



”APS FOR THE THIRD WORLD AND ARAB PHYSICISTS”

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Thank you very much for the warm welcome!

I am honored to be elected and to serve as a member of the FIP EC

- One of my main objectives is to bring the Physicists in the Third World developing and Arab countries to the membership of the American Physical Society. There are several problems associated to this union, however, they are not difficult to solve.
- Before presenting them I will introduce myself and how I got involved with these issues.
- I have been working with various international educational institutes for over 17 years. It started in January 1995 when I visited Dhaka University of Bangladesh with a few thousand dollars and asked the Physics Chair whether an annual physics research award can be initiated. The purpose was to motivate research and give recognition for publications. The idea was new and took several years to convey the message of importance of research publications and go to conferences for interactions and presentations.

- I do not meet Bangladeshi scientists in conferences I go and no one seems to know any university of Bangladesh. Even Dhaka University, where Sat-ten Bose of Bose-Einstein theory was a professor and served as the Physics chair for years, is not known. Professor Bose moved to India in his later age. The amazing fact is that Indian scientists, who live next to Bangladesh, are very much active in research and well known and all their institutions seem to be known outside India.

- After years of work, now there two Physics re-search prizes, one annual research publication prize and one lifetime achievement award for physics con-tributions for any scientist in Bangladesh. Recog-nition is giving encouragement publications

- So far I have initiated and am working for best physics teaching as well as research guidance awards, and student scholarships in 5 research universities, math and science, and non-science teaching edu-cation awards for 2 non-research universities, and math and science, education awards 4 elementary to high schools. All nominations come from stu-dents. I also work with two astronomical societies in Bangladesh for education, events, proposals, and other information. All my work is financially sup-

ported only by myself.

- I have also initiated and involved in teaching and research programs in Aligarh Muslim University in India, which once led spectroscopy in India, but has gone down much in ranking for the last over 30 years. This involvement is outside my research connections with many other physicists in India.
- I have been very much involved in similar work with Egyptian physicists in several universities.
- Quite a bit of these information on these programs are available at my website. The teacher and student awardees appreciate seeing their names at the website.
- I am co-founder, with Professor Lotfia El Nadi of Cairo laser institute NILES and professor of Physics of Cairo University, of the International Society of Arab Women in Science. It has now about 150 members from Middle Eastern and African countries.
- I am the founder and coordinator of the International Society of Muslim Women in Science (ISMWS). It has now about 50 members from 15 countries.

- I am in contact and involved with research issues with physicists of a few other countries who are carrying out research largely isolated, but not connected to APS.
- Dr. Gary Steigman of Ohio State, who is familiar with my work, suggested me to be an FIP EC member mentioning that I could create better scopes for these physicists and scientists through FIP EC. The EC membership has opened up the very important scope for bringing the international physicists to the network of APS.
- I conducted a survey of physicists in 3 Asian and 4 Arab countries: Bangladesh, India, Pakistan, Egypt, Iraq, Oman, and United Arab Emirates, regarding their interest in APS and be in the network with other physicists. Outside my contacts, I had help from Egyptian graduate student Tamer Elkafrawy at Western Michigan University, faculty member Akeel Huaasin of Basrah University in Iraq, Physics Chair Sabieh Anwar of LUMS School of Science and Engineering, Dr. Kassef of Quaid-e-Azam University in Pakistan, Physics Chair Maamar Benkrauda of United Arab Emirates University, Physics Chair S M Mujibur Rahman of Sultan Qaboos University of Oman, and Indian Physicists attending the

CDAMOP conference in Delhi, 2011. I describe the survey next. This represents overall scenerio at developing and Arab countries. The important fact is **”Everyone is interested in APS & its membership”**

- Followings are the questions and answers.

Question 1: How many APS members do you have?

Answer 1: Bangladesh: None (1!), Egypt: Few (≤ 3), India: Few (my contact), Iraq: None, Oman: 1, Pakistan: None, UAE: Few

Reason for low membership: i) Expensive membership fee, ii) Have not heard of APS

Why expensive:

Typical Monthly Income of a physicist: Bangladesh ($\sim \$100$), Egypt ($\sim \100), India ($\sim \$950$), Iraq ($\sim \2000), Oman (Reasonable), Pakistan ($\$1500-2000$), UAE ($\6000)

Question 2: What could be the fair membership fee?

