Webinar 1 (partnership with CSSE) - February 24th - ***Introduction to the Elements of Change Management***
  - Speakers: Glenn Lyle from Laurentian University and Maxime DuFour from Rio Tinto
- Webinar 2 (partnership with CSSE) – April 20th, (collaboration with the Mental Health Commission of Canada), ***Facing Change with a Psychological Safety Approach***
  - Speakers: Liz Horvath from the Mental Health Commission of Canada, Steve Sproule from Husky Energy, a wholly owned subsidiary of Cenovus

Energy, and Karla Kochan from the Agriculture Financial Services Corporation.

- Webinar 3 (partnership with CBOC) – June 14th – ***Managing Change in an All-Electric Future***
  - Speakers: Lynn Smith, GM Canada Company, John Stroyan, GM Corporation and Dr. Homayoun Najjaran of UBC.
- Webinar 4 (partnership with CBOC) – Oct 6<sup>th</sup> – ***Responsible Care Through Change***
  - Speakers: Bob Masterson, Chemistry Industry Association of Canada, Erika Harris, BASF Canada and Dr. Ariel Chan, U of T.

Select webinar presentations can be found on Minerva's website:

<https://safetymanagementeducation.com/>

## **5. Minerva Student Awards**

### **5.1 Rising Star Award**

A committee of Minerva's Board and Working Group was established to revisit Minerva's existing student Health and Safety awards for Canada universities and colleges and allow greater participation.

Based on the committee's recommendation, Minerva has entered into an agreement with Key Media to become its education partner during Canadian's Safest Employers Award by sponsoring a new Minerva Rising Star Award in 2022.

This award shall recognize leaders of the future with a demonstrated commitment to the integration of health and safety. Eligible nominees include full time post secondary students from Canadian universities or colleges in undergraduate, graduate, or coop programs as well as employees with 2 or less years of work experience since graduation.

The nominee is asked to describe a project or initiative that he or she has initiated, developed, implemented or played an integral role in.

The submission can address either a physical object (device, machine or system), a process, a tool, a methodology including for teaching H&S or increasing H&S awareness, a H&S management system or an issue pertaining to organizational culture or Health and Safety performance.



Due to continued uncertainties with the pandemic, the first Minerva Rising Star Award presentations will be held virtually this Fall along with the other awards associated with Canada's Safest Employers Award. Hopefully, our 2023 award will be in person to recognize Canada's Rising Star.

## 5.2 Ontario Engineering Student Competition

Minerva's Larry Masotti and Tony Pasteris were invited to be judges for the Communications and Junior Design venues during the Ontario Engineering Student competition hosted by the University of Toronto and open to all Ontario Engineering Schools. Minerva agreed to be a sponsor of the competition. The competition was virtual due to the pandemic and included 240 participants.



Minerva will work with the 2023 Ontario organizing committee from Western University to assess the possibility of incorporating its Minerva Safe Design Award next year as part of the Ontario competition. Similar student competitions are held at Engineering Schools in Eastern Canada, Quebec and Western Canada with a National competition that's held with winners from each of the four regions. Beyond 2023, Minerva hopes to sponsor a Health and Safety venue at all four regional competitions.

## 6. Minerva Participation at CEEA Conference

The Canadian Engineering Education Association 2022 Conference will be held at York University in June. Minerva Canada, along with its partners, the University of Toronto, George Brown College, Ontario Tech University and the Canada Post Corporation will facilitate a panel discussion. This panel discussion will be entitled: Enhancing Health and Safety Education in Post-Secondary Academia – A Panel's Perspective considering Innovation for Inclusion, Diversity, Decolonization, Equity and Access. The panelists will communicate the importance for academia to continue its journey in enhancing student experience before entering the workplace and to be future leaders in Health and Safety.



## **7. Case Studies**

Last year, Minerva included on its website eleven new short case studies developed by the University of Calgary's Business School through a contract with Minerva Canada. These case studies include an assignment and instructor notes associated with each of them. They cover a wide array of Health and Safety issues including safety culture, mental health and management systems.

