



SOWAEUMED E-Learning COURSE

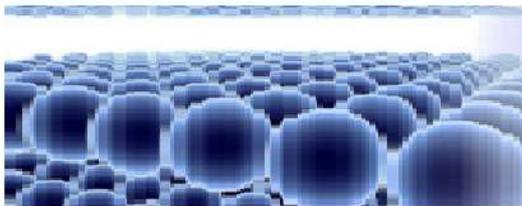
on

Nanotechnology from research to applications in water treatment

From 8th October to 7th November 2012

Organized by

National Centre for Studies and Research on Water and Energy (CNEREE),
Cadi Ayyad University



Presentation

Nanotechnology and Nanosciences concerns the development and production of materials, objects or machines at nanoscale. It's a key technology that helps to improve a large number of applications in the environmental field, like water desalination or wastewater filters.

Because of the unique properties and potential of nanoparticles applications in the fields of energy, health and agriculture, many scientists may perceive nanotechnology as a 'gold solution' to solve a number of problems in developing countries. We note that many countries in the world invest significant amount of budget in Nanotechnology studies and researches. The current SOWAEUMED online course is designed to respond to such challenges by developing skills in Nanotechnology for research groups in educative institutions and for industrials and socio-economic actors.

This e-learning course for nanotechnology learning and application take a part of the SOWAEUMED project. The Nanotechnology E-learning will focus its effort to improve and transfer knowledge and know-how about nanonotechnologies and nanosciences to the participants using different technological tools, learning methodologies and contents developed by SOWAEUMED partner, which are supported in a UCAM virtual platform.

Objectives of the SOWAEUMED E-learning course

The online course on Nanotechnology applied to Water treatment, will enable participants to:

- ❖ Develop a common understanding of basic concepts of nanoscience and nanotechnology applied to water treatment;
- ❖ Become familiar with instruments and methods for nanotechnology;
- ❖ Enhance the university researchers, industrial and socio-economic actors skills in the fields of nanoscience and nanotechnology.

SOWAEUMED E-learning modules



Participants

The SOWAEUMED online e-learning course is specifically designed for academic researchers, managers, industrials, NGO and socio-economic actors from any part of the world working in the field of water technology, research and management.

REQUIREMENTS to attend the course:

- Minimum of experience in water sector;
- A minimum knowledge in the field of Nanosciences and Nanotechnology;
- Being fluent in English.

Methodology

The courses will be a balance between theoretical and practical inputs, giving participants the opportunity to apply in practice what they learned in theory. Exchanges and learning among participants and their trainers will be supported. Training courses are designed to be highly interactive and dynamic.

The courses will be facilitated by Nanotechnology and Nanosciences researchers and experts from KTH and UAB. The trainers will support participants in a systemic way and

respond to their questions and requests on a regular basis via e-mail or discussion forums. For well progress of the training courses, participants must have a good Internet connection and email access.

To guarantee the success of e-learning training some monitoring devices will be apply to maximize the dynamics of knowledge that is generated during the user interaction with the platform and its contents. The course will apply follow-up mechanisms to monitor working time and a successful completion of assignments. This process enable the managers of the e-learning platform to summarize the results and generate feedback information through the compilation of experiences and evaluations, with the specific objective to integrate participants finding on continuous improvement and increased quality of learning content.

The course material will be uploaded in electronic formats on the UCAM platform. Once the course ended, participants who attended and successfully completed the courses program will receive a course certificate given by the SOWAEUMED E-learning organisers.

Trainers

Prof. Manuel Valiente Malmagro (UAB- Spain), manuel.Valiente@uab.cat

Prof. Mamoun Muhammed (KTH-Sweden), mamoun@kth.se

Dr. Montserrat Lopez Mesas (UAB- Spain), montserrat.lopez.mesas@uab.cat

Dr. Abdusalam Uheida (KTH-Sweden), salam@kth.se

Dr. Gustavo Pérez (UAB- Spain), gustavo.perez@uab.cat

Prerequisites and registration deadline

Applicants are asked to complete a registration form and send their CV and motivation letter before **September 30th 2012**. Considering that this is an online course that requires active and motivated participants, a rigorous selection process will take place upon registration. Participants will be selected on the basis of their motivation, professional background, their experiences on nanotechnologies and nanosciences fields, date of application and group-mix needs.