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INTERNATIONAL SOCIAL SECURITY ASSOCIATION

*Section on Prevention in the Mining Industry*

## NEWSLETTER | # 5 | March 2013

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*Section on Prevention in the Mining Industry*


**Theodor Bülhoff**  
President



**John McEndoo**  
Vice-President



**Bui Hong Linh**  
Vice-President



**Helmut Ehnes**  
Secretary General

We are proudly presenting the fifth edition of the ISSA Mining Newsletter. Thank you for your highly encouraging feedback on the previous issues!

We hope you will find the latest information helpful and, as always, appreciate your feedback and input for the next issue!

## Feature

# Successful cooperation tied: ISSA Mining co-hosts Vietnam workshop, extends cooperation agreement

120 international participants met at the conference on “Promoting Decent Work: Occupational Safety and Health, Prevention and Labour Inspection – Challenges and Solutions” in Đồng Nai, Vietnam, 15 and 16 March 2012. Jointly organized by MoLISA, ASEAN-OSHNET, ISSA Mining, IALI and the ILO, the event united some 60 delegates from Vietnam and 60 international experts and decision makers from countries such as Germany, Denmark, United Kingdom, France, Switzerland, China,

Japan, Korea, Malaysia, Indonesia, Brunei, Cambodia, Singapore, Russia, and Turkey.

## How to design prevention aiming for maximum performance?

Thursday 15 March 2012 offered the thematic frame for presentations on efficient prevention and models of good practice, titled “Our Vision: A Safe and Healthy Future at Work Prevention – National Strategies – Programmes for Safety and Health”.

ISSA Mining General Secretary Helmut Ehnes opened the first session with his talk “Reporting and Prevention – Essentials for a Successful Strategy to Improve Safety and Health”, showing how data on accidents at work and occupational diseases can be comprehensively collected and analyzed to derive prevention measures to the highest effect. Asian experiences were shared by Hà Tất Thắng, Director General of the Bureau of SafeWork, Vietnam. ILO Senior Specialist Ingrid Christensen explained prevention in high risk sectors in ASEAN



MoLISA Vice Minister Bui Hong Linh welcomed the 120 participants to the international conference.

countries. ISSA Mining members Jochen Lau (German Road Safety Council) and Wolfgang Freiherr von Richthofen, IALI Technical Advisor and International Consultant on Labour Inspection/Protection followed, discussing road and transportation safety as well as integration as a deciding factor on OSH success.

The German National OSH Strategy was explained by Ulrich Meesmann, Executive Manager of BG RCI, showing how all stakeholders can unite labour inspection resources to maximize the outcome. Prof Oliver Kruse of the Federal German Bank explained systematic risk management and the interaction between OSH and economic benefits for

operators. Balancing the business outcome and health was also discussed from first hand business experience by Dr Gunther Baldermann, Manager Safety and Health of lignite coal producer MIBRAG.

Prof Dr Mathias Bauer and Jan Schiffer of CBM Consulting, Business and Management Germany gave insight into increasing productivity basing on well-organized occupational safety and health, followed by information on effective change management from the safety point of view by Swiss expert Mark Füllemann, looking back on decades of industry experience in safety and health.

### **Labour Inspection: sharing “lessons learnt” across borders**

The conference's second day dealt with “Labor inspection and compliance with labour law and social standards – promotion of decent work”. International senior labour inspectors and executives of regulating and supervising bod-



IALI's Vice President Ho Siong Hin gave insight into Singapore's OSH strategy.



How to collaborate in prevention and labour inspection? Ulrich Meesmann explained the German OSH strategy.



Demonstrating how to collect and best use data on accidents at work and occupational diseases: ISSA Mining's Helmut Ehnes.





Honoured for his commitment on OSH: Wolfgang Freiherr von Richthofen (right) received the Medal for the Cause of Labour, Invalids and Social Affairs by Vice Minister Bui Hong Linh.



ISSA Mining President Theodor Bühlhoff welcomed all delegates on behalf of ISSA Mining's board. Bühlhoff pointed out the importance of occupational safety as shown by the mine collapse in Chile and the meltdown in Fukushima. Noticing the remarkable progress in prevention Bühlhoff underlined the many challenges remaining.



ILO Senior Specialist Ingrid Christensen discussed high-hazard sectors in the work environment of the ASEAN region.



Agreeing to continue the successful collaboration for four more years: Theodor Bühlhoff, ISSA Mining and Bui Hong Linh, MoLISA signed the Cooperation Agreement.

ies discussed experiences and strategies, also giving ISSA Mining's Helmut Ehnes the platform to share BG RCI's adapted strategy in the talk "Strengthening Advising Competence - A New Approach in Labour Inspector Training".

As one of many outcomes, two important documents were issued as a consequence of the meeting: the Đồng Nai action plan to implement the Ha Long recommendations on Labour Inspection Cooperation 2012-2015 and Recommendations towards better safety and health at work. These documents were circulated to

ASEAN member states for comments and are to be presented at the ASEAN-OSHNET meeting in the Philippines following the Đồng Nai conference.

### Continuing successful collaboration on OSH

On the basis of the long and trustful collaboration between ISSA Mining and Vietnam's Ministry of Labour, Invalids and Social Affairs, both parties agreed to continue their intense cooperation and signed a Cooperation Agreement for the period 2012 – 2015 within the frame of the conference 15 March. Theodor



Jochen Lau, German Road Safety Council and ISSA Mining, explained safe traffic systems and their significant role also in workers' safety.



Looking back on decades of highly successful prevention work in mining: Dr Gunther Baldermann talked about balancing business outcome and employee health.



How economic performance can be improved by systematic risk management was shown by Prof Oliver Kruse, Federal German Bank.



ISSA Mining's president and vice-president: Theodor Bülhoff and Bui Hong Linh.

Bülhoff, ISSA Mining and Bui Hong Linh, MoLISA stated they are looking optimistic into further joint work aiming to prevent accidents at work and occupational diseases in high-risk sectors, particularly the mining industry.

#### Award for sustainable commitment in safety and health

Wolfgang Freiherr von Richthofen, IALI Technical Advisor and International Consultant on Labour Inspection/Protection received MoLISA's Medal for the

Cause of Labour, Invalids and Social Affairs during a festive act on the second congress day. Vietnam's renowned recognition for outstanding achievements in occupational safety and health was presented by MoLISA Vice Minister Bui Hong Linh.

#### Demonstrating commitment: The National Safety Week

Consecutively to the conference, the international delegates joined the Launch of Vietnam's 14th National Week for OSH and Fire/Ex-

plosion Prevention 18 March at the Bien Hoa Industrial Park, Dong Nai Province. The event aims to raise awareness for occupational safety and health and promotes safe working since 1999.

On this occasion, orders of merits have been given to workers, and rescue teams demonstrated fire fighting skills live.

ISSA Mining participated as a strategic partner of Vietnam's government in matters of occupational safety and health.







Health and Safety Manager Hans-Joachim Kelter (right) comprehensively demonstrated the impressive level of OSH organization at Lafarge Cement.

## Feature

# New representative for India region: ISSA Mining welcomes Mining Engineer Chetan Garg

**As of November 2012, Mr Chetan Garg from Madhya Pradesh, India, supports ISSA Mining's work in the India region. A graduate of the Indian School of Mines in Dhanbad and beneficiary of a full scholarship of the European Mining Commission, Mr Garg is currently working for Golder Associates in Gurgaon and brings experience from various international projects into ISSA Mining.**

An initial meeting with ISSA Mining's team around board members Theodor Bülhoff and Helmut Ehnes on 5 November in Langenhagen/Germany, followed by a study tour with senior mining experts formed the platform of Mr Garg's future work for the interna-

tional network aiming to improve mine safety.

The consecutive day led the Mining Engineer from India to Ladenburg/Germany, where mine rescue manager Wolfgang Roehl introduced him to the task force rescue operations on the occasion of a line manager meeting. Mine Rescue, crucial for the life of many miners, particularly relies on dialogue on best practice in emergency response and transnational collaboration. A site visit to the Ladenburg facility of TOTAL Feuerschutz GmbH, producer of fire protection technology including a live demonstration, proved to be another informative chance to enter exchange with suppliers of fire

protection equipment, respiratory devices and rescue equipment.

Hans-Joachim Kelter, Health and Safety Manager of Lafarge Cement in Wössingen gladly welcomed ISSA Mining Senior Expert Gerhard Czuck and Mr Garg on 7 November. Mr Kelter comprehensively presented the state-of-the-art health and safety concept of the internationally operating enterprise and led a guided tour through the plant along the material flow. The thermal use of recycling material found particular interest.

Meeting ISSA Mining Senior Expert Matthias Stenzel, an introduction to mining in the Ruhr area was on the agenda – the heart of

## Mr Chetan Garg shares his background with the readers of the ISSA Mining Newsletter

“

I am a Mining Engineer and MBA from India's Most prestigious mining school, the 'Indian School of Mines' with a vast exposure to Indian mining industry and international with variety of mining like metal, hard rock, thermal coal and coking coal. Currently I am working with Golder Associates as a consultant and a associate of SME. My international experience includes working in Middle East, Jordan, Jambia, China, Turkey and Europe (around 12 countries). My area of Mining working has been working from banks side for feasibility reports, lenders consultant and safety audits (internal and external). My interest areas are policy, rules and regulations for the mining Industry along with techno commercial developments.

”

German coal mining. This included a plant tour to the Garzweiler open cast lignite mining operations, run by RWE Power AG and a visit to the Auguste Victoria underground mine of RAG with their internationally acclaimed high standards on safety and health.

Looking at the level of every miner's qualification and the commitment of RAG's management in aspects of safety, the outstanding safety record did not come as a surprise!

“Our exchange on mine safety has been very insightful for both sides,” summarized Matthias Stenzel, who is looking back on decades of experience in prevention in mining. A view shared by Helmut Ehnes: “The discussions with Mr Garg convinced me that we can

combine his mining expertise and regional touch in this important mining region with our well established network. Our future collaboration bears a vast potential for increasing safety by learning of each other.”, the Secretary General expressed his optimism.

“After intense discussions on ISSA Mining tools and strategies, I am not returning only to represent this important organization in my home area, but also will take with me important impulses on modern safety management,” Mr Garg commented on his stay.



Helmut Ehnes (left) and Theodor Bülhoff are optimistic looking into the future cooperation with Chetan Garg.

The visit to Ladenburg included a live demonstration of fire extinguishing technology.