Some of Minerva's case studies have been incorporated into its online modules and can they can also be incorporated as classroom assignments. A summary of Minerva's 47 case studies can be found [here](#):

Professors whose teaching institutions have a Licensing Agreement for Minerva's online modules can access any of these case studies by entering the Minerva password at the Academic Login on the website. Contact Minerva for more information: <https://safetymanagementeducation.com/contact-us/>

## **8. In Memoriam**

The Minerva community and its many volunteers were deeply saddened with the passing away of Doug Ruth on January 11, 2021. While he was Engineering Dean at the University of Manitoba, Doug was instrumental in the creation of Minerva Manitoba and the development of many H&S post secondary educational programs and resources with the help of the Manitoba government. He was also involved in the creation of a resident engineer program at the university to assist in experiential learning including H&S. He had a passion for H&S and understood the importance of H&S education for engineers. He was very valuable in assisting Minerva Canada with case studies and Teaching Modules including the one developed by the University of Manitoba on engineering ethics. He will be sadly missed by all of us at Minerva Canada.

## **9. Meet our Board and many Volunteers**

### **Minerva welcomes new Board members and says thanks to others**

Minerva welcomes to its Board Byron House (Division Manager, Learning and Performance, Bruce Power), Michael Wilson (Specialized Services Lead, Workplace Safety & Prevention Services), Paul Belair (Vice Chair, BCRSP), Christl Aggus (President, CSSE), Daniel Liao (Dean Applied Science, Technology, Trades at St. Lawrence College) and to Ariel Chan (Chemical Engineering, U of T) from our Working Group.

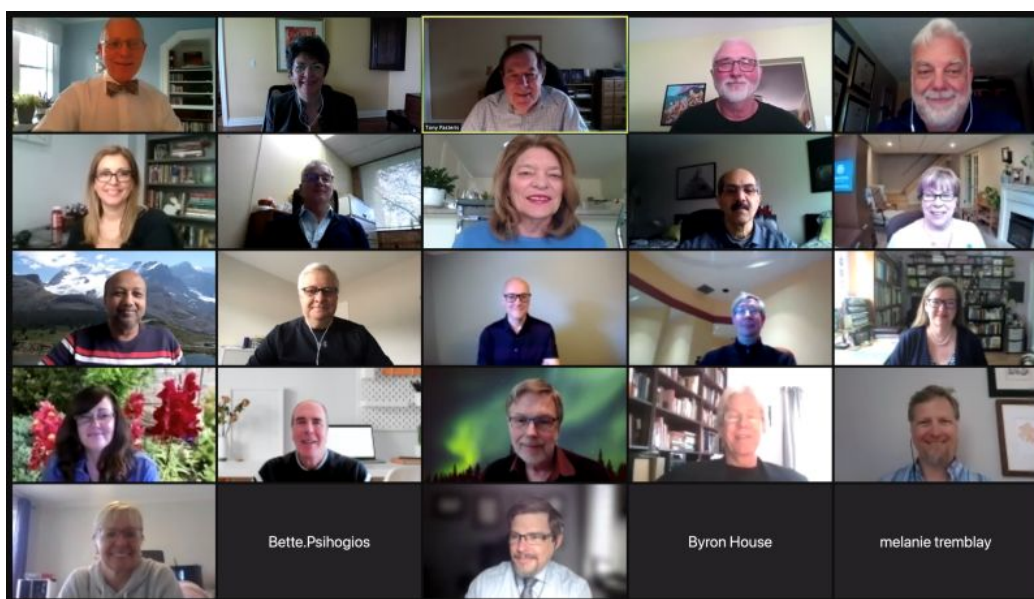


We extend a heartfelt thank you to outgoing Board Members Robin Angel (Chair, BCRSP), Deirdre O'Reilly (Past President, CSSE) and to Renzo Dalla Via (retiree from WSPS), Jeffrey Castrucci (U of T) from our Working Group)

