

Summer Institute a Resounding Success

There's no question that participating in Minerva Canada's 5th annual **Summer Institute** was an altering experience for the more than 25 chemical engineering professors from across Canada who gathered in Toronto in May, 2008.

"It provided me with an outstanding opportunity, for the first time of my life, to explore a complete new area – occupational health and safety, which has not been taught much in the traditional chemical engineering curriculum but is extremely important in industrial, governmental and academic jobs," says **Paul Liao**, Chair and Co-ordinator of the Graduate Program in Environmental Engineering, Department of Chemical Engineering, at Lakehead University. "I would strongly encourage my colleagues to attend this Summer Institute in the future."

One of the highlights for many of the attendees was a panel of industry representatives who kicked off the three-day workshop and addressed what has been lacking in engineering curricula. Among their messages:

• "Engineers need to come to industry with some passion for health and safety. Four years of education must position them better to understand

this critical piece." **Marcel E. Pouliot**, Vice President, Operations, Trimac

• "Industry is going through great change in terms of demographics, with many older workers retiring and new ones fast-tracked into positions where safety is important. That means companies will be actively looking for grads who've had exposure to and training in Process Safety Management." **Syed Ahmed**, Process Safety Engineer, Imperial Oil

• "I encourage you to develop students who will come through engineering courses rich in process safety." **Martin Bruce**, Director of Engineering Services, NOVA Chemicals

• "We're not looking to you to graduate technical experts in health and safety but rather to get students to recognize this will be a critical part of what they do in the business world." **Maureen Shaw**, President & CEO, Industrial Accident Prevention Association (IAPA)

See page 2 for more on the Summer Institute and how you can get involved.



Graeme Norval, University of Toronto

PRESIDENT'S MESSAGE

We have had another great year delivering our message to Canadian universities on the importance of providing more health and safety education to their students. I am really grateful to **Graeme Norval** from the University of Toronto for his leadership of the 2008 Engineering Summer Institute – many of the new initiatives he introduced, including inviting recently hired professors and providing a wide array of health and safety teaching material, will be repeated next year.

Minerva Canada would also like to congratulate **Mark Cicero** from the University of Western Ontario for winning the 2008 Minerva Canada *James Ham Safe Design Award*. His unique design of an incident inspection data management system should prove to be a very useful and cost-effective tool for medium and smaller sized companies.

Minerva Canada intends to introduce new initiatives in 2009 that include:

- A business student award for the best analysis on a case study related to health and safety.
- Introduction of mini-Summer Institutes for engineering and business professors on the campus of some Canadian universities.
- Minerva Canada involvement with training

sessions at the October 2008 Canadian Society of Chemical Engineering conference and workshops in Ottawa.

- Creation of some additional provincial Minerva organizations based on the Minerva Manitoba working design.
- Use of Minerva Canada case studies for training sessions by safety associations with their industry client base.

Finally, I wish to offer my thanks to the many volunteers from industry, government, academia and health and safety associations who make up our Board of Directors and Working Committee for their never-ending assistance. I am also grateful to our many sponsors mentioned in this newsletter. Minerva Canada would not exist without their continued support and financial assistance and, in particular, we thank the **Industrial Accident Prevention Association (IAPA)** and the **Ontario Workplace Safety and Insurance Board**.

Tony Pasteris
Chairman & President

CONTENTS

| | |
|---|---|
| 5 th Summer Institute Highlights | 2 |
| Minerva Partnerships | 4 |
| 2008 James Ham Safe Design Awards | 6 |
| Case Studies | 8 |

SAFETY REWARDED



Minerva Canada presented its second annual James Ham Safe Design Award to **Mark Cicero** of the University of Western Ontario, shown here with **Maureen Shaw**, President & CEO, IAPA, and **Tony Pasteris**, Minerva Canada Chairman & President.

See page 6 for more about the award and what it means to Mark.

