Global Young Academy

Young Scientists Ambassador Programme

Ambassador:
Ghada Bassioni

Country of Origin:
Egypt (developing country)
Country of Destination:
The Netherlands (developed country)
Time of Visit: April 9-14, 2015

Mission Report

Background. Wilfred van der Wiel and I are in scientific collaboration within the North-South Strongly Interdisciplinary Research Grant offered by the Global Young Academy. Our project includes mutual visits to our home countries with a seminar session and a YSAP activity. We have included an Egyptian student, Rehab Ibrahim, as well, whom we co-supervise on her M.Sc. Thesis.

Mission. Wilfred van der Wiel contacted Twente Academy Young to offer an activity for school kids. Anne van den Bos, the representative of Twente Academy Young, met us on Friday, the 10th of April in preparation to the event. Michaela Nesvarova interviewed us for an article on the UT website. The article appeared on the website 3 days later. On Wednesday, the 15th of April, the regional newspaper "De Twentsche Courant Tubantia" published an article about the activity with the school children.

http://utrecht.ewi.utwente.nl/ne/web/TwentseCourantTubantia-15-04-2015.pdf

YSAP Activity. On Monday, April 13th, 2015, Wilfred van der Wiel and I offered a YSAP activity to pupils in the age between 8-12 that incorporated a connection to my background with science. I chose to talk about "The Curse of the Pharaoh" and that science has proven it to be a wrong belief. It is rather the accumulation of radon gas and the exposure to different toxic dosages that resulted in nausea, insanity, cancer or death during discoveries of the tombs of the pharaohs.

Ghada and students using a microscope.

I have taken the opportunity to make a comparison between the ancient times and Egypt today. I have talked about what I do and what inspired me to choose chemistry as my major field of studies.

Wilfred talked about his field, nanotechnology and in particular nanoelectronics. In a cute experiment, he gave the pupils an idea of how small a nanometer is: a finger nail grows about 1 nanometer in a second. Using a rain pipe he explained the concept of the transistor and the on-going miniaturization in the electronics industry.

The pupils (around 35) from regional schools among which were 10 from an Islamic school enjoyed the talks and the lab tour. Hands-on experiments fascinated the pupils even more.

The lab tour included a visit to the nanolab of the MESA+ Insitute for Nanotechnology. Many of Wilfred's colleagues participated in a number of demonstrations. There was a scanning electron microscope with insects inside. The pupils could make selfies in a clean room suit and study the power of vacuum.

Wilfred uses a rain pipe to explain the concept of the transistor and the on-going miniaturization in the electronics industry.

Ghada end her lecture on "The Curse of the Pharaoh".

Ghada Bassioni

Cairo, Egypt, April 21, 2015