



Professor Shabana Rizvi

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Ref. Collaboration with Karachi University

Dear Prof. Shabana,

Assalamu alaikum.

I am an atomic astrophysicist in the Department of Astronomy of the Ohio State University (OSU) in Ohio, USA. I came in contact with University of Karachi for evaluation of a Ph.D. thesis in Physics sometime in the past. Since then I was assigned as an external examiner of several Ph.D. theses in Physics of University of Karachi. Several members of the Physics Department took my online global lecture course with research training "Atomic Astrophysics and Spectroscopy with computational workshops on the R-matrix codes and SUPERSTRUCTURE code" under the Indo-US STEM Education and Research Center of OSU and Aligarh Muslim University, India. I was also interviewed for the "Physics camp for girls" to be presented at the camp, and I know you and Prof. Zaheer were among the lecturers of the Physics camp. I provided information on free membership of APS (American Physical Society) to a number of members of the Physics Department. All these state that I am not unfamiliar in Physics of University of Karachi.

I would like to collaborate with the Physics Department on the items listed below. Thank you as Prof. Zaheer wrote that you would be willing to cooperate.

1. Membership of American Physical Society (APS) at no annual fee.

This is the outcome of a proposal I worked on in 2012 when I was serving in the Executive Committee of International Forum of Physics (FIP) of APS. I am attaching the necessary application form for the free membership of APS. It is very simple. Anyone in physics, astronomy, chemical physics etc which are related to physics can fill out the form and email the form along with his/her CV to "prinat@aps.org" or "roberto@aps.org". He/she will hear about the APS membership within a week. The applicant may like to read some important information given at my website:

<https://www.astronomy.ohio-state.edu/nahar.1/fip.html#apsmember>

APS provides many benefits, including prizes and grants. It can provide some fund for the "Physics camp for girls" or a symposium organized by female student members of Physics. I would like you and Prof. Zaheer to help making all members of the Physics Department of Karachi University to become members of APS. Membership is free for 4-6 years after which the person has to apply again.

2. Membership of International Society of Muslim Women in Science (ISMWS): This membership for any Muslim female in science (basic or applied) is also free. She can be member of Karachi chapter and global one that I maintain. I founded ISMWS in 2010. Now it has members from 32 countries and chapters in Egypt, India, Pakistan, Palestine, USA. University of Karachi also has a chapter and Bushra Gul, writing her M.Sc. thesis in the Physics Department, has the responsibility of the President of the chapter. However, due to busy schedule, Bushra was not able to expand ISMWS at Karachi and carry out any activity. ISMWS provides many useful information and helps in networking. At a University environment, any female student or faculty member in science can be a member and carry out various tasks, but the President and her team of Vice President, Treasurer, Event Manager etc, should be students. Web address:

<https://www.astronomy.ohio-state.edu/nahar.1/ismws.html>

I would really appreciate if you or someone else could take over as the faculty advisor of ISMWS and help or guide Bushra Gul to make ISMWS chapter active at University of Karachi. I could send a formal letter for the appointed faculty advisor who will supervise ISMWS activities and issues.

3. Physics recognition program giving prizes for faculty teaching, faculty research publication, and best Ph.D. student for research and academic record: Recognition definitely bring inspiration and motivation to raise the bar of excellence. I will provide the endowment fund of \$6000 and profit from the endowment will be used to give three prizes every year. I will also provide the guidelines for selection of winners. Students will vote for nomination for the faculty winners.

I would like you, as the Chair of the Physics Department, support the recognition and help in instituting it in the Physics Department.

Please let me know your support and comment on the above 3 items.

With my best regards and wishes,



Professor Sultana N. Nahar

Fellow of APS, BPS, BAS, TWAS-UNESCO

Co-Director, Indo-US APJAK STEM Education and Research Center of OSU and Aligarh Muslim University