2008 Minerva Summer Institute Geared to Younger Faculty

"If we collectively do nothing else, we must create the culture, the awareness and the ability to ask the right questions and know where to go to get the right answers." This was the challenge presented by industry leaders at the outset of the **2008 Summer Institute**. What differentiated this year's workshop from the previous four was the participation of many younger professors, as well as several students.

Presented by Minerva Canada and its loyal sponsors (see page 3), this annual event introduces engineering and business faculty to the key concepts of health and safety management for integration in the curricula. The 2008 program was targeted to chemical engineering professors, featured the most-ever teaching resource material and focused on six themes: safety, health and environment (SHE) management systems; safety engineering technology; ethics; engineering design; regulations, codes, standards, practices; and SHE teaching practices and research.

"The new goal for 2008 and beyond was to reach out to younger professors and those with little industrial experience, and to provide them with the basics of industrial occupational health and safety knowledge," says **Graeme Norval**, Associate Chair and Undergraduate Coordinator, Department of Chemical Engineering and Applied Chemistry, University of Toronto, and a lead organizer of this year's Institute. "The broader mix of professors and the participation of a few students made a substantial difference – everyone left with a set of teaching tools and information and ideas on how to introduce this into the curriculum."

"Let the network flourish and grow."

MAUREEN SHAW, PRESIDENT & CEO, IAPA

"There were rich teaching/case study resources supplied by the facilitators that can be readily utilized and applied in courses or services we provide at workplaces," says participant **Martin Tango** of Acadia University in Nova Scotia.

According to **Manny Marta**, Process Safety Engineer at NOVA Chemicals, one of Minerva Canada's sponsors, "It has been reassuring to receive positive feedback like this because it reaffirms our strong belief in this worthwhile mission. Methodically, we are influencing the values of future engineers/industry leaders by giving them an understanding of these important matters and issues early in their professional development."

The three-day program, held at the Centre for Health and Safety Innovation in Mississauga, included:

- A panel addressing what industry looks for in engineering grads



Chemical engineering faculty from across Canada gave high marks to this year's event.

- Presentations by professors, safety experts and industry on improving the teaching of H&S, and hazard and accident prevention
- Breakout discussions on incorporating safety into core engineering courses and boosting H&S learning
- An industry tour of Procor, a national company servicing rail cars for a wide range of industries that implemented a new process improvement plan that not only cut operating costs in half, but also resulted in a safer work environment
- Videos of case studies
- Networking opportunities
- A tour of the Industrial Accident Prevention Association (IAPA) library with its extensive resources on H&S

"I felt privileged having been here and particularly appreciated the networking opportunities," said **Nancy Black**, Associate Professor, Department of Mechanical Engineering and Head, Industrial Engineering Programmes, the University of Moncton.

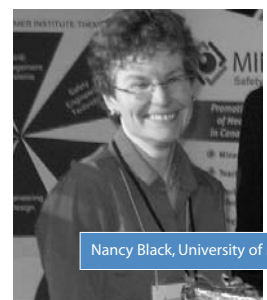
Participants also gave high marks to the opportunity to learn about all the resources available to them through Minerva and organizations like the IAPA as well as the Canadian Standards Association (CSA), particularly after hearing industry reps reinforce the need to integrate material in engineering curricula. **Jeanne Bank** and **Cathy Frederickson**

of CSA gave a presentation on CSA standards and pilot materials, such as case studies, developed around standards and education for engineering programs.

"We so often hear about the challenge professors face in incorporating new material because of time constraints in an already overcrowded curriculum,



Martin Tango, Acadia University, N.S.



Nancy Black, University of Moncton

so I was extremely impressed how Graeme Norval demonstrated in his presentation that it can be done quite easily if you have the will and the right information and tools," said Jeanne. (Contact Jeanne.bank@csa.ca for access to CSA tools.)

In order to accelerate communications of Minerva's mission and discuss the process of integrating health and safety concepts into curricula, Minerva Canada plans to run several mini-Summer Institutes in the coming year at several Canadian universities. The 2009 Summer Institute will take place in Toronto.

