

Zsuzsanna Gyenes, PhD

Deputy to the Director
IChemE Safety Centre

Education

Technical University of Budapest Faculty of Chemical Engineering, Budapest, Hungary

(September 1994 – June 2000)

MSc in Biochemical Engineering - good

Title of the thesis:

Determination of the amount of carbon sources to denitrify in waste water

Denitrifikálható szénforrás mennyiségének meghatározása

Corvinus University, Faculty of Environmental Protection Public Administration, Budapest, Hungary

(September 2002 – June 2004)

Postgraduate Diploma as Environmental Public Administrator

Miklós Zrínyi - National Defence PhD Institution in Military Technology, Budapest, Hungary

(September 2003 – May 2008)

PhD in Military Technological Science – cum laude

Title of the dissertation:

Development of procedures and tools for the improvement of industrial safety against external effects

Az ipari biztonságot szolgáló eljárás- és eszközrendszer fejlesztése a külsőhatások elleni védekezésben

Liverpool John Moores University, online

(March 2017 – May 2018)

Postgraduate Certificate in Risk and Safety management

Key Skills

- Major accidents analysis and lessons learned
- Risk Assessment and knowledge of risk assessment software system (SAFETI, PHAST, TNO), bow-tie diagram, Hazard Identification, TRIPOD Beta
- Process Safety Management System, Common Inspection Criteria, Land-Use Planning and Emergency Management/Response
- Seveso Site Inspection
- Major Accident Database Administration
- Analysis of accidents and extract lessons learned
- Management of Technical Working Groups and Research Projects

- Strategic thinking and research
- At least five years of experience in working with international organisations such as the OECD, UNECE, DG ENV, DG ECHO, IChemE, EPSC and CCPS and working in a multi-cultural environment
- Networking with European and OECD countries' competent authorities and process safety experts
- Promoting process safety products, writing process safety related publications, technical reports, provide trainings

Employment History

Deputy to the Director, IChemE Safety Centre (ISC), Rugby, UK

(September 2017 –)

Achievements and responsibilities:

- Supporting ISC members in Europe, UK and the Middle East.
- Working with IChemE and ISC member company staff to define, plan and implement agreed process safety work programmes.
- Managing the ISC technical working group on leading metrics to ensure they deliver outcomes in a timely manner, as well as managing external specialist resources as part of delivering activities where required.
- Co-authoring and running the ISC Six pillars of Process Safety webinar series
- Authoring the ISC Safety Lore document on learning from major incidents
- Contributing to the forward planning and strategy for the ISC.
- Acting as an internal specialist and advocate for process safety related issues.
- Promoting process safety products and services.

Scientific Technical Officer in Research, European Commission Joint Research Centre, Ispra, Italy

(January 2012 – August 2017)

Achievements and responsibilities:

- With the support of Member States' collection of data of failure frequencies, development of a handbook as a tool for candidate countries in order to help them to develop their own land-use planning policy
- Regular publication, on a semi-annual basis of the Lessons Learned Bulletin on Chemical Accident Prevention & Preparedness and Common Inspection Criteria (<https://minerva.jrc.ec.europa.eu/en/content/minerva/f30d9006-41d0-46d1-bf43-e033d2f5a9cd/publications>)
- Being involved in a multi-annual capacity building project with the DG ECHO on Strengthening Chemical Accident Prevention and Preparedness in European Neighbour Countries (Africa and East Europe)
- Co-author of many of the Seveso Inspection Series, reports of the Mutual Joint Visits Working Group of Seveso Inspectors
- Responsible for the analysis of major accident reports within the OECD Working Group on Chemical Accidents' project on ageing of installations
- Analysis of lessons learned from major accidents via data from eMARS database
- Development of future studies on the issue together the TWG Focal Point
- Carrying out a survey on the issue of industrial parks and domino effects in order to develop new inspection techniques
- Providing training on Land-Use Planning around Seveso sites in Lithuania
- Within the collaboration with the UNECE, providing training in FYROM Skopje on inspection and evaluation of safety reports
- Providing on-site inspection and training in Croatia at INA (MOL)

- Consulting and completing major incidents remediation plans for Hungarian sites
- Working on consequence analysis via DNV PHAST and TNO EFFECTS software
- Working with TRIPOD Beta accident analysis tool – certified user
- Participating in testing the so-called ADAM consequence assessment tool developed by the Major Accident Hazards Bureau
- Preparing the Seveso translation table for ECHA C&L Inventory Database
- Administrator of the major accident reporting database eMARS.