## ISSA Mining in dialogue

# High-level exchange on OSH with Ho Siong Hin, Singapore

**A visit of Ho Siong Hin, IALI Vice-President and Commissioner for Workplace Safety and Health at the Singapore Ministry of Manpower to Germany in June offered the frame for high-level exchange on OSH and the discussion of future collaboration.**

On 14 June, Ho Siong Hin attended the grand finale of BG RCI's Young Worker Competition in Rotenburg an der Fulda as the guest of hon-

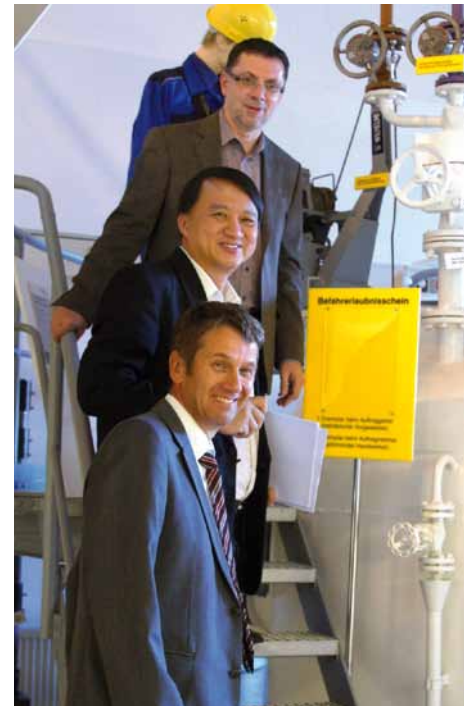
our. After the competition, including practical tasks on OSH, fire fighting and first aid skills and a knowledge quiz, he handed over the award to the winners.

The following day, Mr Ho discussed prevention strategies and models of good practice with Helmut Ehnes and Wolfgang von Richthofen (ISSA Mining, BG RCI), and Holger Trechow, Occupational Health and Safety / Accident Insurance of German GVG.

BG RCI expert Peter Guterl explained the European legal framework for Major Hazard Installations, including an insight into the Seveso Accident 1976 and its impact on the European legal framework for Indus-



International dialogue: Holger Trechow (GVG), Helmut Ehnes (ISSA Mining/BG RCI), Ho Siong Hin (IALI/Ministry of Manpower, Singapore), Wolfgang von Richthofen (ISSA Mining), Peter Guterl (BG RCI) (from left).



Exhibits at BG RCI' OSH Academy Maikammer demonstrate good practice.



Discussing prevention and reactions to major hazards: Holger Trechow, Ho Siong Hin, Helmut Ehnes and Peter Guterl (from left).



trial Risk management, such as the Directive 96/82/EG on the Control of Major Accident Hazards (COMAH) involving Dangerous Substances (SEVESO II - Directive).

Uli Bürkert, BG RCI, discussed the aims, strategies and methods applied for maximum success in qualifying and motivating some 40,000 employees per year on

occupational safety and health, followed by a guided tour of BG RCI OSH Academy Maikammer.



Uli Bürkert, BG RCI (left) explained OSH seminar concepts and methods.



As a guest of honour at the grand finale of BG RCI's Young Worker's competition, Ho Siong Hin (middle) handed over the award.

## ISSA Mining in dialogue High-level talks in Turkey on OSH in hard coal and lignite mining

In September 2012, ISSA Mining Secretary General Helmut Ehnes and ISSA Mining Regional Representative Nevzat Bagli discussed follow-ups and new cooperation opportunities to improve occupational safety and health in Turkish mining operations.

On 10 September, Ehnes and Bagli met Namık Ata, Under Secretary at the Turkish Ministry of Labour and Social Security together with Kasım Özer, General Director Occupational Safety and Health of the Ministry of Labour and Social Security, to discuss the status and perspectives of the ongoing cooperation in the frame of the "International Mine Safety Audit" project in the Turkish hard coal industry and 2013 activities.

The consecutive day brought the ISSA Mining representatives together with TKI's Mustafa Aktaş, Gen-



Nevzat Bagli, Helmut Ehnes, Namık Ata, Kasım Özer (from left).

eral Director and Head of the Board of Directors as well as Muammer Bulut and Mustafa Özdingiş, Deputy General Director. TKI – Türkiye Kömür İşletmeleri Kurumu – is the state-run lignite producer of Turkey. On the agenda were topics on occupational safety and health including the development of seminars.

12 September, Özer, Ehnes and Bagli met to discuss joint actions at the 2014 XX World Congress on Safety and Health at Work, options to improve the qualification of labour inspectors, and a 2013 symposium on personal protective equipment in mines.

## ISSA Mining in dialogue

# Learning of each other across borders: Experts develop prevention strategies for high risk businesses

**Some 100 delegates, most of them managers of Vietnamese operations, joined the international conference “Prevention in High Risk Enterprises”, aiming at target groups of mining, quarrying, and cement production. The participants discussed challenges and solutions in a ten hour workshop in Quang Ninh, Vietnam.**

Vietnam is currently redesigning its legal framework of labour protection. To achieve best results, the Vietnamese stakeholders take international models of good practice into consideration.

An important economic factor to consider is the mining industry,

Vietnam also particularly benefits of the experience brought in by ISSA Mining member RAG, the German hard coal mining corporation, which assembled outstanding knowledge in safe mining at large depths – a challenge Vietnamese underground mining operators experience more and more.

On 16 July 2012, business representatives and high-ranking decision makers met international experts on occupational safety and health to discuss models and strategies for prevention in high risk industrial sectors. The high-ranking conference was opened by Nguyen Thanh Hoa, Vice-Minister Labour and Social Affairs.

ing the “Vision Zero” strategy to avoid all fatal and serious accidents and diseases. Among other examples, he used RAG’s safety results to prove that this is a realistic aim, not an illusion. Ehnes outlined seven rules to systematically reach this ambitious aim.

Vietnamese Director General Labour Protection Ha Tat Thang reported that some 600 fatal accidents at work are recorded each year in Vietnam officially. Given the low reporting rate the true figure is estimated four times higher. Mining in Vietnam is officially benchmarked with approximately 30 fatal accidents per 100,000 employees. Each 8th accident at work in Vietnam is contributed to mining, each third to construction.

After insights into safety while working on electric equipment by Jens Jühling, Manager Prevention of BG ETEM Germany and ISSA Electricity, RAG’s Dieter Mantwill discussed requirements for managers and responsible persons in mining and talked about the training of managers in respect to safety and health in German hard coal mining.

The safe design and operation of quarries and safe blasting was discussed by senior expert Gerhard Czuck, BG RCI and ISSA Mining. Peter Haß of the German Commission for Electrical, Electronic & Information Technologies of DIN and VDE introduced explosion protection underground.

ISSA Mining member Dr.-Ing. Ulrich Palzer, IAB Weimar, Germany



**“Vision Zero has to be the benchmark of our joined actions”: Secretary General Helmut Ehnes pleaded for systematic and effective prevention to stop fatal and serious work accidents.**

showing the highest accident rates second to construction. To streamline prevention, the Ministry of Labour, Invalids and Social Affairs is long-term cooperating with the International Section of the ISSA on Prevention in the Mining Industry.

Helmut Ehnes, Manager Prevention of BG RCI Germany and Secretary General of ISSA Mining opened the discussion with a keynote highlighting the social and economic consequences of accidents and diseases in mining. He called for implement-





The tile production plant of Viglacera showed the vast improvements in work safety.



Dieter Mantwill impressed the participants by introducing the organisation of job safety in German hardcoal mining.

introduced a noise prevention tool developed by his research institute. The “demonstration system and computer aided selection assistance” measures noise levels at individual workplaces, aids in selecting the most efficient type of ear protection, and motivates employees to use personal protective equipment by simulating the effects of noise induced hearing loss.

Vietnamese mining operator VINACOMIN, aiming at a production capacity of 1.6 million tons of black coal for 2012, gave insight into its operations and work safety situation. VINACOMIN operates at a

depth up to 250 meters with geological challenging strata control and water ingress. Another challenge are undocumented mining faces stemming of the French colonial time. VINACOMIN takes great effort in improving work safety, such as by increasing investments in safe technology, training and motivation of its employees and sanctioning unsafe behaviour.

“Today showed impressively that we chose the right topic for our conference”, Helmut Ehnes balanced at the end of the ten hour workshop. “We heard plenty practical advise in the talks and a very high amount

of useful information”. Ehnes called for Vision Zero to be defined as the benchmark of the joint actions. Redesigning the legal framework together with improved labour inspection is the right path, said Ehnes, and suggested additional practice oriented consulting of business managers for the highest efficiency in improving the current situation. Ehnes thanked all participants for the motivated work and discussion and identified items such as safety management systems and the integration of small and medium-sized enterprises as showing a vast potential for future cooperation on occupational safety and health.



Some 100 experts and operational decision makers intensively discussed challenges and methods of prevention in high-risk sectors in Quang Ninh, Vietnam.



Bui Hong Linh (second from left) joined the awarding ceremony of BG RCI's Award Work – Safety – Health as a guest of honor. Left ISSA Mining President Thedor Bühlhoff, middle from left Dorothea Henzler, State Minister of Education of Hesse, Germany, Hans Paul Frey, Chairman of the Board BG RCI Germany, translator Hoang Tuan Anh and ISSA Mining Senior Expert Matthias Stenzel.

## ISSA Mining in dialogue

# ISSA Mining/MoLISA cooperation connects high-ranking delegation with good industry practice

The last week of March 2012, a high-ranking Vietnamese delegation led by Vice Minister Bui Hong Linh came to Germany to learn from first-hand examples of good OSH practice. Mr Bui Hong Linh was accompanied by Mr. Ha Tat Thang, Director General of Vietnam Social Insurance Vietnam and Mr. Vu Nhu Van, Deputy Director General of the Bureau of Safe Work Vietnam.

Vietnam's emerging industry, depending on raw materials and energy, aims to learn from models of good practice of established systems, in both efficient industrial processes and occupational safety and health. The sustainable cooperation between ISSA Mining and Vietnam's Ministry of Labour, Invalids and Social Affairs (MoLISA) promotes exchange and brought the OSH stakeholders to Germany

to learn on safe and economic mining.

On the arrival day, the delegation visited the Power Plant Weisweiler run by German lignite coal mining corporation RWE Power AG, and took a field trip to the construction site of the Neurath power plant in Grevenbroich by RWE Technology.

Day two led the decision makers on social security to German limestone producer Schäferkalk's Hahnstätten plant. Next to production aspects, the guests special interest focussed on the organization of occupational safety and health on-site, such as in efficient and safe

blasting technology. Ulrich Wagner, manager quarry operations and safety & health explained methods such as collecting and analyzing information on near-miss incidents. Wagner also explained the companies commitment to health promotion for all employees.

After a visit to the Institute of mining engineering of mining university RWTH Aachen, the delegation then joined the Awarding Ceremony of BG RCI's Award Work – Safety – Health in Frankfurt, where the winners of the 2012 award have been honoured and their innovative ideas on improved OSH were introduced to the public.



<http://www.issa.int/About-ISSA/Prevention-Sections/Section-on-Prevention-in-the-Mining-Industry/Announcements/Innovations-in-Safety-Health-BG-RCI-Germany-awards-eighteen-creative-ideas>



## ISSA Mining in dialogue

# ISSA Mining in dialogue on mine safety at 6th China International Forum on Work Safety

The 6th China International Forum on Work Safety has been joined by some 300 participants from 26 different countries. In the frame of this high-ranking event, running 18-19 September 2012 in Beijing, several delegates particularly from China expressed clearly how important occupational safety and health is considered in the P. R. China, all the more in the high-risk sectors. The exchange with experts from other countries is seen as a high potential source to achieve improvements.

