# Global Young Academy Young Scientist Ambassador Programme



**Ambassador:** Mirabbos Hojamberdiev

**Country of Origin:** 

Uzbekistan (lower-middle-income country)

**Country of destination:** 

Tanzania (low-income country)

**Date**: 10-11 October 2017

#### **Mission Report**

#### **YSAP** Activities Overview:

- (i) Initiating a research collaboration on water purification;
- (ii) Encouraging young minds to be involved in science to solve community as well as global issues;
- (iii) Introducing the Global Young Academy and its mission, including Global Young Scientist Ambassador Programme;
- (iv) Familiarising young minds with available fellowships/scholarships for continuation of their higher education (e.g., PhD)
- (v) Increasing public awareness of the United Nation's Sustainable Development Goals.

#### **Background:**

While in Northern Tanzania to collect water samples from Maji Ya Chai River, which is highly contaminated with fluoride, arsenic, and other heavy metals, under the Elsevier Foundation - TWAS Sustainability Visiting Expert Programme, GYA member Mirabbos Hojamberdiev visited the Nelson Mandela African Institute of Science and Technology as well as the "Blue Sky" Primary School located in Arusha, Tanzania.





## YSAP activity at the Nelson Mandela African Institute of Science and Technology:

At the Nelson Mandela African Institute of Science and Technology (NM-AIST), Mirabbos was first given a tour of the laboratory infrastructure by Dr. Askwar Hilonga at the Department of Water Resources and Environmental Science and Engineering. He was then introduced to young scientists doing their doctoral and postdoctoral studies on water purification. Young scientists presented their research works and discussed the possibility of implementing their project results in local communities in order to provide them with access to clean drinking water. Mirabbos also introduced his research work on photodegradation of organic pollutants over synthetic oxide and non-oxide inorganic materials under visible light and initiated a research collaboration by taking the samples of young scientists for physico-chemical characterisation in his research institute and also by leaving his developed materials for water purification tests at the NM-AIST. He also introduced the Global Young Academy and its mission, including the Young Scientist Ambassador Programme, to young scientists and encouraged them to be involved in science and science advice and diplomacy to solve local as well as global issues. Moreover, he shared the available fellowship/scholarship opportunities with young scientists to continue their doctoral or postdoctoral studies in another country.









### YSAP activity at "Blue Sky" Primary School:

At "Blue Sky" Primary School located in Arusha, Tanzania, Mirabbos was first introduced to the school's history, its mission and present foreign volunteers by a school principle, and given a tour of the school infrastructure. Later, he talked about how he became a scientist, why the world needs scientists and his own research work on photodegradation of organic pollutants over synthetic oxide and non-oxide inorganic materials under visible light. He strongly encouraged and motivated young minds to be involved in science to solve local and global issues related to energy, the environment, health, food, education, poverty, etc. As the main target audience for this outreach programme were young children in primary school, he shared his experience as a member of the GYA, its mission and the YSAP. He also explained the UN Sustainable Development Goals in more simplified form and the role of Chemical Sciences in reaching these goals, particularly Goal 6: Clean Water and Sanitation.













#### **YSAP Follow-up:**

Mirabbos and young scientists from the Nelson Mandela African Institute of Science and Technology will continue their research collaboration on developing suitable and low-cost inorganic materials for water purification and knowledge transfer and submit project proposals for international funding for collaborative research.

He will encourage more young scientists to visit the "Blue Sky" Primary School as volunteers especially in science education and will raise some donations for the school.

GYA member Mirabbos Hojamberdiev 18 October 2017