United Nations Institute for Training and Research

Unitar Online Catalogue

Green and Sustainable Chemistry

Planet

Type:	Course
Location:	Web-based
Duration:	1 Days
Thematic Area:	Chemicals and Waste Management
Website:	https://www.unitar.org/cwm
Price:	$0.00
Event Focal Point Email:	cwm@unitar.org
Contact Number:	Jorge Ocana
Partnership:	UNEP (502)

BACKGROUND

The information found within this e-course builds on the Green and Sustainable Chemistry Framework Manual which was developed in consultation with experts from industry, academia, government, international organizations and NGO’s.

The overall aim of the e-course is to unveil the full potential of chemistry such that it is compatible with, and supports, the implementation of the 2030 Agenda for Sustainable Development. It aims to teach learners “what” Green and Sustainable Chemistry is, “why” it is needed, “what” it aims to achieve and “how”

stakeholders can achieve a transformation towards its underlying vision.

EVENT OBJECTIVES

After taking the course, participants will be able to:

- Understand what Green and Sustainable Chemistry is.
- Describe the 10 Objectives and Guiding Considerations for Green and Sustainable Chemistry.
- Understand the roles different stakeholders can play to advance Green and Sustainable Chemistry.
- Discuss how educators can advance Green and Sustainable Chemistry.
- Understand the links between chemistry and the 2030 Agenda for Sustainable Development and how the 10 Objectives can advance circularity.
- Explain the potential of Green and Sustainable Chemistry to drive sustainability in different sectors of the economy.
- Describe key policies, tools and instruments that can be used to foster an enabling environment for Green and Sustainable Chemistry.
- Understand the importance of metrics and reporting for monitoring and measuring impact.

CONTENT AND STRUCTURE

Module 1 – Introduction to Green and Sustainable Chemistry

Learning objectives

- Understand what Green and Sustainable Chemistry is.
- Describe the 10 Objectives and Guiding Considerations for Green and Sustainable Chemistry.
- Explain why there is a global call to address the negative impact of certain chemicals.
- Identify who the key stakeholders are and how they can take strategic action.

Content

1. What is Green and Sustainable Chemistry?

2. International momentum for Green and Sustainable Chemistry.
3. Taking action to advance Green and Sustainable Chemistry.

Module 2 – Opportunities for Green and Sustainable Chemistry

Learning objectives

- Discuss the global challenges that can be addressed by Green and Sustainable Chemistry.
- Describe the links between chemistry and the 2030 Agenda for Sustainable Development.
- Explain how the 10 Objectives can be applied to advance the SDGs and a circular economy.
- Understand the market potential of Green and Sustainable Chemistry innovations.

Content

1. Why Green and Sustainable Chemistry is needed.
2. Green and Sustainable Chemistry and the 2030 Agenda.
3. How Green and Sustainable Chemistry contributes to sustainable consumption and production.

Module 3 – Advancing Green and Sustainable Chemistry

Learning objectives

- Understand the 10 Objectives and Guiding Considerations for Green and Sustainable Chemistry.
- Discuss how key stakeholders can take strategic action to apply the 10 Objectives.
- Describe technological areas of Green and Sustainable Chemistry innovation.
- Explain the potential of Green and Sustainable Chemistry to drive sustainability in downstream sectors.

Content

1. A deeper look at the 10 Objectives.
2. Innovations that advance Green and Sustainable Chemistry.
3. Green and Sustainable Chemistry in key sectors.

Module 4 – Enabling Green and Sustainable Chemistry

Learning objectives

- Describe how policy tools, instruments and approaches can be used to enable Green and Sustainable Chemistry.
- Understand life cycle thinking for impactful Green and Sustainable Chemistry innovations.
- Discuss market-based tools, business models and financing mechanisms.
- Explain the importance of metrics and reporting for monitoring and measuring impact.

Content

1. Policies, tools and instruments that enable Green and Sustainable Chemistry.
2. Life cycle thinking and sustainable design approaches.
3. Financial incentives and business models that enable Green and Sustainable Chemistry.

METHODOLOGY

The course, about 2 hours to complete, is self-paced and adapted to the schedule of full-time working professionals. Participants are provided with the opportunity to learn through various experiences: absorb (read); interact (activity); and reflect (relate to one’s own reality). This includes videos, interactive lessons, reading materials and quizzes.

The 4 modules of the course are self-standing and can be completed in any order. However, it is recommended that learners complete the modules in a sequential manner.

All lessons conclude with a quiz to reaffirm the knowledge learners will acquire.

A certificate of completion will be awarded to participants who successfully complete all 4 modules and pass a final quiz with a minimum score of 70%.

Participants will be requested to provide feedback on the course by filling in a feedback form after completing all the modules, accessible anytime.

TARGETED AUDIENCE

This course is targeted at national chemicals officials and education institutions but does not require specialised chemical knowledge and is intended to be of interest to a broad range of sectors and stakeholders along the chemical value chain from chemicals design, production and use to final disposal.

For example:

- Government officials
- Industry and private sector, e.g., especially those in research and development
- Educators
- Students
- NGOs
- Consumers
- Other interested stakeholders

ADDITIONAL INFORMATION

TECHNICAL REQUIREMENTS

The course can be completed on any computer (Windows and Mac) or mobile device. Any internet browser is compatible as long as it has been updated to its latest version.