



“THE MOA WITH CAIRO UNIVERSITY IS ATTRACTING ARAB AND AFRICAN COUNTRIES TO OSU”

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Support: DOE, NSF, OSC, Cairo University

MOA: between OSU and Cairo University: Initiated in 2010 and signed in 2012.

Renewed in 2017.

Covers: Arts and Sciences, Engineering



Meeting President and officials of Beni-Suef University



ACAG5 in Egypt: Arab Conference of Astronomy and Geophysics, President of NRIAG and committee members

Activities under the MOA and Outcome:

The MOA has helped to establish a great OSU-Egypt network contributed by many, but largely by the effort of two individuals, Prof. Lotfia El Nadi of Cairo University and Prof. Sultana N. Nahar of the Ohio State University. Followings give summary outcome:

i) OSU - Cairo University, and other Egyptian institutions:

- **ASTRONOMY:** Conduct annual research based lecture astro-plasma physics course with computational workshops using facilities at the Ohio Supercomputer Center (OSC), at Cairo University which has been attended by participants from 10 universities and institutions: Al Azhar, Ain Shams, Cairo, Menoufiya, Minya, 6 October Universities, German University in Cairo, and Egyptian Atomic Energy Authority, Ministry of Environmental Research, National Research Institute of Astronomy and Geophysics, National Research Center, Zewail City of Science and Technology
- Initiation of research projects and guidance, and help in applications to US institutions

- Serving in the committee for M.Sc. and Ph.D. thesis
- Distribution of astronomy and physics books to many Egyptian universities

- **PHYSICS:** Collaborative study using lasers, Support, OSU Physics and Cairo University

- **Topical Society of Laser Sciences of Egypt:** MOA has facilitated OSU's involvement with the Society

- **Egyptian journal of Physics:** Promoting higher excellence in research

- Serving in the scientific committee for international conferences for US speakers

- **MATHEMATICS:** Research interaction and seminar

- **OSU CENTER FOR MID-EASTERN STUDIES:** Support for lecture presentation, and publications of collaboration reports in its bulletins

- **OSU DIVERSITY AND INCLUSION:** Support for diversity and women in science for bringing female Egyptian to "International Society of Muslim Women in Science"

- **AMERICAN PHYSICAL SOCIETY (APS) AND OSU MEDIA:** Promotion of scientific program under the MOA through news articles in APS and OSU newsletters, presentations in OSU Community Engagement forums and international hall lecture

- Bringing Egyptian physicists to free membership of APS
- **Seminar and visit to other universities by Sultana:** OSU is a more focused US University for other universities, in addition to those with course participants, such as, Beni-Suef, Helwan, American University of Cairo, etc

ii) Global connection to Arab and African countries:

- In Arab and African countries, Egypt was known as the "Mother of Knowledge". Even with advanced technology and current scientific knowledge in the Western and developed countries, Egypt is still a highly regarded country for government scholarships for higher degrees by these countries. Many of these international students are not familiar with the name Ohio State University

- The lecture course at Cairo University has enhanced the OSU image for student scholars from Ghana, Ethiopia, Iraq, Palestine, Oman, Yemen etc

- Conferences in Egypt - MTPR, UFLTA, SPECTROSCOPY AT NRC: Sultana Nahar is often an invited speaker, a Session Chair, a Judge for poster presentations which are enhancing the exposure of and interest in OSU

- **International School of Young Astronomers (ISYA) for Africa of International Astronomical Union:** Sultana was an international lecturer for the 41st ISYA held in Egypt participated by the best postgraduate students and young faculty members from 9 countries, Egypt, Ethiopia, Ghana, Madagascar, Nigeria, Rwanda, Sudan, Tanzania, Nepal. This grew considerable interest for OSU applications.

- **International Arab Conference of Astronomy and Geophysics (ACAG):** Sultana was invited and was the first female Guest of Honor at ACAG - Assembly 5 participated by many Arab, African and Islamic countries where OSU received wide advertisement and interest of the participants



International conference of Modern Trend in Physics Research (MTPR)



ISYA was held at the Kottamia Observatory, OSU represented in lectures

Sultana's research based course at Cairo University



CONCLUSION

- We have very limited number of Egyptian students make it to OSU admission due to higher standard, but future looks very positive by inspiration and effort by the enthusiastic minds.
- Most of the activities have been supported by external funding and support from NSF, DOE, OSC, Cairo University, and OSU
- Aim is to seek fund from US AID, Egyptian Government for more focused future activities of the MOA