ISSA Mining Senior Expert Matthias Stenzel contributed his talk "Vision

Zero - The New Global Prevention Strategy of ISSA Mining for Coal Mine Safety" in the frame of the Technical Session "Coal Mine Safety Inspection Practices and Systems" 19 September 2012.

### ISSA Mining's expertise sought by international delegates

The participation in the Forum allowed for a variety of contacts to be tied. Several delegates from different nations expressed a strong interest to exchange knowledge of safe mining processes and to work together. Blasting and diesel soot emissions have been some of the topics finding particular interest.

### Significant decrease reported: SACMS on fatal accidents in Chinese mines

In the same session, Song Yuan-ming, Director General of the Chinese State Administration of Coal Mine Safety (SACMS) reported on the development of mine inspection within the past ten years. According to the reported figures, the number of fatal mining accidents in China has been decreased from approx. 4,600 to approx. 1,600 in 2011, while the production has been increased from 1.5 to more than 3.5 billion tons per year in the same time frame.



## ISSA Mining in dialogue

# St. Petersburg: Cross-sector exchange on industrial safety by international experts

Some 250 international experts and media representatives made St. Petersburg, Russia, a center of competence and dedication on safety during the International Forum on Industrial Safety, 29 May to 1 June 2012. Running as a jubilee event in its tenth turn, the forum proved to be once more an excellent platform on the exchange of experiences and good practice, and offered plenty of opportunity for networking and informal dialogue. Highly competent presentations such as on Nuclear Safety Actions after Fukushima accident, the 2010 Chile mine collapse and safety in the oil and natural gas industry have been shared. According to forum participants, the reports presented were of high practical value and will contribute to the further improvement of industrial safety and occupational health and safety.

### ISSA Mining on risk assessment and good practice

Helmut Ehnes, Secretary-General, International Section of the ISSA on Prevention in the Mining Industry (ISSA Mining) and Director Prevention, BG RCI (Germany) showed a systematic approach of proven methods to improve safety in mining and other sectors. Ehnes discussed economic benefits of efficient prevention, gave examples of corporations with outstanding safety results, and called for international collaboration in his talk "Vision Zero. Safe Mining: Strategies and Tools". Insights and facts on Ukrainian mine safety were given by Stepan



Some 250 international experts and media representatives joined the St. Petersburg Forum.

V. Dunas, Deputy Chairman of the State Service for Mining Supervision and Industrial Safety (Ukraine) in his presentation titled "Specifics of the State Technical Supervision in Ukraine after Re-organisation of the State Service for Mining Supervision and Industrial Safety".

### Advancing Global Deepwater Capabilities: Findings of the Deepwater Horizon incident

Edmond Thompson, Director Programme Management, Group Crisis & Continuity Management of BP (UK) explained the Deepwater Horizon accident on 20 April 2010 taking eleven lives and leaving many more injured. Thompson explained BP's commitment to prevent future accidents and the intention to share knowledge throughout the deepwater industry. On the accident, Thompson reported that the investigation team's finding showed that the tragedy was the result of multiple and complex causes and

the activities of multiple parties. The 26 recommendations resulting from the investigation teams' work are implemented worldwide at BP, said Thompson, including better contractor management and assurance on blowout preventers, well control and cement testing. Continuous self-verification and independent audits will confirm the delivery of each action. To improve deepwater drilling safety, BP is engaging governments, regulators and the industry in key offshore and deepwater basins Thompson stated.



Fidel Nunez reminded of a truly remarkable moment – the location and rescue of the 33 trapped miners in Chile 2010.





ISSA Mining's Helmut Ehnes called for Vision Zero – no fatalities and no severe accidents in mining.

## Mining safety in focus

Session 4 of the forum was dedicated exclusively to mining, titled “Lessons from the Accident (San José Mine, Chile, 2010)”.

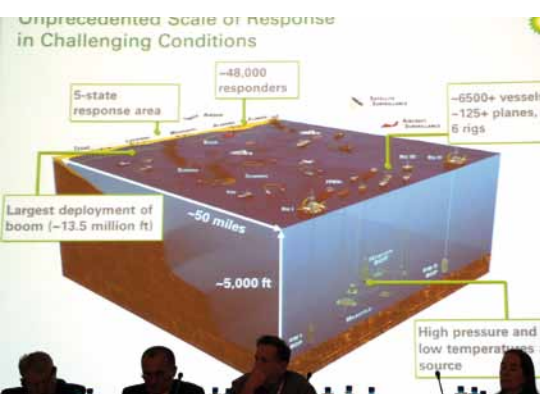
Codelco's Fidel Nunez, Senior Manager for Mining Technology and Innovation, and Katharina Jenny, Occupational Health and Safety Manager titled their talk “The Rescue at San Jose Mine, Sharing an Amazing Experience”, showing impressively how Codelco, called upon for help in retrieving the 33 trapped miners in the Atacama desert 2010, contributed people, knowledge and equipment to lead the disaster to a happy ending. Fidel Nunez gave impressive insight

into the challenges facing the rescuers, including drilling methods, communication with “Los 33” – “the 33” and supplies with food, drinks, and medication. Once more, international cooperation played a big role in the successful efforts.

Occupational safety and health plays an important role at Codelco. Its goals include a record five years without fatalities, a frequency rate under 1 and automation of dangerous processes by 2015, and to be in the top five in the base metal industry. Jenny showed how the corporations global frequency rate and global severity rate could be lowered constantly over the last years. The company recorded an average of six fatalities per year

from 2000, and an average of 67 new occupational diseases (silicosis, hearing loss due to noise impact, and musculoskeletal disorders). On this ground, Codelco aims to improve occupational safety and health by means of changed management standards, systematic approaches and continuous verification of efficiency.

The consecutive talk was given by Rodrigo Santana, Regional Director of the National Service of Geology and Mining (SERNAGEOMIN) in Magallanes of the Ministry of Mining (Chile). Titled “Chilean Evolution of the Mining Security”, Santana explained that Chile is accounting for 30% of world-wide copper reserves. The accident rate in Chile is lower than in other sectors, showed Santana, up to 75% less than in “Transport and communications” and manufacturing, albeit the fatality rate of Chilean miners is the highest of all sectors comparing only to “Transport and communications” while three times higher than in manufacturing. Compared to prior years, the fatality rate in mining decreased significantly and constant. 2010, the number of fatalities was 86% lower than in 1980. The decrease, explained Santana, has been achieved by identifying causes such as labor factors, sub-standard conditions, and personal impacts. Adapted regulations and inspections took these factors into consideration, training methods have been adapted. The by far highest amount of mining accidents is recorded in underground mining, accounting for more accidents than treatment plants, open pits and related industries together. Almost one in three victims had been on the job for one to six month at the occurrence.



BP gave insight into the Deepwater Horizon tragedy an the conclusions derived.



ISSA Mining's Seven Golden Rules for Safe and Economic Mining found high interest among the experts.

## ISSA Mining in dialogue Tying contacts with South American mining in Peru

In August 2012, ISSA Mining General Secretary Helmut Ehnes met with ministry representatives mining safety experts to establish and extend contacts to the South American mining industry and to discuss potentials of a 2013 mining conference.

### Cooperation with ISSA Electricity

With the close relation of the mining and the energy sector, the discussions were led together with Dr Jens Jühling, ISSA Electricity and manager prevention of German BG ETEM. Jühling's long lasting contacts to the South American industry proved to be a valuable asset. Together with Orlando E. Ardito Chávez and Jorge Noé Rondón of Corporación Selectronics SAC, Lima, Peru, important contacts could be made.

### Connecting to Ministry, Industry Association

On August 17, Ehnes and Jühling met Sarita Lerena Francia and Angel Murillo as representatives of the industry association for mining and energy, the Sociedad Nacional de Minería Petróleo y Energía, Lima, representing members producing more than 95% of the Peruvian mining output and employing 150,000 workers and an additional 70,000 contractors. The Sociedad Nacional de Minería Petróleo y Energía is a member of ISEM, the Mine Safety Institute, Lima, represented at the meeting by Dr. José Valle Bayona. The aspects of the relevant government stakeholders were considered by Orlando Chávez Chacaltana and

Roberto Tamayo Pereyra of the Peruvian Ministry for Energy and Mines (Ministerio de Energía y Minas) and Marco Tantaleán del Aguila, Dirección Nacional de Prevención and Instituto Nacional de Defensa Civil.

In the afternoon of the same day, Jühling and Ehnes seized the opportunity to meet Ricardo Guillermo Ruiz Galdos and Benjamín Jaramillo Molina of TECSUP, Profesionales en Ingeniería, Lima, to discuss Mine engineering and the aspects of occupational safety in health, also in aspects of vocational training of miners.



Mining journal "Horizonte Minero" reported on ISSA's Ehnes and Jühling visiting.



The important factor of miner's training has been on the agenda during the dialogue with TECSUP.



The ISSA prevention experts discussed with representatives of the ministry and the sector association for mining.





Efficient mine rescue makes the difference – sometimes between life and death. Mario Sepulveda, 39, was the second miner to leave the San Jose mine with the Phoenix rescue capsule the night of October 13, 2010. An accident trapped 33 miners for over nine weeks in the mine located near Copiapo, Chile.

Photo Credit: HUGO INFANTE/GOVERNMENT OF CHILE

## ISSA Mining in dialogue

### Poland: Mine Rescue Workshop in Bytom unites nations and experts

The first mine rescue workshop hosted the Polish Central Mines Rescue Station (CMRS) united some 150 international experts from Poland, the Czech Republic, Russia, Kazakhstan, Ukraine, the United Kingdom and Germany. The venue of the 25 October 2012 meeting was CMRS in Bytom, Poland, located in the hard coal basin of Silesia.

The participants stemmed from different professional areas such as mine rescuers, respiratory protective device suppliers, authority representatives, experts, and rescue physicians, allowing for an interdisciplinary exchange.

Aside from expert presentations and discussions on respiratory protection, communication in rescue operations, operations under challenging microclimatic conditions and work at heights, the meeting offered exhibits presented by national and international suppliers of respiratory protection, work wear for rescuers, gas monitoring devices as well as communication and transmission technology. The hard coal focussed topics are fully usable in open-pit quarries as well and even for fire departments.

Local mine rescue teams demonstrated their skills by abseiling a person down CMRS' multi-story office building and by several more demonstrations of practical rescue work.

The conference closed with an exchange of experiences and the discussion on future mutual support. As a consequence, agreements on collaboration are under preparation.



Collaborating to improve rescue techniques: some 150 international experts met in Bytom, Poland



Suppliers and experts presented innovations at CMRS.



CMRS mine rescuers demonstrating skill and experience.