E-mail Minerva@safetymanagementeducation.com for more information.



OUTCOMES OF SUMMER INSTITUTE

- **Modify course content to include safety topics presented at the Summer Institute.** "As a result of attending the Minerva Summer Institute, I now appreciate the role of safety much more than I used to do. I have started working on my course outline and will modify the content based on what I learned at the workshop." *Shahzad Barghi, Assistant Professor, Department of Chemical and Biochemical Engineering, University of Western Ontario*
- **Utilize information learned for research work.** "The nanotechnology/nonmaterials evaluation protocol presented and proposed by DuPont Inc. was a take-away for me. I look forward to utilizing this scientific and ethical approach in my impending nanoparticles research work." *Martin Tango, School of Engineering, Acadia University, Nova Scotia*
- **Networking.** "The biggest take-away for me was meeting a set of engineering professors who are interested in boosting the teaching of occupational health and safety in the undergraduate program. I am

now in contact with several of them and we are exchanging teaching resources." *Graeme Norval, Associate Chair and Undergraduate Coordinator, Department of Chemical Engineering and Applied Chemistry, University of Toronto*

- **Sharing of best practices.** "I enjoyed the opportunity to learn from others the steps they take to interest students in health and safety. I often find students are more interested in more efficient or powerful technology and less interested in its safety ramifications, so hearing of the successful experiences of other faculty in motivating students in health and safety was very helpful and I do plan on using some of the ideas. I try to touch on the health and safety aspects that are relevant in any course I teach, so these techniques, which have been proven through experience, should prove useful in many of the courses I teach." *Marc Rosen, President, Engineering Institute of Canada and Professor, Faculty of Engineering and Applied Science, University of Ontario Institute of Technology*

STUDENT PERSPECTIVES ON THE SUMMER INSTITUTE



A recent chemical engineer graduate from McMaster who is now working at a chemical company as an intern, **Nerina Mariathas** says, "a workshop like this would have been over the top when I was in school to create awareness about health and safety. We had very brief exposure to Process Safety Management. I wish it had been more detailed and included information on where to go to get resources." She stressed how important all the knowledge at the workshop is for internal engineers like her who do not have other experienced engineers on staff. "I applaud this kind of workshop and I think it's great that things will be implemented for future students."

Karen Starr, an engineering student from the University of Manitoba, shares these observations: "Attending this Summer Institute was one of the best decisions I have ever made. I have learned so much that I can take back with me and integrate into the OHS project I am working on. In addition, I will be able to personally apply this knowledge to jobs that I will hold in the future. The people I have met at this institute have inspired me to become an active member in the health and safety community of our country. I am hoping to be able to attend the Summer Institute next year, in order to grasp an even greater understanding of OHS knowledge."



THANKS TO OUR SUMMER INSTITUTE SPONSORS

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Special thanks to Sherrie Johnston of IAPA for coordinating the Summer Institute.

Partnerships

1 Robert W. Campbell Award

Congratulations to 2007 Robert W. Campbell Award winner, the Bahrain Petroleum Company (BAPCO), the first ever company outside North America to receive this National Safety Council award for business excellence through integrating safety, health and environment management into their overall business operations.

One of the oldest and largest petroleum companies in the Middle East, BAPCO impressed the Campbell Award's international expert review panel, which includes Minerva President & CEO **Tony Pasteris**, with the range of stringent audits and assessments it regularly undertakes in order to maintain and exceed international standards. The panel also noted BAPCO's corporate investment in SHE management and the significant and positive impact these initiatives have had on the company's overall business performance.

The award is given annually to companies that successfully integrate health, safety and environmental management. An international panel of independent reviewers, including Minerva, examined each application in a rigorous assessment process.

For more about the Award, visit www.campbellaward.org.



