

**IUPAC Committee on Chemistry & Industry
Safety Training Program**

**Safety Training Workshop
“Global Chemical Safety and Sustainability”
San Juan, Puerto Rico 1 August 2011**

Biographies

Dr. Iwona Maciejowska

Vice Chair for Eastern Europe, EuCheMS, Faculty of Chemistry, Jagiellonian University, Krakow
Poland

- Ph.D. in chemistry, Jagiellonian University, 2000, specialization: coordination chemistry, kinetics, photochemistry
- Assistant Professor at the Department of Chemical Education,
- involved in many international projects e.g. Tempus (STEP, NET, EXPAND), Leonardo da Vinci (CHLASTS - Chemical Laboratory Safety Training System, FACE - Forum for Advancing Chemical Education, SOLID - Solid Phase Chemistry), Socrates-Comenius (CITIES - Chemistry and Industry for Teachers in European Schools), EC2T2N (**European Chemistry and Chemical Engineering Education Network**), FP 7 ESTABLISH,
- Vice-president of Division of Chemical Education EuCheMS (since 2007),
- Member of International Advisory Board ‘Chemical Education Research & Practice’ journal and Gamtamokslinis ugdymas/Natural Science Education
- Author and co-author of many educational publications and materials for teachers:
I.Maciejowska, Safety issues in Polish Chemistry textbooks, Educacio Quimica, 5 (2010), 46-54

Ms. Maria I. Rivera

Sr. Safety Specialist, Pfizer Global Supply - Puerto Rico Operations, Vega Baja, PR 00694

Maria I. Rivera has over 12 years of professional EHS experience. She joined Pfizer in 2001 as Industrial Hygienist for Pfizer Vega Baja operations. She has also experience as industrial hygiene technician for Lead and Asbestos abatement projects. In 2009, she was appointed as Sr. Safety Specialist. Besides, she has had special assignments handling environmental compliance programs within Pfizer. Maria holds a Bachelor’s degree in Environmental Sciences from the University of Puerto Rico, Rio Piedras Campus and a Master Degree on Industrial Hygiene from University of Puerto Rico, School of Public Health Medical Sciences Campus, located in San Juan. Maria is an OSHA Outreach trainer for General Industry. Maria’s main career focus has been the identification of occupational health hazards such as chemical, physical, biological and ergonomics, using the fundamental principles of anticipation, recognition, evaluation, control following applicable laws and regulations within the occupational safety and health field. Since 2001 Maria has been responsible to manage the Pfizer Vega Baja Laboratory Safety Program. This program has obtained internal recognition for its excellent safety and health performance within a continuous improvement environment, which includes six sigma tools for the evaluation of EHS aspects.

Dr. Bernard West

WestWorks Consulting Ltd. Toronto, ON, Canada

Bernard West holds a BSc and a PhD in chemical engineering from the University of Manchester where he also taught for 6 years. In 2008 he was President and CEO of CANSOLV Technologies of Montreal, and was previously President and COO, Canada Colors and Chemicals Limited. Prior to that, he had 30 years of experience in the chemical industry with Rhone-Poulenc, Imperial Oil [Esso] and Polymer Corporation.

Bernard has also been very active in industry associations and industry-government bodies; member of the Board of the Canada's Chemical Producers Association (Chair 1995–1997), Chair of The Chemical Institute of Canada, Chair of the Society of Chemical Industry–Canadian Section, member of the Board of the National Association of Chemical Distributors (Washington, D.C.)

He is currently: Chair of the Board of Ontario BioAuto Council, Co-Chair of the Sustainable Chemistry Alliance, Co-Chair of the Canadian Green Chemistry and Engineering Network, and Chair of the Advisory Board of the Institute for Chemical Process and Environmental Technologies in the National Research Council of Canada. He also an associate member of the IUPAC Committee on Chemical Industry representing Canada

Dr. Nancy B. Jackson

Nancy is manager of the International Chemical Threat Reduction Department in the Global Security Center at Sandia National Laboratories which assists the U.S. Department of State and other federal agencies in solving problems related to international chemical security. With the U.S. Department of State, Dr. Jackson has developed the Chemical Security Engagement Program an international program to raise awareness of chemical safety and security among chemical professionals and to enable the practice of safety and security in the research, teaching, and commerce of chemicals. Previously, Dr. Jackson was deputy director of Sandia's International Security Program where she assisted the director in fulfilling its mission to create technology-based solutions through international cooperation to reduce the threat of weapons of mass destruction proliferation and terrorism. During the past four years, Dr. Jackson was responsible for leading the Laboratory Directed Research and Development program for Global Security which requires identifying and overseeing the research program in support of Global Security. Prior to her positions in Global Security, Dr. Jackson was involved in research and development at Sandia, as a principal investigator and a manager. Primarily her research was in heterogeneous catalysis with an emphasis on energy applications. Later work involved chemical imaging with a wide variety of applications from biological systems to homeland defense problems.

Dr. Jackson has a B.S. degree in chemistry from George Washington University from which she won a Distinguished Alumni Achievement Award in 2005 and has a Ph.D. in chemical engineering from the University of Texas at Austin.