## ISSA Mining in dialogue

# ISSA's Prevention Sections Mining and Electricity delivering OSH expertise to ConBuild Vietnam 2012

Economy experts see a mid-term growth in Vietnam, estimating the GDP to grow again by 6.4% in 2013. The expected need for infrastructure, boosted by development projects, will also lead to a demand for raw materials. ISSA's International Section of the ISSA on Prevention in the Mining Industry and for Electricity, Gas and Water presented at the ConBuild Mining Vietnam, running 04 – 07 December 2012 in Hanoi, to raise awareness for occupational safety and health and to inform on modern modes of prevention for the emerging industry at an early stage.

The ConBuild is one of the most important events for the raw mate-

rial- and construction industry in Asia and ran in 2012 for the sixth time. Its scope covers construction and building machinery, equipment, materials, vehicles, technology and services for the construction / building industry and other related infrastructure sectors, offering many links for prevention in high-risk sectors.

ISSA Mining's and ISSA Electricity's presentation, jointly held with German research institute IAB Weimar, was the platform for a variety of contacts to qualified and interested experts of the sector. Next to the exchange of expertise, visitors also expressed their interest in long-term cooperation.

Some 35 delegates joined the conference "Structural Engineering and Construction Products for the Infrastructure", allowing for more opportunities for dialogue on occupational safety and health during the interesting discussions following the presentations.



Industry delegates benefited of the OSH expertise of ISSA's prevention experts.

## ISSA Mining in dialogue

# SISE 2012: ISSA Mining joins inter-sectional workshop

**ISSA Mining's General Secretary Helmut Ehnes shared information in his talk "The key for success: 7 golden rules for prevention" at SISE 2012, uniting some 300 international experts. The V International Symposium on Electrical Safety (SISE) was hosted by the International Section of the ISSA for Electricity, Gas and Water and the German-Paraguayan Chamber of Commerce and Industry and ran 26. - 27. April 2012 in Asunción, Paraguay.**

### SISE 2012

The International Symposium on Electrical Safety (SISE in spanish) is a scientific event that aims to im-

prove the quality of work of professionals in the electricity sector. Following conferences in Cuba, Peru, Chile and Colombia, the fifth edition took place at the Convention Center of the Granados Park Hotel on Thursday 26 and Friday 27 April, organized by the Electricity Committee of the ISSA in Germany, in collaboration with the Faculty of Engineering of the National University of Asuncion and the Paraguayan-German Chamber of Commerce and Industry.

The 2012 SISE gathered the electricity sector, those responsible for risk prevention and other professionals involved in occupational health and environmental preven-

tion, focussing on the exchange of the latest innovations in electrical safety by international researchers and experts from Paraguay, England, France, Argentina, Germany, Korea, Colombia, Peru and Brazil.

### Leading experts exchanging expertise

The attendance of Mr Federico Franco, vice president of the Republic of Paraguay, demonstrated the enormous significance of the conference. Within the opening ceremony, Franco reported on 96 fatalities due to electric shock per year in Paraguay with six million citizens and underlined the importance of prevention.





Some 300 high-level international experts met in Asunción, Paraguay, to exchange expertise and good practice.

The Session Challenges in prevention included the talk “Promoting prevention culture through global network” by Gye-Wan Bae of KO-SHA, Korea. ISSA Mining’s Helmut Ehnes discussed “The key for success: 7 golden rules for prevention”. Economic benefits of prevention were shown by Thomas Kohstall in his presentation “Return on Prevention: Does Investing in Occupational

Safety and Health Pay Off for Companies?”.

Holger Schau explained “The new ISSA guideline for the selection of Personal Protective Equipment when exposed to the thermal effects of an electric fault arc” in the Session Accident Prevention. Internationally renowned expert Karl-Heinz Noetel gave impressive insight

into “Innovative Personal Protective Equipment against falls from a height for scaffold workers”.

In the Session “Regulations for the safe use of electricity”, Alicia Cecilia Rosas Hernández showed the “Impact of training in reducing accidents”.

**Further reading**  
<http://www.sise2012.com/>



<http://www.issa.int/About-ISSA/Prevention-Sections/Section-for-Electricity-Gas-and-Water/Events2/V-International-Symposium-on-Electrical-Safety-SISE>

## ISSA Mining in dialogue **ISSA Mining at inter-sectional workshop “New challenges in OSH”**

ISSA Mining joined the inter-sectional workshop “New challenges in OSH” with a contribution to the workshop’s “Forum Mining” in Santiago de Chile 2.- 3. April 2012. The talk given by ISSA Mining’s General Secretary Helmut Ehnes titled “Vision 2012 - Safe Mining worldwide” called for international cooperation on occupational safety and health.

### **International experts share knowledge and good practice**

Input was given by international experts such as Dr. Jens Jühling, ISSA Electricity, on the new guideline on electric arcs, Karl-Heinz Noetel on protection against falls from height and Norbert Weis, ISSA Machine and System Safety, on the keys to success in small enterpris-

es, as well as Christian Schenk, AUVA Austria on risk assessment.

### **ISSA Mining’s contribution: VISION 2020 - SAFE MINING WORLDWIDE!**

Less than two years ago, the whole world looked to Copiapó, just a good 500 miles north from the workshop’s venue. “Los 33” – 33



Helmut Ehnes called for international cooperation and introduced seven golden rules for safe mining.

miners of the San José copper–gold mine – had been rescued after being trapped for 69 days following a cave-in. The whole world took part in this mission, and the happy ending could be reached because of international cooperation. Until then, it seems we haven't seen many international headlines on mining accidents anymore. Was Copiapó a unique event then? Unfortunately it was not.

Over 330 million accidents at work happen world wide every year, only counting those leading to more than four days absence. More

than 350,000 end fatal. Two million people more die every year due to work-related diseases. To sum this up: around 2.4 million people die every year because of work conditions. That is a fatality every 15 seconds on average!

Mining can be made safer. It is not over ambitious to discuss cutting mining accidents in half within ten years, if all stakeholders work together and if CEO's, employers and all managers accept their responsibility on this important subject. ISSA Mining has defined the "Seven

Golden Rules for Safe Mining" and is open to anyone who wants to improve mine safety, whether it is operators, suppliers, ministries or labour inspection authorities. ISSA Mining is a non-profit and non-commercial worldwide network, spanning four decades of experience in safety and health in mining. During the last years, we have been able to cooperate with reliable partners strongly supporting this aim. Our experts look back on plenty of years on experience in mine safety, and are open to share their knowledge free of charge.



International experts joined the dialogue on safety in Santiago de Chile.



## Awards

# Mining and its impact on people in focus: Best work-related documentary film of the year awarded

Mining-centered movie “Pablo’s Winter” by Chico Pereira of Spain is the winner of the 2012 Healthy Workplaces Film Award. The European Agency for Safety and Health at Work (EU-OSHA) presented its fourth film prize at the 55th International Leipzig Festival for Documentary and Animated Film (DOK Leipzig).

The film award promotes the importance of workplace health and safety across Europe by challenging and encouraging filmmakers to create and showcase documentaries on workplace safety and health topics. Chosen from ten nominated films, Pablo’s Winter tells the story of a retired miner, one of the last generation of miners in a now-closed 2,000 year old mercury mine in Spain. Peter Rimmer, EU-OSHA representative of the jury said that Pablo’s Winter is a worthy winner of the award. Presenting the award in Leipzig, he said: “This sincere film, beautifully shot in black and white, tells the story of the terminal decline of a small town and one of its inhabitants. Cleverly using fiction techniques, the



Pablo's Winter: movie still.

film reveals the serious damaging effects of bad working conditions and poor lifestyle choices.”

The film also evokes the need of strengthening the workability and the employability of all workers to avoid early retirement or redundancy of older people. Issues that will be explored in a major new project on the occupational safety and health of older workers that EU-OSHA has been requested by the European Commission to carry out. Ten thought-provoking films from international filmmakers were nomi-

nated, documenting the everyday routines of people at all stages of their working lives. The films reflected a variety of working environments and focus on the experiences of workers involved in both large scale production and small enterprises.

The nominations were selected from more than 2,850 documentaries submitted to DOK Leipzig this year, with the winner decided by an international jury which included film and occupational safety and health experts.



More information at  
EU-OSHA's website  
[http://osha.europa.eu/de/  
press/press-releases/healthy-  
workplaces-best-work-related-  
documentary-film-of-the-year-  
awarded](http://osha.europa.eu/de/press/press-releases/healthy-workplaces-best-work-related-documentary-film-of-the-year-awarded)

Chico Pereira receives the Healthy Workplaces Film Award from Birgit Müller, EU-OSHA Communications Officer.



Mine rescuers from Barrick-Hemlo finished on top at the 62nd annual competition in Sudbury, Canada.



## Awards

# Barrick-Hemlo tops Ontario: Two-time runners-up move up to claim best in province in Canadian Mine Rescue Competition

**Tops at last. After finishing second in the Ontario Mine Rescue Competition for two years running, mine rescuers from Barrick-Hemlo finished on top at the 62nd annual competition in June in Sudbury, Canada.**

In addition to earning the gold hard hats for the best overall team – Captain Mark Osiecki, Vice-captain Leo Belanger, Dennis Senden, Jason Landry, Brian Randell, Albert Pelland, Tyler Pelland, and Briefing Officer Denis Leduc, also won the Team Firefighting Award.

Barrick-Hemlo finished second in the 2010 competition in Timmins, and repeated as runners-up last year when they hosted the competi-

tion at Williams Mine near Marathon.

Erik Barr, of Goldcorp Canada's Porcupine Gold Mines, won the Technician Award, followed by Barrick-Hemlo's Denis Bilodeau in second, and AuRico Gold Inc.'s Jesse Vaillancourt in third.

Kirkland Lake Gold earned runner-up honours, as well as the First Aid Award. Goldcorp Canada's Mus-sellwhite Mine earned the Special Equipment Award.

KGHM's team, comprised mainly of first-year mine rescuers, received special recognition from guest Alexander Sin, head of the Department of Mines Rescue Services,

Emercom of Russia, who expressed the hope that the volunteers would enjoy as long a career in mine rescue as he has. Sin led a Russian delegation studying the volunteer structure of Ontario Mine Rescue.

Courtesy of Mine Rescue Newsletter, published by Workplace Safety North (WSN), Ontario, Canada.

**@ Full report in the Mine Rescue Newsletter, Issue #18 Summer 2012, available on the Ontario Mine Rescue website, [http://www.masha.on.ca/mine\\_rescue/newsletter.aspx](http://www.masha.on.ca/mine_rescue/newsletter.aspx)**





## Awards

# England: Mineral Products Association's Health & Safety Conference and Awards 2012 Celebrates and Inspires

Mineral Products Association's (MPA) prestigious Health & Safety Conference and Awards 2012 took place on 13 November 2012 at BAFTA, London, bringing together 78 organisations, including members, contractors and other key stakeholders to recognise, reward and share best practice, progress and results in health and safety.

Overall, the Awards attracted 142 entries from 32 member companies, with a significant proportion of submissions provided by companies with less than 1,000 direct employees.

