

EXPLOSION DEMO

Dear members of the essenscia Process Academy,

Explosions continue to be a significant cause of incidents in the process industry. New energy technologies, such as hydrogen and electrical batteries, imply new safety risks. Understanding them is, therefore, an important competency for anyone working in this field.

The aim of this session is not only to raise participants' awareness. Through practical experiments, this workshop provides greater insight into the parameters and conditions that lead to explosions, based on different gas and dust characteristics.

The demonstration includes the following experiments:

- Vapor ignition, UEL, flash point, ...
- Heavy gases, gases lighter than air, hydrogen
- Physical explosion, Implosion, Chemical Explosion, BLEVE, Internal Explosion, ...
- Flame propagation in a tube
- Pressure relief, pressure build-up.

This demonstration uses small-scale, controlled experiments to make explosion risks visible, audible and sensible. The goal is to help employees recognize hazardous situations in the workplace. The session has a proven educational effect on participants regarding the most important explosion phenomena.

Attendance is free of charge for all essenscia Process Academy members.

To register, [please click here](#).

We look forward to welcoming you!

Geert Boogaerts
Director Safety & Sustainability
essenscia Process Academy

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02 April 2026 | 13.00 – 17.00
Zebrstraat, 9000 Ghent

Program Overview:

13.00.....	Registration and Welcome Coffee
13.30.....	Introduction Geert Boogaerts, essenscia Process Academy
13.40.....	Start of the Demonstration Prof. Filip Verplaetsen, Adinex Frederik Norman, Adinex
14.00.....	Demonstration: Part 1
15.00.....	Reception
15.30.....	Demonstration: Part 2
17.00.....	End of Workshop