BAPCO executives answer questions during National Safety Council's 95th Annual Congress & Expo in Chicago last October after being presented with the 5th Robert W. Campbell Award.

The Attributes of World Class Health & Safety Leaders

Minerva Canada President Tony Pasteris, who has served as a judge of the Robert W. Campbell Awards since its inception and visited the companies that have entered, has observed these common themes among the winners. (These themes were also discussed at the 2008 Summer Institute and a recent CEO Leadership Charter workshop.)

- Safety, health and environment (SHE) commitment from top of the house
- Seamless integration of SHE and other business operating systems (such as productivity, reliability, quality, finance)
- A zero-injury mindset incorporated in the culture
- Documented risk-based and well-understood SHE management systems
- Improvement of other operating results such as energy consumption, yields and quality as SHE results improve
- Variable pay for SHE results coupled with well-defined SHE accountability appraisal systems
- Reliance on leading indicators through benchmarking and audits to drive continuous improvement.

2 Canadian Standards Association –

CSA and Minerva share common goals related to influencing engineering curriculum in order to elevate the awareness and value of safety. Building on CSA's attendance and participation at the last two Summer Institutes, Minerva Canada and CSA will be further discussing collaboration on how to more widely disseminate the message to schools about the importance of educating students on standards and regulations related to health and safety and how to expand the tools professors can use to accomplish this.

3 CEO Leadership Charter –

Minerva Canada is continuing its participation in the CEO Health & Safety Leadership Charter (www.ceosafety.com), an initiative of over 250 CEOs seeking to achieve breakthroughs in health and safety performance in workplaces across Canada.

4 Healthcare –

Minerva Canada Board member **Joseline Sikorsky**, CEO, Ontario Safety Association for Community and Healthcare, has initiated discussions with the Ontario Council of Universities on the need for integrating more health and safety management principles into healthcare curriculum. Work is underway to have Minerva possibly sponsor a case study for one of the healthcare teaching institutions in Ontario.



Minerva Canada's board and working committee gathered for the Annual General Meeting in April at IAPA's Toronto office. (l to r) Vic Pakalnis, Ontario Ministry of Labour; Sherrie Johnston, IAPA; Claudio Girolami, Oshawa Truck Assembly, General Motors of Canada; Paul Gallina, Bishop's University; Tony Pasteris, Minerva Canada; Renzo Dalla Via, IAPA; Marcel E. Pouliot, Trimac Transportation; Len Hong, Canadian Centre for Occupational Health & Safety; Marc Rosen, University of Ontario Institute of Technology; and Dave Meston, Consultant.

CASE STUDIES

Case Study Development Process

Minerva Canada provides funding for case studies, such as a recent case study about General Motors of Canada developed by **Marc Rosen**, who served as Founding Dean of Engineering and Applied Science, University of Ontario Institute of Technology. Marc outlines the process to create this case study which took several months and which other academics could follow in developing case studies:

- 1. Document acquisition/review.** This includes collection of information both from public sources as well as from the company directly.
- 2. Meetings with company representatives.** Interviews and discussions represent an opportunity to ask questions and learn more.
- 3. Reviews/approvals of case study drafts.** This step ensures that the information and messages are accurate and that the confidentiality of any proprietary information supplied as background in step one is maintained.



How to Spark Case Study Debate

Minerva Canada's new General Motors of Canada case study (*see www.safetymanagementeducation.com*) is not restricted to the auto environment and includes many generic points about health and safety in any manufacturing facility that are worth emphasizing. Writer Marc Rosen shares these questions for sparking debate about this case study among students:

1. List the four most important health and safety changes at the plant in the 90's.
2. Was the approach to improving health and safety top down or bottom up?
3. Summarize the benefits, financial or otherwise, of health and safety investment for the company.
4. Is there anything more the company can do to achieve world-leading performance levels?