The theme of the 2012 Health & Safety Conference and Awards, sponsored by PICS, was Delivering 'Safer by Partnership' and Inspiring Excellence. A key focus of the morning conference session was MPA's 'Safer by Partnership' initiative, launched earlier this year, for mem-

**The Awards were judged across seven categories, with winners in each:**

**Bitumen; Asphalt; Contract Surfacing: Promoting Safer Behaviour**  
Winner: Midland Quarry Products – Griff Quarry and Asphalt Plant

### **Contractors Safety**

Winner: CEMEX UK/Response Engineering – South West and Wales

### **Engineering Initiatives**

Winner: Aggregates Industries – Bardon Aggregates - Stoneycombe

### **Leadership; Training and Management Systems Initiative**

Winner: Lafarge Aggregates and Concrete – Granite House

### **LGVs and all company vehicles; Driver Safety/Public Safety**

Winner: Hanson UK – Hanson Concrete

### **Occupational Good Health**

Winner: Aggregate Industries – Concrete Products – Leighton Buzzard

### **Worker Involvement**

Winner: Tarmac, Buxton Lime & Cement

bers and their contractors to work more closely together to reduce contractor injuries and the incidence of ill health, as part of the drive to achieve Zero Harm. Progress on

MPA's emerging Contractor Charter was reported, whilst MPA's new Contractor Database – also part of the 'Safer by Partnership' initiative – was launched at the event.



For more information visit: [www.mineralproducts.org](http://www.mineralproducts.org)

For more health & safety great ideas and innovations, visit [www.Safequarry.com](http://www.Safequarry.com)

## Best Practice

# EU-OSHA calls employers and employees to action for improved safety

The European Agency for Safety and Health at Work (EU-OSHA) aims its two-year Healthy Workplaces Campaign on Working together for risk prevention. EU workplaces are safer and healthier than they have ever been. But still every year there are 6.9 million workplace accidents and millions more work-re-

lated diseases. The human suffering of poor safety and health is immeasurable, but the economic cost is estimated at 490 billion Euros a year - more than half the current cost of the EU's financial crisis bailout fund. EU-OSHA's new campaign turns the spotlight on the importance of management leadership and worker participation in improving workplace safety and health.

Ministry of Employment, called for workers and employees to work together to lay the foundations for a more sustainable risk prevention culture in Europe.

Commissioner Andor stated that 'Europe has made a lot of progress in the area of occupational safety

productivity; a happier and more productive workforce; lower rates of worker absence and turnover; fewer accidents; improved standing among suppliers and partners; greater awareness and control of workplace risks; and a better reputation for sustainability among investors, customers and communities.'



EU Commissioner for Employment, Social Affairs and Inclusion, Mr László Andor, Dr Christa Sedlatschek, Director of EU-OSHA and Mr Bo Smith, Permanent Secretary at the Danish Ministry of Employment with Napo animated character.

'The most effective results are achieved if workers and managers join together,' adds Dr Christa Sedlatschek. 'Therefore the campaign is focusing on encouraging both bosses and top managers to show leadership in actively engaging in risk reduction and workers, their representatives and other stakeholders to work together with managers to reduce risks. There is still action to be taken and here our Healthy Workplaces Campaign plays a major role, offering simple and practical guidance to working together.'

Results from EU-OSHA's recent pan-European opinion poll on occupational safety and health (OSH) give cause for optimism for the campaign's success. The poll shows that on the whole, EU workers (74%) feel confident that an occupational health and safety problem raised with a supervisor

and health in the past decade and we have to continue our work in this area. This is one of the key policies to make active ageing a reality, which is the aim of the European Year in 2012. There is evidence that prioritising health and safety is not just the right thing to do, it's also good for business. Benefits include reduced costs and increased

and health in the past decade and we have to continue our work in this area. This is one of the key policies to make active ageing a reality, which is the aim of the European Year in 2012. There is evidence that prioritising health and safety is not just the right thing to do, it's also good for business. Benefits include reduced costs and increased

Launching the campaign in Brussels, the EU Commissioner for Employment, Social Affairs and Inclusion, Mr László Andor, alongside Dr Christa Sedlatschek, Director of EU-OSHA and Mr Bo Smith, Permanent Secretary at the Danish

### Key dates

- European Week for Safety and Health at Work in October 2013
- Good Practice Awards Ceremony: April 2013
- Healthy Workplaces Summit: November 2013



<http://www.healthy-workplaces.eu/en/>



would be addressed; and generally Europeans (67%) consider themselves well informed about occupational health and safety. But there are big differences between Member States and a key aim of the campaign is to share good practice to raise the levels of risk prevention in companies of all sizes and in all sectors wherever they might be situated in the EU.

Research confirms that whatever an organisation's size, leadership from the top and the active participation of workers are crucial to successful health and safety management. The European Survey of Enterprises on New and Emerging Risks (ESENER) shows that worker participation combined with management commitment leads to far better occupational safety and health performance. Enterprises with high worker participation combined with high management commitment, for example, are 10 times more likely to have a documented OSH policy in place. This has the additional benefit of these measures being perceived as more effective.

The campaign encompasses a range of activities at national and European level, including the 11th European Good Practice Awards. The Awards, to be announced in April 2013, highlight the best examples of managers and employees working together for risk prevention. Organised by EU-OSHA, in cooperation with the Member States and the incumbent Council Presidencies of the European Union, the Awards are now officially open for entries, via EU-OSHA's network of national focal points ([http://osha.europa.eu/en/campaigns/competitions/good-practice-award\\_2012-2013/](http://osha.europa.eu/en/campaigns/competitions/good-practice-award_2012-2013/)).

The campaign will be led at national level by EU-OSHA's national focal points and official campaign partners. To download the official campaign guide and other campaign materials (presentations, publica-

tions and promotional material in 24 languages) and find campaign events happening across Europe, visit the Healthy Workplaces Campaign 2012-13 website: [www.healthy-workplaces.eu](http://www.healthy-workplaces.eu)

## IMA Europe: ISSA Mining members commits to Healthy Workplaces campaign of EU-OSHA

**Industrial Minerals Association (IMA Europe), long-term member of ISSA Mining, shows a clear commitment to EU-OSHA's prevention campaign on healthy workplaces. Supporting the agency's campaigns since 2006, IMA Europe initiated various actions to support the 2012-2013 campaign aiming at encouraging managers, workers and other stakeholders to join forces to improve safety and health at work.**



“Workers and health & safety is at the core of IMA-Europe’s concerns and activities since its creation in 1993. The association promotes risk prevention and is active in data collection on dust exposure levels for more than 10 years and, more recently, on accidents at work statistics in the sector. It is the duty of managers and employers to take the lead on workplace safety and health, however behavior based safety is the way to improve safety performances in the long term. It requires active participation of every one in the company. IMA-Europe promotes the monitoring, reporting, reviewing as well as improvement action plans of health & safety performance in all its member companies. Excellence in safety will only be made possible through the involvement of all.”, the campaign website quotes IMA Europe-CEO Thierry Salmona.

The European Sectoral Association for the extractive industry communicates the campaign’s message to its members online, in print and by meetings, runs a workshop and collects models of good practice to be communicated to its 500 member companies.



<http://www.ima-europe.eu/commitments/osha-eu-healthy-workplaces>

<http://www.healthy-workplaces.eu/en/about/campaign-partners/detail?id=ima-europe-industrial-minerals-association-europe>

## Industry

# Prevention pays: ISSA Mining member introduces results on European level

On June 28 2012, German quarry operator and ISSA Mining member Johannes Nickel GmbH & Co. KG introduced its successful prevention engagement and the resulting economic success to experts from across Europe. The workshop, titled “Review of the EU OSH Strategy 2007-2012 and priorities for the future” ran in Copenhagen, Denmark, on the occasion of the Danish presidency of the council of the European Union 2012.

### EU presidency invites all stakeholders to dialogue

The conference aimed to balance the results of the current European strategy on occupational safety and health. More than 200 representatives of the European employers and employees, government members as well as high-ranking delegates of various European institutions evaluated the strategy, discussed options to increase acceptance of OSH action, and reviewed economic outcomes by considering



Representing mining at the conference: Dr. Bettina Nickel and Phillip Tuschhoff.

the results of scientific studies as well as models of good practice.

### Prevention pays – confirmed once more by two studies

Teresa Moitinho, Directorate-General for Employment, Social Affairs and Inclusion, Health, Safety and Hygiene at Work, presented the results of the study “Socio-economic costs of accidents at work and work-related ill health”, 2011 (see ISSA Mining announcement) The study was conducted to analyse at the company level the incremental benefit that may be realised if prevention measures permitting to avoid the accidents and work-related ill-health are undertaken. The study shows that the vast majority of investments in preventions lead to significant savings, Moitinho explained.

Dr. Walter Eichendorf, deputy director of the German Social Accident Insurance, reported on the outcome of the study “Calculating the international return on prevention for companies: Costs and benefits of investments in occupational safety and health”, initiated by the International Social Security Association (ISSA), the German Social Accident Insurance (DGUV) and the German Social Accident Insurance Institution for the Energy, Textile, Electrical and Media Products Sectors (BG ETEM) in 2010. The results derived from the first round of evaluation of the data collected from 300 interviewed companies across 16 participating countries show a “Return on Prevention” of 2.2 – thus returning more than double of the invested resources.

### From academic findings into the mining business

What does all this mean in everyday's business? To deliver hands-on examples, employers and employees both talked about prevention and its effects in Copenhagen.

Next to representatives of France, Poland, Denmark and the United Kingdom, ISSA Mining member Nickel gave an impression of effective prevention in the aggregates industry. Manager Dr. Bettina Nickel and employee Phillip Tuschhoff explained actions in the medium-sized business employing 70 people producing one million tons of aggregates a year.

Nickel's iSiS-Initiative (“Always safe in the quarry”) aims to systematically improve occupational safety and health – sustainably. The campaign showed that only an approach combining technical improvement, communication, behaviour modification and aspects of organization proves to be a success.

From 2004 to 2011, the technical equipment was improved and organizational structures were modified. Aspects covered were the function of supervisors and co-workers as role-models in safety, the inclusion of OSH into work contracts and the quality management system and group-incentives basing on safety outcomes on site. The company also rewards employee's ideas successfully improving safety and health on the job.



In result, the frequency of accidents dropped significantly, and awareness for OSH has been improved throughout the workforce.

Phillip Tuschoff found particular recognition of the participants: prior to the workshop he conducted 45 interviews with co-workers to find out what aspects of the iSiS-initiative are considered to be most effective and sustainable. The staff pointed

out improved Personal Protective Equipment and intensified regular safety briefings; potential is seen in communication and collaboration.

A conclusion underlined by Bettina Nickel: "In the run of the campaign we found there is no end. Sustainable prevention has to be practiced by everyone. "Improving occupational safety and health remains a challenge!", said Mrs Nickel.

