

The **IPSEN – Industrial Process Systems Engineering Unit** of NTUA is pleased to invite you to the upcoming **Bioindustry 4.0 annual webinar series**. We'll explore the cutting-edge innovations transforming bioprocessing across industries. Along with expert presentations, we'll also offer **hands-on training sessions**.



**Date:** August 27-28, 2025

**Location:** online

**Participation is free!**

**Sign up** [here](#).

**Target audience:** Biotechnologists, process engineers, researchers, and data scientists across different sectors, **anyone** interested is welcome!

Take a look at the **timetable** and get more **information** of the speakers [here](#).

## **Sessions and Speakers:**

**Wednesday, August 27th, 2025, 2 pm – 5 pm**

1. **LLMs in Bioindustry:** Knowledge base expansion, data integration, and insight generation  
**Speakers:** Emanuel Souza de Quadros (DSMZ), Marco Anteghini (University of Bologna)
2. **Training webinar:** Real-time insights: the role of Process Analytical Tools in industrial biotech  
**Speakers:** Jörn Viell (RWTH Aachen), Martin Kögler (VTT), Mari Tenhunen (Timegate Instruments Ltd.)

**Thursday, August 28th, 2025, 10.30 am – 5.15 pm**

1. **Auto-Encoders to Use Process Dynamics to Target Metabolic Protein Regulation in Metabolic Pathways**  
**Speakers:** Vassily Hatzimanikatis (EPFL), Stefanos Xenios (National Technical University of Athens), Konstantinos Mexis (National Technical University of Athens)
2. **Connected innovation ecosystems** in the field of biotechnology  
**Speakers:** Vitor Martins dos Santos (LifeGlimmer GmbH), and Stefanie Bröring (Ruhr University Bochum)
3. **Biotechnology in the age of Artificial Intelligence:** benefits and security implications  
**Speakers:** Michael Imperiale (University of Michigan), Markus Schmidt (Biofaction), Michael O'Donohue (INRAE)