United Nations Institute for Training and Research

Unitar Online Catalogue

# Introduction to Nanomaterial Safety: UNITAR E-Learning Course

Deadline: 14 Oct 2016

| | |
|---|---|
| Type: | Course |
| Location: | Web-based |
| Date: | 17 Oct 2016 to 4 Dec 2016 |
| Duration: | 7 Weeks |
| Thematic Area: | Chemicals and Waste Management |
| Website: | http://https://www.unitar.org/event/introduction-nanomaterial-safety-unitar-e-l... |
| Price: | $600.00 |
| Event Focal Point Email: | cwm@unitar.org |

## BACKGROUND

Nanomaterials have a range of novel properties enabling many new useful applications in areas such as medicine, environmental clean-up, energy production and material technology. However, the special properties of nanomaterials can also be a challenge, as these materials may have different implications for human health or the environment compared to traditional chemicals.

This e-Learning course provides interested stakeholders with an introduction to the sound management of manufactured nanomaterials. The course has been developed by UNITAR based on work under the Strategic Approach to International Chemicals Management (SAICM) and international organizations, such as the Organization for Economic Cooperation and Development.

## EVENT OBJECTIVES

The overall goal of the course is to enhance the participants' knowledge of nanotechnology and manufactured nanomaterials. Participants will learn about: the science behind nanotechnology; hazards related to human health and the environment: occupational health issues; risk assessment and management; and the international political context of nanotechnology. The course gives participants the opportunity to apply their knowledge through tests and discussion fora, providing them with the skills to develop policies and practices in their workplaces.

## LEARNING OBJECTIVES

Participants will learn about global, national and sector-specific issues and begin to develop basic skills for recognizing safety concerns and learning about risk management approaches to manufactured nanomaterials. No prerequisite or prior knowledge is needed to take the course.

After completing the course, participants will:

- Identify properties, uses, and safety issues of nano-containing products
- Classify hazard, exposure and risk assessment, and options
- Identify opportunities and challenges to regulate nanomaterials
- Discuss international and national regulatory approaches
- Recognise applications of nanomaterials and its uses to improve global environmental, public health, and safety issues

## CONTENT AND STRUCTURE

The course consists of the following six modules:

- Introduction to Manufactured Nanomaterials

- Hazards of Manufactured Nanomaterials
- Occupational, population, and environmental exposures to manufactured nanomaterials
- Risk assessment of manufactured nanomaterials
- Risk management of manufactured nanomaterials
- Approaches to the sound management of manufactured nanomaterials including societal dimensions

## METHODOLOGY

The course is internet-based, and places emphasis on online discussions and self-paced learning to accommodate professionals in full-time work.

Moderated by course facilitator(s) who are experts in the field, the total number of learning hours is 35 hours over a 7 week. Specific course features include:

- Self-paced learning
- Case studies and tests
- Moderated discussions and interactions
- Additional resources (books, articles, documents, and websites)

## TARGETED AUDIENCE

Individuals from the following groups may be interested in taking the course:

- Civil servants in national Ministries, provincial departments and local authorities
- Environmental and occupational safety managers in private sector and civil society organizations
- Industry and SME representatives of companies which already produce or intend to produce products containing nanomaterials
- Faculty, researchers and students

No pre requisites or prior knowledge is needed to take the course.

## ADDITIONAL INFORMATION

**Technical Requirements**

Access to the Internet is an essential condition for participation. In case of unreliable connection or for ease of access (e.g. while travelling), the course content can be downloaded in e-book format. UNITAR also recommends the following as a minimum in hardware and software to take this e-learning course:

- Windows 7 or higher, MacOS X for Apple computers
- At least 2Gb of RAM, 4 G of free disk space
- Microsoft Word, Adobe Acrobat Reader (downloadable for free at http://www.adobe.com)
- Internet Explorer 10 and later version, Mozilla Firefox and Chrome - JavaScript, pop-ups and cookies must be enabled

Your network administrator or a person who has basic knowledge of hardware and networks will be able to tell you whether or not your computer/setup meets the requirements.

**Contact:** ghs [at] unitar.org (cwm[at]unitar[dot]org)