# ADVANCED MASTER CLASS ON PROCESS SAFETY

13 - 17 January 2025
ANTWERP | HYLLIT HOTEL ANTWERP





# DEAR MEMBER,

essenscia herewith presents the details of the Advanced Master Class on Process Safety organized by its Process Safety Academy. For additional information, please contact Mr. Geert Boogaerts (+32 476 906 663 | gboogaerts@essenscia.be). To register, please click here.

### **Programme**

Process safety is a specific discipline within the organization of a company. The level and quality of process safety management determines the success of the organization. The essenscia Process Safety Academy aims, with this 5-day 'Advanced Master Class on Process Safety', to provide professionals with a process safety course offering the essentials and pointing out the pitfalls of process safety. The lectures are taught by academics and specialists in their discipline. A certificate will be granted at completion of the course. For each day, a syllabus is provided by the organization.

The governance board and steering committee of essenscia Process Safety Academy

- ✓ MSc. Ivan Pelgrims, President Process Safety Academy, Director, Evonik
- ✓ MSc. Koen Colpaert, HSE Group Process Safety Manager,
- ✓ MSc. Benny Ghoos, Senior Operations Support Manager, Johnson & Johnson
- ✓ MSc. Nico Hertoghe, ExxonMobil Research & Engineering
- ✓ Phd. MSc. Pol Hoorelbeke, Vice president Safety, Total
- ✓ MSc. Marnix Mahieu, Managing Director, Kronos
- ✓ MSc. Inge Van Der Meeren, AMPP Plant Manager ExxonMobil
- MSc. Frank Quaeyhaegens, Head of Technical Services, Covestro
- ✓ MSc. Stephen McGrady, EHS BL Director, GSK UK
- ✓ MSc. Geert Vercruysse, Process Safety Expert, BASF
- ✓ MSc. Jan Weckx, Antwerp Process Safety Lead, Bayer Agriculture
- ✓ MSc. Filip De Proft, EHS director Campus Belgium, JnJ Innovative Medicines
- ✓ MSc. Kris Deboutte, Global SHE Manager, Ineos
- ✓ MSc. Gunther Van Cauwenberge, Vice President of Global Operations Intermediates, Envalior
- ✓ MSc. Ignace Hooftman, Managing Director, Lanxess Belgium

# **Past Attendees**

Ajinomoto Omnichem, BASF, Borealis, DuPont, ExxonMobil, Eval, Evonik, GE Water & Process Technologies, Indaver, Umicore, INEOS Manufacturing Belgium, Janssen Pharmaceuticals, JSR Micro, Kronos, LANXESS, Bayer, Monument Chemical, Nippon Shokubai, Noord Natie, Proviron, Prayon, Solvay, Styrolution, Tessenderlo Chemie, Vopak.

The governance board and steering committee of the Process Safety Academy recommend this course as

«A strong introduction and an appreciated refreshment concerning process safety».



# **Target Audience**

Professional engineers with industry experience for whom understanding and applying process safety thinking is an integral part of their job and who would benefit from a holistic view on process safety for deepening the expertise in their roles and for their career development (e.g. operations, engineering, maintenance, inspection, safety professionals...).

### DAY TO DAY OVERVIEW OF THE PROGRAMME:

08:00 - 17:30

DAY 01



# MONDAY 13 JANUARY 2025

# Introduction to process safety

### Welcome speech



MSc. Els Paredis, Vice President EHS BASF Antwerp, Environment & Energy Policy, BASF Antwerpen

Still a need?

# Very clear approach

BASF



### Introduction to process safety: Incidents & legislation that define process safety

MSc. Geert Boogaerts, Senior Advisor Process Safety, essenscia Are things improving?

### Process Safety Management Systems

Phd. MSc Pol Hoorelbeke, Vice president Safety, Total, Brussels, Visiting professor at the South China University of Technology, Fellow of the VUB

An integrated safety management system

# "Good course" SOLVAY

### **Product Safety**

Phd. MSc. Kristel Bernaerts, Professor, CREaS, KU Leuven, Leuven Do we understand the intrinsic hazards?



### Organizational and Human Factors

Phd. MSc. Herman Van Roost, General Manager Feedstock and Mechanical Recycling, Styrenics Circular Solutions

A practical point of view

**DAY 02** 



### TUESDAY 14 JANUARY 2025

# Qualitative and quantitative risk analysis



### Hazard & Operability Study

MSc. Grainne Kelly, Clwyd Associate, Leicestershire Use and pitfalls of HAZOP

" Good concept and very useful for training within the organisation"

GE WATER

### Layers of protection analysis

🗳 MSc. Nico Hertoghe, ExxonMobil Research & Engineering Use and pitfalls of LOPA

### PHA / sub selection / API 752 - Temporary Housing

MSc. Peter Wittevrongel, Safety Engineer, Notified Expert, Vinçotte, Vilvoorde A risk based approach

## Global overview of QRA

MSc. Bob Gorrens, Notified Expert, SGS Belgium, Antwerp Towards a dynamic instrument in safety reporting?

HOST CITY Antwerp LOCATION Hyllit Hotel De Keyserlei 28-30 LUNCH

3 course business menu

REGISTRATION FEE

Member: 3000€ Non-member: 3200€

**REGISTRATION LINK** click here



### DAY TO DAY OVERVIEW OF THE PROGRAMME:

08:00 - 17:30

DAY 03



# WEDNESDAY 15 JANUARY 2025

# **Explosion safety**

(Gas) Explosion Characteristics

Phd. MSc. Filip Van den Schoor, M-tech, Hasselt, visiting professor KU Leuven Essential elements in risk assessment

A good eye opener

LANXESS



Aphd. MSc. Filip Verplaetsen, Adinex, Herentals, visiting professor KU Leuven and Ghent University Essential for prevention

Vapour Cloud Explosion and Explosion Modelling

Phd. MSc. Filip Van den Schoor, M-tech, Hasselt, visiting professor KU Leuven The number one cause?

Explosion Prevention and Protection - Atex directives

Phd. MSc. Filip Verplaetsen, Adinex, Herentals, visiting professor KU Leuven and Ghent University What is emphasized by the legislation?

DAY 04



### THURSDAY 16 JANUARY 2025

# Competence in operation & safety in unit operations

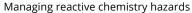
Introduction to process safety engineering

強 🏻 **Phd. MSc. Geert Vercruysse**, Process Safety Engineer, BASF Antwerp, Visiting professor at Ghent University and at KU Leuven

Safety engineering: the corner stone of intrinsic safety

"Very interesting for engineers

KRONOS



Phd. MSc. Wim Dermaut, R&D Manager Chemical Process Development, Agfa Labs, Antwerp A scenario based approach

Safety Integrity Level

站 MSc. Erik Dom, SIL and HAZOP expert, Nero Engineering, Antwerp A reliable device on a known risk



### FRIDAY 17 JANUARY 2025

# Mechanical integrity: the first layer of protection

### Mechanical integrity

MSc. Thomas Beirnaert & MSc. Jeroen Moens, Quality Inspection & Materials, BASF A code based approach

"Good mix of academic and pragmatic

DAY 05

INEOS

MSc. Erik Thomas, Corrosion engineer, Degradation expert, Metalogic, Leuven An important threat

### Measuring, monitoring and inspection

MSc. Kristof Timmermans, Inspection engineer, Metalogic, Leuven A solution for everything?

### Closing speech

MSc. Ivan Pelgrims, Managing Director, Evonik Antwerp, Board Member of essenscia

Global evaluation, feedback and open discussion

### Granting of certificates

MSc. Ivan Perigrims, President Process Safety Academy, Director, Evonik, Board member essenscia