## Industry

### International cooperation to innovate: Designing the zero-impact mine of the future

**The I2Mine (Innovative Technologies and Concepts for the Intelligent Deep Mine of the Future) project marks the start of a series of activities designed to realise the concept of an invisible, zero-impact mine. It will concentrate on the development of technologies suitable for deep mining activities.**



The project will also encompass the development of new techniques for geological engineering methods and rock mechanics that will be demanded by deeper

mines and the new technology. The focus will be on selective exploitation by new sensor based systems for material recognition, boundary layer detection and sorting operations. Although the overall aim is to develop machinery as autonomous as possible, 100% remote operations will not be feasible. This means that health and safety issues and questions related to the working environment will also be addressed. In addition, the environmental implications and impacts will be taken into account.

The challenges for the minerals extractive industry are so large and numerous that comprehensive international cooperation is needed, both by the industry and wider society, in order to succeed. This is true not just for the technical challenges, but also for socio-economic and environmental ones. Working separately would lead to a slow development, something that is undesirable for both the mining industry and for the community. There is need for a new and modern vision for the whole industry based on a modern technical approach that encompasses all aspects of mining.

The project will be carried out by a consortium of 26 companies and academic institutions from 10 European countries led by LKAB from Sweden over a period of 4 years and is funded by the European Commission 7th Framework Programme.

## Toolbox

### A WHO-supported Website on Workers' Health Education

The Workers' Health Education website aims to provide a database of learning materials for safe and healthy work all over the world.



It collects, selects and organizes learning materials that are available on the Internet,

free of charge or for low prices, from non-profit organizations. In addition, it provides a forum where participants can ask the community for support for specific needs and share their own training materials, experiences, plans and programs. Everyone is invited to share learning materials through this initiative.

Workers' Health Education is an initiative of the Coronel Institute of Occupational Health Academic Medical Center of the University of Amsterdam, The Netherlands. The initiative is part of, and supported by the WHO Network of Collaborating Centers in Occupational Health. The official launch of the website took place at the 30th ICOH conference in Cancún, México, in March 2012.

@ [http://www.workershealtheducation.org/?utm\\_source=oshmail&utm\\_medium=email&utm\\_campaign=oshmail-126](http://www.workershealtheducation.org/?utm_source=oshmail&utm_medium=email&utm_campaign=oshmail-126)

## Toolbox

# Holistic HSE integration and improvements by incident analysis: full text versions of papers on ISSA Mining's website

Bernd Freibott, Technidata AG Germany, shared two papers with ISSA Mining and its readers.

The 2010 talk "Overcoming HSE integration challenges in process optimization and factors to be considered when implementing a successful EHS strategy" shows how the wide range of stakeholders coming into play can be taken into consider-

ation in deriving and implementing a clear and transparent EHS strategy for tangible improvements.

Sustainable Safety Management: Incident management as a cornerstone for a successful safety culture, presented in February 2012 at the 10th Professional Development Conference & Exhibition (PDC&E) of the American Society of Safety

Engineers – Middle East Chapter (ASSE-MEC) discusses how to best acquire knowledge on the organization's incident history beyond the standard and often regulation driven parameters and how to use this data to improve the level of prevention sustainably.

Both papers are available for download courtesy of Mr Freibott.

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## Overcoming HSE integration challenges in process optimization and factors to be considered when implementing a successful EHS strategy

### Abstract

The intricacy of EHS and its many functional areas means that a wide range of stakeholders come into play, each with their own set of objectives and functional expertise. And although the functional areas of EHS are to a certain extent separate, there is nonetheless a high degree of interdependency and interaction between them. In the same way, EHS in itself is also – by its very nature – very

closely integrated with the numerous different functional areas within an enterprise.

Consequently, when seeking to successfully implement an EHS Management System, it is essential to take into account every aspect of

the solution landscape as part of a holistic EHS strategy, from the very start.

Bernd Freibott: Overcoming HSE integration challenges in process optimization and factors to be considered when implementing a successful EHS strategy.



[http://www.issa.int/About-ISSA/Prevention-Sections/Section-on-Prevention-in-the-Mining-Industry/Files/2010\\_02\\_ASSE\\_BahrainConf\\_article.pdf](http://www.issa.int/About-ISSA/Prevention-Sections/Section-on-Prevention-in-the-Mining-Industry/Files/2010_02_ASSE_BahrainConf_article.pdf)

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## Sustainable Safety Management: Incident management as a cornerstone for a successful safety culture

### Abstract

Most managers agree that protecting people and the environment is all about prevention. But with today's tight budgets and cutbacks, the environmental and safety professions must choose wisely where to invest in prevention programs that will yield the best results. Knowing the details about your organization's incident history is one key component to improving and

maintaining low incident rates and their associated injuries, illnesses, and environmental releases. By regulation, most of us have to report our incidents in accordance with our region's regulatory processes, and the Environment, Health, and Safety (EHS) management systems do that very nicely. However, positive gains in efficiency and lower costs are gained by going beyond compliance to a

point where you are anticipating and intervening with any negative trends that a proactive modern EHS management system can help identify. Beyond environmental incidents and accidents, the term "incident management" implies that any observations about hazards or unsafe behaviors are reported and addressed before they become a costly incident.



Modern incident management and its applied tools must address various stakeholders with different perspectives, and varying degrees of computer proficiency. All stakeholders must be intuitively comfortable with the solution and find it easy to use for their purposes. The proc-

ess of incident management must also ensure that all data is provided, approved, and available for reporting. All corrective actions must be tracked, and escalations automatically delivered if they are overdue. A modern incident management system is the central communication

platform that provides the right tools and the right information for all the involved people and stakeholders. Bernd Freibott: Sustainable Safety Management: Incident management as a cornerstone for a successful safety culture.



[http://www.issa.int/About-ISSA/Prevention-Sections/Section-on-Prevention-in-the-Mining-Industry/Files/2012\\_02\\_ASSE\\_BahrainConf\\_article.pdf](http://www.issa.int/About-ISSA/Prevention-Sections/Section-on-Prevention-in-the-Mining-Industry/Files/2012_02_ASSE_BahrainConf_article.pdf)

## Toolbox

### Canada: ISSA Mining member introduces information document, offers online tool for selecting gloves for protection against mechanical hazards

A new information document published by the Institut de recherche Robert-Sauvé en santé et en sécurité du travail (IRSST) was designed for anyone who has to select protective gloves against mechanical hazards for occupational use. Its recommendations are also valid for personal and recreational activities, because it provides the information needed to help individuals

and organizations identify gloves that will protect them from mechanical hazards.

When hands are exposed to hazards, they must be protected and so in order to help prevent injuries, it is crucial to select the gloves that will provide appropriate protection against the potential hazards, and to use and clean them properly.



The online tool at [www.irsst.qc.ca/gloves](http://www.irsst.qc.ca/gloves) allows for easy selection of the sufficient models.



Professional selection is a crucial factor in protective gloves.

More specifically, the document provides general information on hands, laws and regulations dealing with hand protection, and on types of gloves, including the methods and materials used to manufacture them. It proposes steps for risk assessment and for the protective glove selection process that may be used in combination with the tool for selecting gloves available on the IRSST Web site at [www.irsst.qc.ca/gloves](http://www.irsst.qc.ca/gloves). An explanatory video is also provided. Moreover,

the document provides a list of risks and other considerations relevant to the selection of protective gloves, including a few situation scenarios. Lastly, it describes standard methods to measure glove resistance to mechanical hazards, as well as the glove performance levels used in the Web glove-selection tool, and suggests some avenues that could be explored in determining the levels required for each type of task.

@ To download the document: <http://www.irsst.qc.ca/-publication-irsst-document-information-selection-gants-de-protection-risques-mecaniques-rg-738.html>

The French version is available at: <http://www.irsst.qc.ca/-publication-irsst-document-d-information-pour-la-selection-des-gants-de-protection-contre-les-risques-mecaniques-rg-649.html>

## Research

### 2012 ISSA Mining Academic Award goes to Daniel Wagener



Bachelor student Daniel Wagener of German mining university "Technische Fachhochschule (TFH) Georg Agricola", State-Approved Private University of Applied Sciences received ISSA Mining's 2012 academic award from Dr Günter Levin, Technical Secretary of ISSA Mining.

ISSA Mining recognized Mr Wagener's Bachelor thesis on "Optimizing safety equipment" and awarded his work with 500 Euros.

Daniel Wagener, 2012 winner of the ISSA Mining Academic Award.

### Call for academic papers: Seeking new impulses from researchers!

ISSA Mining is interested in academic findings on occupational health and safety for the mining industry and other sectors. Are you working on a Bachelor or Master thesis shedding light on occupational safety and health? Submit it to us! Do you know of anyone having completed a thesis on this matter? Please make them aware of ISSA Mining's academic award of occupational safety and health. ISSA Mining will award selected papers with up to 1,000 Euros after a jury assessment.

Contact: [helmut.ehnes@bgrci.de](mailto:helmut.ehnes@bgrci.de)



## Research

### Leadership and Occupational Safety and Health (OSH): An Expert analysis

A new report, published by the European Agency for Safety and Health at Work, examines on 51 pages how good leadership practices can promote better occupational safety and health (OSH) behaviour amongst employees. It considers what are the necessary corporate leadership factors on which success depends. It does so by reviewing existing literature on OSH leadership. It also examines 16 detailed case studies from companies across the EU highlighting good practice, the type of activities that deliver achievements, innovative approaches, success factors and the role of stakeholders. In this report recommendations for improving OSH leadership are also made and explored.

@ Download at EU-OSHA's website:  
[https://osha.europa.eu/en/publications/literature\\_reviews/leadership-and-occupational-safety-and-health-osh-an-expert-analysis/view](https://osha.europa.eu/en/publications/literature_reviews/leadership-and-occupational-safety-and-health-osh-an-expert-analysis/view)



## Research

# Breakthrough change: IWH Canada finds and describes firms that make large OHS improvements

**What changes, why and who's driving the change in firms that make large improvements in workplace health and safety? Possible answers are coming from the first phase of an ongoing study at the Canadian Institute for Work & Health (IWH) that is exploring the process of "breakthrough change."**

Large improvements in health and safety can be driven by mid-level people within an organization, such as dedicated health and safety professionals or joint health and safety committee chairs.

"While senior management support is important, we are finding that large change is often not driven from the top down," says IWH Associate Scientist Lynda Robson, the lead researcher on the study. "An internal OHS advocate can be the driving force. This is exciting, because it widens the possibility of who can be the change agents in organizations."

### Study explores change in OHS performance

Research has identified the characteristics of firms that perform poorly

To do this, Robson first had to find workplaces that had undergone "breakthrough change" (BTC), which the study defines as large, intentional, firm-level improvement in the prevention of injury or illness. She and her team devised a method that she hopes will prove useful to other researchers and health and safety professionals and policy-makers in Ontario and beyond.

Working with two health and safety associations that made initial contact with potential BTC firms (Workplace Safety and Prevention Services and Public Services Health and Safety Association), Robson was able to gather information on 12 firms that, according to her definition, had undergone BTC during the period from 1998 to 2008. She presented these findings from the first phase of the study in June at the Canadian Association for Research on Work and Health conference.

Based on these 12 firms, this is what the research is showing so far about the characteristics of BTC organizations.

