Belgian Society for Toxicology and Ecotoxicology

Belgian Environmental Mutagen Society

Scientific program and speakers BelTox-BEMS Annual Meeting

Overview of AI tools used in toxicology and ecotoxicology

December 7th, 2026, 9:00-17:15

Bel Brussels

Organizing committee: Vitalina Gryshkova, Maaike Vercauteren, Freddy Van Goethem, Mark Martens, Steven Van Cruchten

Time	Topic	Speaker	Organisation
8:30	Registration		
9:00	Welcome by BelTox & BEMS Chairs		
9:10 – 10:30	**Morning session: Introduction and overview of AI tools in (eco)toxicology**		
	AI in chemical risk assessment (Tentative)	David Rouquie	Bayer
	Computational Toxicology in Drug Development	Helga Gerets	UCB Pharma
	From Historical Data to Virtual Controls: Leveraging AI and Machine Learning to Transform Preclinical Toxicology Assessment	Jian Jiang	VUB
10:30	**Coffee break - poster session**		
11:00	CRO presentations & demo		
11:45	General Assemblies BelTox and BEMS		
12:00	**Lunch - poster session**		
13:15	YSC competition		
14:15-16:15	**Afternoon session: European initiatives to advance AI tools in toxicological assessment**		
	Virtual Control Groups in Safety Testing – An Approach to Reduce Animal Use	Thomas Steger-Hartmann	Bayer; Innovative Health Initiative
	Computational Toxicologic Pathology	Pierre Moulin	Deciphex Ltd
14:45 – 15:15	**Coffee break - poster session**		
	Agentic AI in Toxicology; Where do we stand	Marc Teunis	HU - University of Applied Sciences Utrecht
	The AI4AOP Challenge: Toward Transparent AI-Assisted Workflows for Adverse Outcome Pathway Development	Lidwina Gerner	Swiss Centre for Applied Human Toxicology (SCAHT)

	Regulatory prospectives on use of AI tools in toxicology	FloraMusuamba Tshinanu	Federal Agency for Medicines and Health Products, Belgium
16:45	Awards ceremony		
17:15	Closure of Annual Meeting		

Belgian Society for Toxicology and Ecotoxicology

BelTox is a professional network dedicated to foster scientific excellence and collaboration within the **toxicology** community. BelTox is part of the European toxicology society (EUROTOX).

Our mission is to:

- **Facilitate Training & Networking**: Connect students and professionals from academia, industry, and government.
- **Promote Scientific Exchange**: Encourage the sharing of cutting-edge research on the effects of chemical and pharmaceutical substances on health and the environment.
- **Develop Young Talent**: Provide a platform for the next generation of toxicologists to learn and grow.

Belgian Environmental Mutagen Society

BEMS is a professional network focused on **environmental mutagenesis** and **genetic toxicology**. BEMS is part of the European EMG society (EEMGS).

Our mission is to:

- **Promote Research:** Advance fundamental and applied research on the genetic and carcinogenic effects of chemicals.
- **Foster Collaboration:** Work with national and international societies, including BelTox, to create an open dialogue and share key information.
- **Organize Events:** Host scientific meetings to discuss current issues and cutting-edge research in our field.