“ GM was pleased to share its best practices in health and safety. I encourage academics to approach other companies for such case study input. ”

CLAUDIO GIROLAMI,
GM OF CANADA



At the World Safety Congress in Seoul, Korea in June, Minerva was positioned as a world leader in encouraging the teaching of systematic approaches to occupational health and safety in business schools and engineering core education at the university level. Len Hong, President of the Canadian Centre for Occupational Health and Safety (CCOHS), represented Minerva at a Campbell Awards luncheon hosted by the National Safety Council (NSC) at the event. He spoke on Minerva's participation as a judge for the Awards and on Minerva's vision and leadership in creating case studies from the winning applications so that university students could learn from the successes of award winners. Pictured here, [l to r] are Len Hong, CCOHS, Mei-Li Lin, NSC, Chris Chi, National Taiwan University of Science & Technology, and Nowrooz Faraz, BAPCO.

Health and Safety Online

Our web site continues to grow and reflect the dynamic organization that Minerva is. We encourage you to check out our site for comprehensive information about us along with top academic resources, up-to-date news on our activities and awards opportunities. Visit www.safetymanagementeducation.com soon and often!



Regional Report

MANITOBA

In late 2007, Manitoba's Steering Committee approved funding to the University of Manitoba for the development of a University 1 half credit course that will be available to any first year student. The goal of the course is to discuss occupational health and safety issues from a number of perspectives. The intent is to develop a course that will appeal to a wide (beyond Engineering) audience. Implementation is planned for September 2009. The proposed course would qualify as an Arts elective. As all students in science based programs such as Engineering, Science, Pharmacy, Nursing, etc. are required to have an Arts credit, it is anticipated that many of them will choose this course as an applicable option for their Arts credit along with many students in Arts based programs.

An undergraduate co-op student (Engineering) was hired to work full-time on the project for a period of eight months. **Karen Starr** began in January 2008 and has completed much of the work under the supervision of the grant applicants. To further her knowledge and assist in locating support material for the course, the Steering Committee approved sending Karen to the 2008 Summer Institute. This was a benefit both to Karen and the work she is doing. Minerva Canada contributed support for Karen's attendance. At Manitoba's request, this was the first time a student has attended the SI and it is apparent that such a partnership can be very effective!

Minerva Manitoba contact:
Judy Fraser,
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STUDENT INITIATIVES

SAFETY INNOVATION BY STUDENT RECOGNIZED



In April, Minerva announced the winner of the 2008 James Ham Safe Design Award at the Industrial Accident Prevention Association's national Health and Safety Conference and Trade Show in Toronto. Congratulations to engineering undergraduate student **Mark Cicero** of the University of Western Ontario, who designed a safety management audit training database system that greatly assisted his summer employer in making employees more aware and responsive to workplace hazards.

The Award, which will become available nationally by 2010, honours Order of Canada recipient James Ham, whose Royal Commission Report on Health and Safety in 1975 led to the creation of Ontario's *Occupational Health and Safety Act* and to the adoption of the Internal Responsibility System in Ontario workplaces. They challenge students and faculty members in Ontario engineering schools to:

- Suggest ways to improve the existing design of devices, processes or systems.
- Envision new, innovative designs that will eliminate or reduce potential hazards in the workplace.
- Create tools to help manufacturers and workplaces integrate safety into new or retrofit designs.

Mark received a plaque and a cheque for \$3,500 and also participated in the conference's Research Poster session, where he demonstrated the system.

Minerva Update recently asked Mark to share his thoughts both about the award and about health and safety in university curricula.

Q: How did it feel to receive this honour?

A: It was amazing. Accepting the award at the IAPA conference was a great experience I was able to share with my family who were there.

Q: What sparked your interest in health and safety?

A: Last summer while working at a drywall manufacturing plant updating its production database, I took a look at their existing safety audit database, which was not as efficient as it could be. By first linking it to a full database, I was able to improve the system quite a bit. From there, I really started thinking about the issue of safety in the workplace – something that people my age don't really do. It's unfortunate that it's not taught in the school system today. This award and attending the IAPA conference really opened my eyes to what the issues are out there.