Multiple interventions are necessary. In all cases, the organizations introduced six to 12 distinct changes that contributed to their improvement. This, says Robson, confirms that there are no "magic bullets" when it comes to improving OHS. "This isn't surprising, given the complex nature of workplaces," she adds. "The workplace is a system. You can't expect to change only one part and affect outcomes system-wide." Among the changes made by these



Safe equipment is one of many essential elements for improving workplace health and safety.

This is one of the early results emerging from an ongoing study at the Institute for Work & Health (IWH) that is exploring "breakthrough change" – i.e. how workplaces go from being not-so-good to good performers on the occupational health and safety (OHS) front.

or extremely well with respect to work-related injury and illness prevention, but it hasn't shown what it takes to go from one to the other. "We wanted to explore one way of filling this research gap and focus on the change process," says Robson.

BTC firms, the following were the most common:

- improved OHS education and training;
- additional OHS personnel through hiring or reassignment;
- new or upgraded workplace equipment, tools and/or machinery;
- enhanced hazard identification;
- more active joint health and safety committee (JHSC);
- new/enhanced return-to-work program;
- increased use of external expertise;
- enhanced OHS policies and/or procedures; and
- improved OHS information systems and reporting.

The prevention system can instigate change. As for the push behind the change, the most common reason

(mentioned by one third) was an intervention from Ontario's prevention system (e.g. Ministry of Labour enforcement, Workplace Safety and Insurance Board Workwell audit, health and safety association outreach).

A mid-level OHS advocate can drive change internally. When asked to explain who was behind the change within the organization, only a sixth pointed to senior management. Most (one third) said it was an internal advocate, such as an OHS manager or worker JHSC co-chair; the rest were unsure.


"Senior management needs to allow people to spend time on health and safety, or support equipment purchases or program changes suggested," says Robson. "But it doesn't look like senior management has to drive the change. It looks like

an internal advocate at the mid-level can make a lot of difference."

### The "how" of change up next

As part of the same study, Robson and her team took a close look at four BTC firms, digging deep into not only what changed and why, but also how. Findings from this second phase of the study are currently being compiled and will be ready to share in early 2013. Watch for more in a future At Work.

Source: At Work, Issue 70, Fall 2012: Institute for Work & Health, Toronto

 <http://www.iwh.on.ca/at-work/70/break-through-change-finding-and-describing-firms-that-make-large-ohs-improvements>

## Research

### IWH Canada: Study finds persistence of higher injury risk for new workers

The Canadian Institute for Work & Health introduces a study examining the risks of this vulnerable group.

We know that newly hired workers face a higher injury rate. Recent research from the Institute for Work & Health finds that the higher risk of work injury among new workers has persisted over the past ten years. This suggests workplaces need to do more to ensure new workers get the training and supervision they need to stay safe on the job.

While lost-time claim (LTC) rates for work injury and illness in Ontario have been declining, workers new

to a job remain at much higher risk of a lost-time injury than is the case for more experienced workers. This is the finding of recent research from the Institute for Work & Health (IWH), which underscores the importance of workplaces paying particular attention when any worker is new in the job.

"The higher injury rate among new workers is a persistent problem," says IWH Scientist Dr. Curtis Breslin, who led the research and co-authored the related paper that's currently under review by the journal Occupational and Environmental Medicine (OEM).

### Study provides decade-long review

This research is the first to examine work injury risk by job tenure over a time period during which overall claim rates generally declined. It is an extension of earlier work completed in 2006 by Breslin and fellow IWH Scientist Dr. Peter Smith, which formed the basis of an OEM article (vol. 63, no. 1, pp. 27-32) with the memorable title "Trial by fire." That article examined the relationship between job tenure and work injuries, and showed that workers in their first month on the job had much higher LTC rates than



workers with more than one year in the job.

The current study extended the research by describing the association between job tenure and work injury over a decade (1999 to 2008). Researchers used Ontario's Workplace Safety and Insurance Board LTC records, and calculated claim rates per 1,000 full-time equivalents.

IWH Coordinator of Research Operations Sara Morassaei, who is lead author of the paper that's currently being reviewed at OEM, points out an important distinction between the two studies: "The 'Trial by fire' research was a snapshot at one point in time, while this new research tells us what's happened over a 10-year period."

### **Risk highest first month in the job**

The new research gives rise to two main findings:

Over a 10-year period, the risk of work injury for workers with shorter job tenure has consistently remained higher compared to those employed at a job for more than one year. Risk is particularly elevat-

ed among those in the first month on the job, with over three times the risk of a lost-time injury as workers with over a year's job experience. The risk of work injuries among new workers is greater among older workers, men and those in the goods sector, which includes construction and manufacturing, among others.

The age-based findings are striking, says Breslin. While all workers in their first month have elevated injury risk, the risk of a lost-time injury is highest among workers over 45 years of age compared to all other age groups. Indeed, youth injury rates have been converging with adult rates (see *At Work*, Fall 2011). "The key risk factor is newness, not youth," says Breslin.

New workers may be at greater risk on the job due to a number of things, including a lack of job experience and inadequate safety training, Breslin says. And contemporary work trends are exacerbating the problem. "The growth of precarious forms

of work means more temporary employment, a higher proportion of workers with shorter job tenure, and higher rates of job turnover," he says. "If frequent job changing continually puts a worker at high risk, then job turnover becomes a potential health and safety issue."

### **Prevention activities and training will help**

So how do we help newly hired workers? "Developing effective safety management systems may help," says Morassaei. "Prevention activities should involve employers creating strategies at an organizational level."

Researchers also suggest promoting policies and practices that reduce job turnover, encourage permanent employment and improve job security. They also propose increasing new workers' knowledge of their workplace by ensuring that they get proper safety training and supervision.



**Source: At Work, Issue 69, Summer 2012:  
Institute for Work & Health, Toronto**

<http://www.issa.int/%20http://www.iwh.on.ca/at-work/69/study-finds-persistence-of-higher-injury-risk-for-new-workers>

## **Research**

## **Prevention Pays! Proven.**

### **European Commission introduces facts on the economic benefits of prevention**

Approximately 6.9 million workers in Europe are victims of an accident at work every year and 23 million persons report a work-related health problem. This results in high absenteeism with around 450 mil-

lion calendar days of sick leave and lost productivity. The loss in quality of life that results from work-related health problems and accidents at work is the price paid by workers. The more effective prevention at company can save billions of Euros that the European economy loses every year in absenteeism due to work related accident and ill-health

and associated health care and state benefits.

The burden of accidents at work and work-related ill health falls on workers, employers and the society as a whole. Employers are key decision-makers in the field of practical implementation of occupational safety and health risk management meas-

ures. It is important to convey the fact that the effective prevention of risks and development of safe working conditions may not only save lives and help to avoid work-related health problems, but also result in reduced costs at company level.

In order to enable employers, authorities and all those involved in prevention of accidents at work and work-related ill health to get an overview of how prevention pays back, a study

was conducted on the initiative of the European Commission to analyse at the company level the incremental benefit that may be realised if prevention measures permitting to avoid the accidents and work-related ill-health are undertaken. The study report sheds light on costs and benefits of effective health and safety management. The report includes case studies conducted in companies in different sectors which provide a valuable insight into the use of cost-benefit

analysis at company level. The report is accompanied by a publication presenting the key messages illustrated by case studies.



The report and the publication are available on the European Commission's web site:  
<http://ec.europa.eu/social/main.jsp?catId=716&langId=en&intPageId=1716>

## Research

### IWH Canada: Training promotes safer practices

**A systematic review led by the Institute for Work & Health shows that training positively influences worker practices, making it an important part of multi-component health and safety programs.**

A systematic review of the effectiveness of occupational health and safety (OHS) training conducted by the Institute for Work & Health (IWH) was selected as the "editor's pick" in a recent issue of the *Scandinavian Journal of Work, Environment and Health* (vol. 38, no. 3, pp. 193-208). That means readers can access the full journal article for free.

The review, covered in an earlier issue of *At Work* (Winter 2010), concluded that health and safety training promotes safer practices among workers and, as such, should be delivered by workplaces as part of a larger OHS program. On its own, however, training will not necessarily prevent injuries and illnesses.

This makes sense, says IWH Associate Scientist Dr. Lynda Robson, who led the review: "Workplaces are com-

plex systems. You can't just change one part of a system and expect to have a large impact. Other components need to be working toward the same goal; in this case, preventing workplace injuries and illnesses."

Conducted in partnership with the American National Institute for Occupational Safety and Health (NIOSH), the systematic review assessed relevant studies of sufficient quality to determine the impact of training in four areas: knowledge, attitudes/beliefs, behaviours and health (the latter referring to the absence of workplace injuries, illnesses and early symptoms).

The review team found strong evidence that training is effective in changing behaviours or practices. There were not enough studies of sufficient quality to conclude that training affects knowledge or attitudes/beliefs. However, in the few studies that were included, the evidence points toward training being effective in both of these areas. With respect to health, the review team could not say OHS training

has an effect. The studies were inconsistent in their findings about effectiveness, and the effects found were small.

The study confirms a message that has been emerging from other IWH systematic reviews: that multi-component programs are the key to effective prevention. As Robson puts it, "You can educate people to sit properly in order to reduce musculoskeletal disorders, but if they're sitting on a wooden stool or at a poorly designed workstation, there's only so much the education can achieve." Hazard elimination and reduction must work hand in hand with training to fully protect workers' health, she adds.



To read the article, go to:  
<http://dx.doi.org/10.5271/sjweh.3259>.

Source:

*At Work*, Issue 69, Summer 2012:  
Institute for Work & Health, Toronto  
<https://www.iwh.on.ca/at-work/69/training-promotes-safer-practices>



## Research

### France: OSEV calculator simplifies vibration risk assessment for vehicle operators

Construction, transport and handling machinery subjects operators to vibrations that can cause low back pain. In order to provide assistance to companies that use such vibrating vehicles with preventing these risks, French research institute INRS and the prevention network have developed an interactive tool, OSEV, associated with a good practice guide reports French institute INRS in its March Newsletter. The easy-to-use application is intended in particular for small- and medium-sized companies. It does not require any

exposure measurements or detailed knowledge in assessment. The OSEV calculator, which draws on a database containing about a thousand in situ measurements, determines the daily exposure depending on the type of vehicle and how it is used. The results are then compared to limit values defined by European Directive 2002/44/EC. Lastly, prevention advice adapted to the vehicle category is offered to employees and business managers. INRS is pursuing work to adapt this calculator to hand-arm vibration caused by

hand-held portable power tools. A database which will eventually serve as a basis is being developed. INRS has contacted its counterparts in Switzerland (SUVA) and Germany (IFA) with a view to possibly pooling their respective databases. For more information about OSEV (in French only): [http://webistm.com/bvt2011/output\\_directory/cdl/data/articles/000051.pdf](http://webistm.com/bvt2011/output_directory/cdl/data/articles/000051.pdf)



INRS website:  
<http://www.inrs.fr/>

## People in Mining & Safety

### Canada: Mine Rescuer saves child's life while on vacation

Dan Gagnon received the Ontario Mine Rescue Distinguished Action Award from Tim Maloney of Vale, and Candys Ballanger-Michaud, president and chief executive officer of Workplace Safety North. Gagnon, a mine rescuer from Vale's Garson Mine, performed CPR and mouth-to-mouth resuscitation to save a three-year-old child while on vacation near Kapuskasing in June 2010. He is only the third recipient of the award, first given in 2006 and intended for any mine rescuer who saves a life under any circumstances.