Head of Section for Nuclear Safety, National Directorate General for Disaster Management, Budapest, Hungary

(January 2011 – December 2011)

Achievements and responsibilities:

Nuclear:

- Data interchanging with the relevant nuclear authorities; assessing data with RODOS system
- Managing a team of four nuclear experts
- Contact to the Nuclear Authority and the NPP of Paks
- Providing background radiation data to the public and to the corresponding organisation
- Representing the respective areas of nuclear safety in committees

Seveso related:

- In parallel to the daily work as a Head of Section, during the Hungarian Semester in 2011 in the WPE meetings providing professional assistance to the Chair at the EU Council in the legal process to word the Annex I of the Seveso III Directive
- Giving technical advice to the Hungarian representative in the EU Parliament regarding the Seveso III Directive

Disaster Risk Assessment:

- Carrying out the national disaster risk assessment for Hungary as it was requested by DG ECHO

Scientific Technical Officer in Research, European Commission Joint Research Centre, Ispra, Italy

(July 2008 – June 2010)

Achievements and responsibilities:

Carrying out scientific, technical research and development tasks in accordance with the research programme. Responsibilities as a member of a project team in the field of risk analysis for process industries inside the MAHB (Major Accident Hazards Bureau) programme included

- Participation in the activities of MAHB on security of Seveso industrial installations involving external events such as terrorism or extreme weather events
- Participation in the TWG2 on Seveso inspections
- Coordination and participation in the activities of the Technical Working Group on the position of the Scientific Secretary of the Group
- Contribution to the scientific work supporting “GHS and Seveso” with doing research on toxicity data of dangerous substances
- Issuing the first “Lessons Learned Bulletin on Chemical Accident Prevention & Preparedness ”
- Performed consequence analysis of accidental release scenarios, using the relevant codes/tools as well as ensured data control, documentation and maintain of records of all activities
- Presentation of the new Annex I of the Seveso Directive during the workshop organized by VITO in Antwerp
- Providing workshops and training concerning Seveso inspections in Norway, Belgium and the Netherlands
- Providing GHS workshops and trainings in the UK, Netherlands and Italy
- Collaboration on consequence analysis within a Case study in Montreal (LPG storage)

Seveso Site Inspector, National Directorate General for Disaster Management, Budapest, Hungary

(October 2003 – December 2010)

Achievements and responsibilities:

- Development of methods and tools for the consistent and robust assessment of risks in chemical industrial plants. Focusing on all causes, i.e., accidents internal to the installation, natural events and malicious acts
- Responsible for the license activities under the Seveso II Directive (administrative measure), review of the Safety Reports and analysis of dangerous establishments
- Other responsibilities and tasks included:
 - Giving expertise to operators on how to write Safety Reports and Emergency Plans;
 - Evaluation of Safety Reports and Emergency Plans (more than 8 years of experience);
 - Checking the risk/consequence assessment methods/results with the DNV SAFETI or PHAST software;
 - Control of dangerous establishments with onsite inspections (review of the safety management system, internal safety plan, overview of the external safety plan and practice);
 - Implementation of environmental authority license activities for IPPC establishments such as hazardous waste storage, leather factories, transportation of dangerous goods.
 - Identifying more than 300 possible establishments in the area of pesticides and 18 in hazardous waste facilities; carrying out identification and classification method specifically for industrial parks;
 - Conducting the verification of inspection checklists for inspectors;
 - Participation in the legal modification process of the Decree that implemented Seveso II in Hungary;
 - After evaluation of Safety Reports and Emergency Plans giving permission to launch the dangerous activity with providing legal decision;
 - Responsible for issuing of the official decision on prohibition of use of dangerous establishments due to the lack of submission of notification form or due to use of dangerous substances without permit;
 - Giving lectures at the Universities on the Seveso II and classification of dangerous substances;
 - Member of the committee of Seveso expert group;
 - Participating in external emergency plan exercises as an inspector of the activity

Official in Charge, Tolna County Directorate General for Disaster Management, Szekszard, Hungary

(July 2001 – September 2003)

Achievements and responsibilities:

- Implementation of Environmental authority tasks in the area of environmental assessment and licensing of dangerous wastes and waste water treatment activities related to disasters. The County level was responsible for contributing in IPPC permission process and disaster management-related questions like prevention of major accidents. Responsible for on-site inspections as part of these processes. In the event of an accident as a member of the HAZMAT team deployed to explore the polluted area (involvement in operational activities).

Languages

Language	Reading	Speaking	Writing
Hungarian	Mother tongue		
English	C1	C1	C1
Italian	C1	C1	C1

Russian	A1	A1	A1
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