Q: You participated in the poster session. What was that experience like?

A: I found that very useful. The database I designed could be implemented at any company, and many attendees asked me how they could get something like it. For me, it was great exposure, and for others it demonstrated that young people are getting involved. I've been asked to come back next year and demonstrate it again.

Q: Do awards like this encourage students to focus on integrating safety into design?

A: Absolutely. Incorporating H&S into the curriculum would be the best solution, but that's not always easy, so organizations like Minerva and companies that offer these one-time grants of money or recognition for something a student has done are to be applauded. I plan to meet with some of my professors next year and tell them about this award and how they can incorporate H&S into their classes.

Q: What would you add to the curriculum?

A: A co-op experience is very useful because it's difficult to tell students about all the safety issues without on-the-job exposure. H&S starts from integrating it into a daily routine, and, as a student, you don't get that opportunity. Many people don't realize how much more efficient workers can be when they do not have to worry about an unsafe environment. One of your goals as an engineer is to increase efficiency, and H&S is one of the easiest ways to do it.

Official entry forms and complete details for the 2009 James Ham Safe Design Award are available at www.safetymanagementeducation.com.



A PROFESSOR'S PERSPECTIVE

"I believe that the James Ham Safe Design Competition is a tremendous activity. Just as engineering design competitions help promote strong design skills in engineering students, this competition fosters in students awareness and mastery of safety, health and environmental management. This knowledge is almost certain to reduce occupational illnesses and injuries through safe engineering design once these students graduate.

"The competition also encourages faculty to instill this value in all of their students, and encourages creative approaches. I know the team from my university that won second place in 2007 gained a broader appreciation of health and safety through their participation in the competition, and improved their overall engineering skills as a result."

Marc Rosen, Professor, Faculty of Engineering and Applied Science, University of Ontario Institute of Technology

WORKSMART CAMPUS

Over 7,000 students in 12 pilot institutions have successfully completed the WorkSmart Campus, Ontario's on-line workplace safety education tool for post-secondary students. Launched in February of 2007, the WorkSmart Campus provides students with generic knowledge and insight on key elements of a successful workplace health and safety program.

Faculty in business and engineering schools and those responsible for cooperative education have found the content relevant for their students and appropriate either as a stand-alone learning activity or as a prerequisite to more involved discipline-specific workplace safety discussions and case studies. Many have made it a required course element, some including the grade that students receive from the WorkSmart Campus in their overall course marks.

On-line student evaluation has indicated that students are satisfied with the content, learning methods and testing on the WorkSmart Campus. The overall average grade students achieved was approximately 78%, with a handful achieving a perfect 100%.

WorkSmart Campus takes approximately three hours to complete and consists of three online modules, quizzes, a final test and printable transcript. The modules take an innovative approach, using interactive elements such as videos, games, quizzes



and case studies to explore health and safety concepts in an interesting way.

Developed by the Ministry of Labour, with partners from the Workplace Safety and Insurance Board (WSIB), Minerva Canada, Passport to Safety, and the Ministry of Training, Colleges and Universities, the program is the first of its kind in Canada. WorkSmart Campus will continue in pilot through the 2008/09 school year. **For more information, contact sue.boychuk@ontario.ca and visit www.worksmartcampus.ca.**

“This website is an e-learning experience where students sift through a series of materials, answer a test with a hundred questions, and then receive a certificate and a perfect fit for the OHS course that I am developing.”

KAREN STARR, UNIVERSITY OF MANITOBA

MINERVA GRANT BOOSTS 2009 STUDENT COMPETITION

Hosted annually by the Queen's School of Business, the Inter-Collegiate Business Competition (I.C.B.C.) is the premier undergraduate business case competition in Canada, over the years garnering entries from across North America and Asia. Minerva has provided a \$5,000 grant to Queen's University Ph.D. candidate **Sean Tucker** to provide two business cases in the Business Ethics category. Sean's cases will be used by prospective student finalists to analyze and submit for marking and evaluation.