### Meet Minerva's Board of Directors

- **Chairman and President:** Anthony Pasteris – Retired from Imperial Oil Limited
- **Vice President:** Larry Masotti – Retired and Former Director Strategic Relations, Workplace Safety & Prevention Services
- **Secretary-Treasurer:** Peter Sturm – Sturm Consulting and Past President, Canadian Society of Safety Engineering
- **Minerva Meeting Coordinator:** Cameil McLennon and Simona Mazat – Workplace Safety & Prevention Services
- Christl Aggus – President, Canadian Society of Safety Engineering, Alberta
- Paul Belair – BCRSP Vice Chair and Corporate H&S Director, Equinox Gold, Alberta
- Sue Bruning – Adjunct Professor Univ. Victoria and retired Business Professor at I.H. Asper School of Business, University of Manitoba
- Andrew Cooper – Past President, Canadian Society of Safety Engineering, and Lead EHS System Planning, Development, Dept. of Environmental, Health & Safety, University of Alberta
- Kim Gould – Manager Health and Safety, Canada Post, Ontario
- Jules Artzn-Gray – Director OHS Branch, Operations Division, Ontario Ministry of Labour, Training and Skills Development
- Lisa Hallsworth – CEO, Rillea Technologies, Belleville, Ontario
- Anis Haque – Electrical, Computer Engineering Professor, University of Calgary
- Bill Holmes – Associate Professor and former Dean, Faculty of Management, Royal Roads University, Victoria, BC
- Byron House – Division Manager, Learning and Performance, Bruce Power, Tiverton, Ontario
- Bruno Korst – Department of Electrical Engineering, University of Toronto
- Daniel Liao – Dean, Applied Science, Technology, Trades, St. Lawrence College
- George Marshall – Gen. Manager Public Safety Telecommunications, CanOps, Prince Albert, Sask.
- Iain McNab – Chair Engineering Technology and Architectural Studies, George Brown College
- Ron Pelot – Assoc. Dean COOP, Faculty of Engineering, Dalhousie University, N.S.
- Sandro Perruzza – CEO, Ontario Society of Professional Engineers
- Don Petkau – Professor, Faculty of Engineering, University of Manitoba

- Marcel Pouliot – IQ Trucking Consultant, Retired VP - Trimac Transportation Services LP, Alberta
- Marc Rosen – Professor and Founding Dean, University of Ontario Tech University
- Robert Schultz – Haskayne School of Business, University of Calgary, Alberta
- Lynn Smith – Engineering Workplace Safety Leader, General Motors of Canada, Ontario
- Wendy Tobin – Senior EHS Consultant, Corteva Agriscience, Kingston, Ontario
- Melanie Tremblay – HSE Partner, Rio Tinto Alcan, Jonquiere, Quebec
- Michael Wilson – Specialized Services Lead, Workplace Safety & Prevention Services



### Meet Minerva's Working Group Members

- Syed Ahmed – Retired from Imperial Oil Limited
- Susan Baka and Allyson Warden – Bay Communications
- Shahzad Barghi – Western University
- Ariel Chan -- University of Toronto
- Seyed Goosheh – Fanshawe College
- Brenda Henry – Fanshawe College
- Manny Marta – Retired from NOVA Chemicals
- Dave Meston – Retired Consultant
- Graeme Norval – University of Toronto
- Ed Secnik – York University
- Gord Winkel – University of Alberta

## 10. We Applaud our Sponsors and Academic Partners

*It is with deep gratitude that we acknowledge  
all our current and past sponsors and close working partners.*

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Canadian Centre for Occupational  
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[www.ccohs.ca](http://www.ccohs.ca)

Canadian Society of Safety Engineering

[www.csse.org](http://www.csse.org)

CF Industries

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[www.sudburyino.ca/EN/Pages/default.aspx](http://www.sudburyino.ca/EN/Pages/default.aspx)

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[www.mitacs.ca/](http://www.mitacs.ca/)

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[www.novachem.com](http://www.novachem.com)

Nova Scotia Department of Labour  
and Advanced Education

<https://novascotia.ca/lae/>

Ontario Ministry of Labour, Training and Skills  
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[www.labour.gov.on.ca](http://www.labour.gov.on.ca)

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[www.riotinto.com](http://www.riotinto.com)

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Workplace Safety &  
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[www.wsps.ca](http://www.wsps.ca)

WorkSafe BC

[www.worksafebc.com](http://www.worksafebc.com)

## University and College Supporters of Learning Forums

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