Dr. Jackson is a National Affiliate of the National Academies where she has served on several boards and chaired studies. Dr. Jackson is a Fellow of the American Association for the Advancement of Science and was recipient of the 2005 American Indian Science and Engineering Society Professional of the Year Award. Dr. Jackson was a member of the Board of Trustees of Rocky Mountain College and is a Research Associate Professor at the Chemical and Nuclear Engineering Department of the University of New Mexico. In 2009, she was elected to the Presidential succession of the American Chemical Society. She served as President-Elect for 2010, serves as President for 2011, and will serve as Immediate Past President in 2012.

Mr. T.C. Gwaza

Shell Petroleum Development Company, Port Harcourt, Nigeria.

The dependence on energy has put more pressure on Oil and Gas production, hence the need for best safety practices cannot be over emphasized. As an IUPAC-UNESCO-UNIDO safety fellow, I have continued to add value and influence safety at my place of work and community.

My fellowship at Sasol Chemical Industries in South Africa focused on the aspects of responsible care and integrated approach for Safety Health and Environment, Occupational Hygiene, Process safety management, Material Safety Data Sheets (MSDS), Hazard Identification and Risk Assessment.

Current Projects /Programs include:

- Sharing Process safety best practices and learning's from Process Safety Incidents, aimed at reaching out to Production Process staff.
- Facilitating website and chat forum aimed at reviewing process safety initiatives with peers towards maintenance of safe work environment.
- Developed and delivered Hazardous Area classification awareness training modules for staff working at High risk facilities with potential for explosions.
- Sustained sharing of Learning's from Incidents across staff and Contractors involved with Production operations activities.
- Community outreach programs aimed at creating awareness on domestic and Road transport safety.

Production facilities in the Oil & Gas Industries have a lot of process Hazards. Process safety initiatives, Safety campaigns and implementation of structured Safety Management Systems using some of the programs highlighted has proved valuable in creating good safety culture at work and some of the activities have positively impacted communities outside my immediate work environment. Results: Reduction of Number of Incidents and improved Safety culture.

Mr. Godfred A. Nyarko

Tema Lube Oil Company Limited, PMB, Tema, Ghana

Some organisations see Health, Safety and Environmental (HSE) management as a purely commercial exercise and, apart from a commitment to achieving an HSE management system, there is little support for HSE initiatives. This can make HSE practitioners develop a “why should I bother?” attitude towards its management success. However, it takes leadership to be visible and strong workforce participation to build and sustain a successful HSE culture. And these Visible Leadership and Workforce Participation are the two pillars that drive the workplace HSE excellence.

Though there are many challenges to ensuring a positive HSE culture at the workplace, a culture where HSE awareness stands paramount and workers and other stakeholders are empowered to prevent unsafe acts, even if lines of commands are crossed, zero incidents become a reality.

Among the HSE initiatives taken which have yielded excellent HSE performance at the workplace, communities and other stakeholders included:

- Establishing and organising annual chemical safety training for laboratory staff and HSE training for the company's contractors.

- Instituting Potential Incidents Reporting Award Scheme to encourage staff to identify and report potential hazards as a step to controlling the possible risks involved, and which is being replicated at other organisations in Ghana.
- Establishing the company's Emergency Brigade responsible for all incidentals.
- Developing and updating the company's HSE Operational and Legal/Regulations Requirements documents.
- Co-ordinating the company's ISO 14001 (EMS) Certification Program (2009- 2010).
- Promoting organisation-wide weekly HSE Toolbox Talks Program, and whose materials are also being used at some Churches for congregational education on HSE.

Prof. Fabian Benzo

Unidad Academica de Seguridad, Facultad de Quimica, Universidad de la Republica, Montevideo, Uruguay

- Had training in Japan.
- Surfactants, powders safety issues.
- Currently have industry and university involvements.
- Uruguayan chemical company.
- University exposure to 3000 students.
- Works with Aldo in school of Engineering
- Issues of protection versus prevention.
- Developing Uruguayan Regional focal point for international training.

Ms. Esma Toprak

Chief Chemical Engineer in the Department of Chemical Engineering, Boğaziçi University, Istanbul, Turkey.

Education, Regulation, Cooperation: Working conditions, insufficient education, non-strict OH&S laws, weak cooperation between government and educational systems have major and direct impact on the health of workers. Each year almost 300 million work related accidents occur, mostly in developing countries. The key objective of social security is "The preservation of every human health".

Education: Work-related accident rates are higher at the uneducated areas, slums, small-sized enterprises. OH&S Specialists, TCA, Non-profit organizations, voluntary university students; visiting companies, schools, homes (Door to Door OH&S), distributing printed materials, using the advantage of IYC, case studies such as "Working woman in Chemical industries", "Dilovası Industrial Zone". Feedback: Surveillance reports, questionnaires, graphics, Responsible Care: TCMAP

Regulation: OH&S practices are still embryonic in Turkey. Intensive effort is spent for upgrading OH&SM. Sanctions, penalties are increasing, preventive measures against earthquake probabilities, such as strengthening government buildings as well as private

Cooperation: Between Turkish Ministry of Labour and Social Security and Turkish Ministry of Education: Projects for developing educational materials and integrating them into the curriculum to develop social security awareness. Occupational Health examinations at worksite to reduce absenteeism and increase productivity.

Turkish authorities are working intensively to reach Global Chemical Safety and Sustainability, following the mentioned pathway.