Both cases, which will include teaching notes, will involve safety-related dilemmas for an MBA graduate in a management role.

The student teams that win the preliminary competition will then gather at Queen's University for the finals on January 9-11, 2009, and the winners of the finals will receive a trophy and attend the 2009 IAPA Conference. "This grant marks Minerva Canada's first sponsorship of the 31-year-old competition," says board member **Vic Pakalnis**, Director with the Ontario Ministry of Labour. "It links Business Ethics with Occupational Health and Safety and will undoubtedly raise awareness for managing occupational health and safety within business schools here in Canada and abroad."

For more information, visit www.icbconline.ca.

Students Front and Centre at Safety Conference

2007 James Ham Safe Design Award runner-up **Mark Bernacki** of the University of Ontario Institute of Technology demonstrates his prize-winning design at the Research Poster Exhibit at the 2008 IAPA Conference. Other students displaying their designs included Mark Cicero (see page 6).



Case Studies

NEW IN 2008

General Motors of Canada (by University of Ontario Institute of Technology). This case describes how GM of Canada's Oshawa Truck Assembly Centre achieved significant improvements in safety performance by modifying its overall safety strategy and its approach to safety leadership. It builds upon GM's discussions at the 2006 Summer Institute related to the important elements leading to the company's step change improvement in personnel safety results.

Seven Oaks General Hospital (by University of Manitoba). It focuses on the organization's approach to employee safety, health and wellness that made it a safety, health and environment (SHE) leader in the healthcare industry.

To access case studies and other resources, visit www.safetymanagementeducation.com. PROFESSORS SHOULD CONTACT Dave Meston, Co-Chair of the Minerva Working Committee, at dmeston@ilap.com FOR PASSWORD TO INSTRUCTOR NOTES.

Alcan Inc. (by McGill University). This case study examines 2006 R.W. Campbell Award winner's EHS FIRST (Alcan's Environment, Health and Safety Management System). EHS FIRST rallies Alcan employees everywhere around common EHS objectives and goals by

integrating best practices from the company and third parties, as well as ISO 14001 and OHSAS 18001 specifications. Available by request to minerva@safetymanagementeducation.com.

Upcoming Case Studies

DynMcDermott Petroleum Operations (by Union University in Tennessee). This 2006 R.W. Campbell Award winner's profits are generated by meeting specific, performance-based goals, many of which are directly related to safety, health and environmental (SHE) outcomes – meaning that the better the SHE performance, the more profit the company generates.

Ceiling Fan (by University of Ontario Institute of Technology). The objective is to describe the development of an enhanced ceiling fan, while highlighting health, safety and the environment considerations. The topic of a ceiling fan was chosen because it is a typical real product that relates to many engineering fields, it includes numerous health and safety concerns and regulations, and it involves improved energy efficiency and reduced environmental impact, making it highly topical. The case study will address both technical and non-technical issues, as that is usually important to teaching health, safety and environment topics.

The Safety Case For Business: A Multi-Stakeholder Examination Of Best Practices And Health And Safety Outcomes. (by Schulich School of Business, York University; Oregon State University; Institute for Work and Health; Ivey School of Business, University of Western Ontario, with funding from Ontario Workplace Safety Insurance Board and support from Minerva). While there is a large body of knowledge on how to improve the economic performance or the health and safety performance of an organization, there is little research that looks at both outcomes simultaneously. Understanding these relationships is the key to better decision making for employers, workers and regulators. Using multi-industry case studies and a survey of Ontario production facilities to simultaneously examine known best operating and H&S practices, this study will examine their influence on both economic and H&S outcomes. Pertinent information will be posted on the Minerva website once this research study has been completed.

WELCOME TO...

Sherrie Johnston
of IAPA, Minerva Canada's
new Meeting Coordinator.



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