Courtesy of Mine Rescue Newsletter, published by Workplace Safety North (WSN), Ontario, Canada.



From left: Tim Maloney of Vale, Dan Gagnon, Candys Ballanger-Michaud, president and chief executive officer of Workplace Safety North.

## People in Mining & Safety

# Tony Forster chief inspector of mines in New Zealand after Pike River Mine disaster



New Zealand Labour Minister Kate Wilkinson appointed Tony Forster as Chief Inspector for mines in the Ministry of Business, Innovation and Employment's High Hazards Unit.

Tony Forster, formerly the principal inspector of mines in the UK, took up his new role in January 2013 leading the Ministry's health and safety regulatory work in relation to mines including both underground and opencast and heading a team of four specialist inspectors.

"This is a significant appointment for the High Hazards Unit. It is the result of an international search to find the best person from a very small pool of candidates," states Labour Minister Kate Wilkinson; "We are very pleased to have someone of Mr Forster's calibre in this role."

Tony Forster has been appointed in the wake of the Pike River Mine disaster, a coal mining accident that began on 19 November 2010 in the Pike River Mine in the West Coast Region of New Zealand's South Island, in which four explosions within ten days left 29 miners and contractors dead and two injured.

His 40 years experience in the mining industry includes being an active member of a Mines Rescue Team for 14 years, taking part in several underground rescue and recovery operations. He has deputised as the United Kingdom's HM Chief Inspector of Mines and is currently HM Principal Inspector of Mines. Mr Forster holds a Master of Science in Occupational Safety and Health and is a chartered Mining Engineer, a fellow of the Institute of Materials, Minerals and Mining and

a member of the Institute of Mining Engineers Technical Committee. He is the chief adviser to the UK Health and Safety Executive on mines rescue and emergency planning, is a Board Member of the International Mines Rescue Body (IMRB) and is a Principal Judge at International Mines Rescue competitions.

"Without doubt his experience and knowledge will be a valuable asset to New Zealand's Inspectorate and he will help reshape regulatory requirements.", comments Alex Gryska, Manager Ontario Mine Rescue and Secretary Treasurer IMRB on Mr Foster's new role.



<http://www.beehive.govt.nz/release/chief-inspector-mines-appointed>



## News by other ISSA Prevention Sections

# Hazard Evaluation and Risk Assessment in Process Safety

### New brochure by ISSA Chemistry describes proven methods

Design and failure tolerance are crucial factors for the safety of a process plant. For this reason, risk assessment has to take conceptual faults, technical failures and human error into consideration. The brochure "Hazard Evaluation and Risk Assessment in Process Safety"

describes a selection of methods, variants and combinations as utilized in various businesses in the frame of such evaluations. The discussed examples serve as a practice oriented aid for the selection and application of systematic methods. The individual sections have been edited by experts looking back on many years of experience or who have developed the relevant method.

The brochure (German only) is available for the price of 18 Euros at ISSA Chemistry, c/o BG RCI, Kurfürsten Anlage 62, 69115 Heidelberg, Germany, Tel +49 6221 5108-0 or E-Mail [niels.schurreit@bgrci.de](mailto:niels.schurreit@bgrci.de)



## More events for the Mining Industry

bc India - International Trade Fair for Construction Machinery, Building Material Machines, Mining Machines and Construction Vehicles	05. - 08.02.2013	Mumbai, India
IOSH 2013 Conference Health and safety: Fit for the future	26. - 27.02.2013	ExCeL London
VITÓRIA 2013 Stone Fair	26.02. - 01.03.2013	Rodovia do Contorno - BR 101 Norte - Carapina - Serra - ES - Brasil
13th China Xiamen International Stone Fair	06. - 09.03.2013	Xiamen, China
Asia Mining Congress 2013	12. - 15.03.2013	Marina Bay Sands, Singapore
2nd Annual LatAm International Mining Conference	13. - 14.03.2013	Rio de Janeiro
2nd Annual Global Human Asset Expansion In Mining	19. - 20.03.2013	London, United Kingdom
bauma 2013	15. - 21.04.2013	Munich, Germany
23rd International Mining Congress and Exhibition of Turkey	16. - 19.04.2013	Antalya, Turkey
37th International Colloquium on Prevention of Occupational Risks in Agriculture	28.04. - 1.5. 2013	Munich-Erding, Germany
ConBuild Mining Indonesia 2013	15. - 18.05.2013	Jakarta, Indonesia
XI International Forum on Industrial Safety	27. - 30.05.2013	Saint Petersburg, Russia
2nd Annual Global Sustainable Mining Summit	28. - 29.05.2013	Toronto, Canada
International Seminar SME of the ISSA in the frame of Forum Prevention 2013	4.06.2013	Vienna, Austria
EPICOH 2013 - The 23rd International Conference on Epidemiology in Occupational Health	18. - 21.06.2013	Utrecht, The Netherlands

## More events for the Mining Industry

6th Annual Central Asia Mining Congress	18. - 21.06.2013	Almaty, Kazakhstan
Vietnam International Construction & Building Exhibition 2013 (VICB 2013)	18. - 20.06.2013	Ho Chi Minh City, Vietnam
Perumin	11. - 16.08.2013	Lima, Peru
23rd World Mining Congress & Expo	11. - 15.08.2013	Montréal, Canada
4th Annual Global Mining Technology Forum	18. - 19.09.2013	Johannesburg, South Africa
bauma Africa 2013	18. - 21.09.2013	Johannesburg, South Africa
Inhaled Particles XI (IPXI),	23. - 25. 09.2013	Nottingham, UK
Sharing Vision / Sharing Knowledge: Sixth biennial conference of the Inter- national Mines Rescue Body (IMRB)	05. - 10.10.2013	Niagara Falls, Canada
35th International Conference of Safety in Mines Research Institutes	15. - 17.10.2013	London, UK
2nd International Conference on Stone and Concrete Machining (ICSCM) Dort- mund, November 14th/15th, 2013	14. - 15.11.2013	Dortmund, Germany
Copper 2013 International Conference	01. - 04.12.2013	Santiago, Chile
Expomin Chile 2014	21.- 25.04.2014	Santiago, Chile
XX World Congress on Safety and Health at Work 2014	24. - 27.08.2014	Frankfurt am Main, Germany

Updated list on [www.issa.int/prevention-mining](http://www.issa.int/prevention-mining)



Preview

## Read in the next issue of ISSA Mining's newsletter:

### ISSA Mining and Turkish Ministry of Labour and Social Security sign MoU

Theodor Bülhoff and Helmut Ehnes signed a Memorandum of Understanding with the Turkish Ministry of Labour to form a sound base for future collaboration on occupational safety and health in mining. While in Turkey, the ISSA Mining board members also gladly welcomed Turkish lignite producer Türkiye Kömür İşletmeleri Kurumu as a valued new member.



### Board decides on enhanced structure, ties contacts to African miners

ISSA Mining has been growing significantly over the last years and widened its network, its scope, and its projects. During the board meeting in Cape Town 14 January, a new structure has been decided upon, allowing ISSA Mining to work more efficiently. The

members of the board also seized the opportunity to tie promising contacts with the Uranium Institute in Swakopsmund, Namibia, the Health & Safety Department of Labour in South Africa and the Mine Rescue Service in Carletonville together with Dräger.

### ISSA Mining in joint international workshop on hazardous work in Vietnam

ISSA Mining will host the International "Workshop on Strengthening National Occupational Safety and Health System in Hazardous work" together with the Ministry of Labour- Invalids and Social Affairs, Vietnam, the International Labour Organization and ASEAN-OSHNET, running 14 - 15 March 2013. The delegates will also attend the opening ceremony of Vietnam's National Safety Week on Sunday, 17 March and visit regional enterprises.



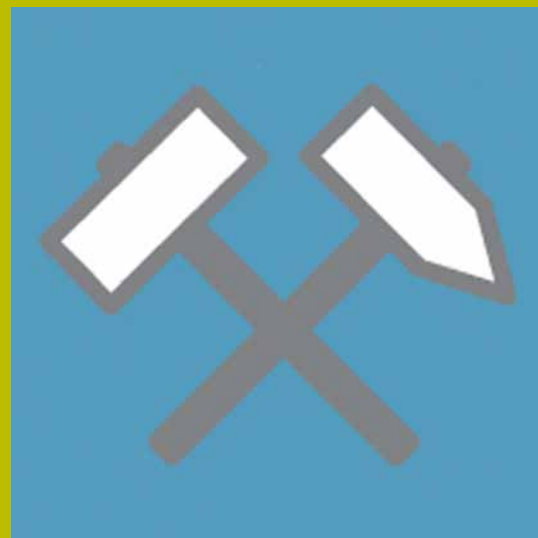
## New members

ISSA Mining gladly welcomes its new members

- **RAG Mining Solutions GmbH**, Herne, Germany
- **Fluid-Competence GmbH**, Dinslaken, Germany
- **Türkiye Kömür İşletmeleri Kurumu (TKİ)**, Ankara, Turkey
- **Mutual de Seguridad C.Ch.C**, Santiago, Chile

and the expert members

- **Herry Permana M.Sc.**, Jakarta Selatan 12870, Indonesia
- **Patrick Ndjom**, Montréal, Canada
- **Nevzat Bagli**, Gladbeck, Germany
- **Chetan Garg**, Madhya Pradesh, India



## Up-to-date, versatile and always available: ISSA Mining on the Web

What is the impact of nanotechnology healthwise? How can I reduce the risks arising from heavy equipment? How do we face the challenges of competently and safely integrating miners? And where does standardization of respiratory protective devices go? ISSA Mining's website spans these and many other topics, brought to you by ISSA

Mining experts and by courtesy of specialists of related associations and institutes.

ISSA Mining's website is continuously updated and tells about latest events in both OSH and the mining industry.

Just one click away:  
[www.issa.int/prevention-mining](http://www.issa.int/prevention-mining)

## Not a member of ISSA Mining yet?

Join ISSA Mining and...

- ... Give input to global decisions in OSH politics for mining
- ... Show your commitment to occupational safety & health
- ... Prove Corporate Social Responsibility (CSR)
- ... Play an active role in setting standards and recommendations
- ... Get in contact with the leading non-profit organisations for OSH
- ... Be part of an independent international network
- ... Get in touch with key players, suppliers and experts
- ... Get involved in international events, congresses and workshops
- ... Get advice on the Section's topics
- ... Directly link with the International Labour Organization (ILO)

Your link to membership: [www.issa.int/prevention-mining](http://www.issa.int/prevention-mining)

## ISSA Mining Newsletter

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