



ONLINE TRAINING

**“GREEN CHEMISTRY FOR SUSTAINABLE DEVELOPMENT AND GROWTH”**

AGENDA

**REGISTRATION**

**Date:** 15 June 2023

**Start:** 11:00 (EEST)

**End:** 13:00 (EEST)

**Format:** web-based video conference via MS Teams

**Language:** Ukrainian

# TRAINING “GREEN CHEMISTRY FOR SUSTAINABLE DEVELOPMENT AND GROWTH”

15 June 2023, 11:00-13:00 (EEST), online via MS Teams

## AGENDA

Time (EEST)	Item
11:00-11:10	<i>Welcoming remarks</i>  <b>Mr. Andrii Vorfolomeiev,</b> Director, Resource Efficient and Cleaner Production Centre
11:10-11:30	<i>Role of chemicals in society, the environment and the economy</i>  <b>Ms. Olena Tabachuk,</b> Chemical Management Expert, Resource Efficient and Cleaner Production Centre
11:30-12:10	<i>Fundamentals of green chemistry: definitions, principles, applications</i>  <b>Mr. Oleksandr Khokhotva,</b> Chemical Management Expert, Resource Efficient and Cleaner Production Centre
12:10-12:25	<i>Q&amp;A session</i>  <b>All participants</b>
12:25-12:40	<i>The Global GreenChem programme: benefits and opportunities for Ukraine</i>  <b>Ms. Olena Tabachuk,</b> Chemical Management Expert, Resource Efficient and Cleaner Production Centre
12:40-12:50	<i>Discussion, Q&amp;A session</i>  <b>All participants</b>
12:50-13:00	<i>Wrapping up the training</i>

## Training objectives

- Review the current role of chemicals in society, the environment and the economy;
- Raise awareness on green chemistry among participants;
- Present the principles of green chemistry and its opportunities in various research areas;
- Discuss new opportunities related to green chemistry in Ukraine.

## Participants

The training will bring together experts and researchers working on issues related to green chemistry and engineering, green economy, circular economy, resource efficiency, and environmental protection from central and local authorities, enterprises, expert organizations, business associations, NGOs, and educational and research institutions.

The training is organized by the Resource Efficient and Cleaner Production Centre in Ukraine in collaboration with the Center for Green Chemistry & Green Engineering at Yale University (USA) under GEF-funded UNIDO project “The Global GreenChem Innovation and Network Programme”.

## Practical information

The training will be organized online on 15 June 2023 (11:00 - 13:00 EEST) using MS Teams. The event will include presentations and discussion with participants. The training will be held in Ukrainian.

Interested participants should register in advance by filling out [the form](#).

Participation in the training is free of charge. The number of participants is limited. All attendees will receive certificates for participation in the training.

## Background

Green Chemistry focuses on the development and application of chemicals with inherently benign and beneficial properties at all stages of their life cycles. Its purpose is not simply to reduce pollution through the elimination of hazards associated with chemical, reagents, solvents, and products, but also to ensure that sustainability is considered already in the design process for innovations in the area. Green Chemistry touches virtually every business sector—food, energy, plastics, cosmetics, cleaning products, pharmaceuticals, etc. Due to the nature of green chemistry, it is an essential building block and guiding principle for the development of a circular economy.

Currently, financial, regulatory, organizational, and cultural barriers prevent the fast adoption of Green Chemistry. In industry, suppliers are under pressure to deliver chemicals faster on a regular basis. Hence, there is an inherent regulatory risk of switching to a new process, an upfront investment, the cost of redesigning existing infrastructures, and a barrier to change to new solvents and instrumentation respectively. Moreover, additional barriers include:

- lack of information about the availability of Green Chemistry alternatives and solutions,
- lack of demonstration of commercialized successful Green Chemistry solutions,
- limited connections between Green Chemistry innovators and industry,
- lack of awareness of the Green Chemistry principles, and
- the perceived high costs for small to medium-sized enterprises.

Entrepreneurs from the area of Green Chemistry are facing many challenges, including profitability and financial safety in the early years of business, difficulties securing instrumentation and laboratory space, as well as hurdles in the regulation of chemicals and chemical processes. Women underly special constraints and inherent systemic barriers, including limited inclusion efforts, difficult access to special technical expertise and managerial training, and overall restricted opportunities.

In Ukraine, the Resource Efficient and Cleaner Production (RECP) Centre is the national partner in implementing “Global GreenChem Innovation and Network Programme”. Here, the Programme components:

- *Component 1. Green Chemistry Innovation and Inclusion Network for Capacity Building.* It aims at the development of a robust Global Green Chemistry Innovation and Inclusion Network, connecting collectives and individuals, including scientists, entrepreneurs, and representatives from government, industry, academia, and non-governmental organizations.
- *Component 2. Green Chemistry Accelerator Programme.* The Programme focuses on the establishment and execution of six (6) multi-year accelerator programmes, providing support and training for sustainable businesses and business ideas in the area of green chemistry, nurturing regional innovation ecosystems in the focus nations.
- *Component 3. Green Chemistry alternatives for persistent organic pollutants (POPs), mercury and micro-plastics for upscaling and replication.* It demonstrates green chemistry alternatives and capacities in selected chemical & waste related focus sectors.

## **About GreenChem**

The Global GreenChem Innovation and Network Programme (GreenChem) aims to strengthen the sound management of industrial chemicals and their waste through better control, reduction, and/or elimination protocols, and specifically to scale up green chemistry solutions for POPs and mercury replacement through capacity building, innovation, and the creation of a global green chemistry network fostering visibility, support, and implementation.

The project is funded by Global Environment Facility (GEF), implemented by the United Nations Industrial Development Organization (UNIDO) and executed by Yale University in close collaboration with governmental counterparts of six beneficiary focus countries (Indonesia, Jordan, Peru, Serbia, Uganda, and Ukraine).

For more information, please visit [www.globalgreenchem.com](http://www.globalgreenchem.com)