Answer 2: Bangladesh: \$5, Egypt (& other developing Arab countries): \$5 or free, India: \$10 – 15, Pakistan: \$15-20, Iraq: \$75, Oman: \$50, UAE: \$70 & \$1000 for lifetime membership

Question 3: Can the Science and Education Department of the government help in membership fee through a society like Bangladesh Physical Society?

Answer 3: Bangladesh, Egypt, Iraq, Pakistan: The government can if it wants, but helping in member-

ship to a scientific organization is taken to be of no general interest - difficult to work with government officials. India: Difficult to work

Question 4: Do you go to APS conferences?

Answer 4: Bangladesh: No (most expensive & visa), Egypt: No (most expensive & visa), India: Yes with DST grant, Iraq: No, Oman: No (expensive & visa), Pakistan: No, most expensive, UAE: No (expensive & visa)

Question 5: Which conferences do you go?

Answer 5: Bangladesh: Bangladesh regional, & in India, Middle East, China, Europe (with government grant & visa - ~1 one grant per lifetime), Egypt: Regional, Middle East, & sometime in China, Europe, India: Any conference with grant, Pakistan: Limited, Oman: Middle East, China, Europe, UAE: Middle East, China, Europe
Wishlist: APS involvement and provide good speakers

Question 6: Do you have access to APS journals?

Answer 6: Bangladesh: Very limited, Egypt: on campus internet, India: Most of them, Iraq: No

(Some access in the past), Oman: Wants individual discount access, UAE: generally yes

Question 7: What can FIP do for you?

Answer 7: All countries: Give cheaper membership fee and organize conference in their countries.

Each, except Iraq, has facility to hold the conferences. Egypt particularly asked for conference every other year. Egypt and UAE say they are in the most convenient location for Middle Eastern, African, even Asian physicists to attend

Based on the survey, I would submit the following proposal and ask for support

APS MEMBERSHIP PROPOSAL

PROPOSE: I suggest that we, FIP EC, propose an motivating APS-UN (Unity Network) membership for any physicist in the developing and Arab countries. It is a discount membership membership with the following benefits at low cost to APS:

- i) APS-UN membership fee \$10-\$15
- ii) Receive APS electronic announcements
- iii) Receive APS electronic newsletter
- iv) Right to contribute to APS newsletter
- v) Right to participation in APS conferences as a member
- vi) Receive discount on APS journals
- vii) May engage in APS projects
- viii) Apply for any APS travel grant for conference presentations
- ix) May cast votes in APS elections
- x) Right to hold APS regional conferences under APS banner and policies

● This is similar to that offered by some other organizations (e.g. IEEE) and societies (e.g. INWES) for developing nations. If we consider bringing these physicists to unity network as one of FIP's important goals, we should accomodate the interested individual physicists with a fee that they are

able to pay, We can always revise the fee as the situation improves. The most important outcome will be that these physicists will have the opportunity to know the others in the developed countries and be able to interact for advanced research

I believe, we FIP EC can make the right change for the Physicists of Developing and Arab Nations.

”So the question is: What is the step to take from here?”

- Finally, I would like to say a few things about ISMWS, the International Society of Muslim Women in Science, and welcome any help or comment.

International Society of Muslim Women in Science (ISMWS)

Our Motto: *Stay in Science (basic or applied)*

ISMWS URL:

<http://www.astronomy.ohio-state.edu/~nahar/ismws.html>

Current Status:

Number of Members: 50, Number of Countries: 15

Countries:

USA, Afganishtan, Bangladesh, Canada, Egypt, India, Iran, Jordan, Kenya, Pakistan, Palestine, Saudi Arabia, Syria, Turkey, United Arab Emirates

Current Activities:

Networking - Share achievement news, Job information, Conference information

Membership Application info (Free membership):

Email the following application information:

Name:

Position, Degree (already achieved or working on):

Research/Professional Area:

Present Institution/Lab/Company:
Country (Nationality) and Country of Residence:
Address (preferably institutional):
Tel(optional): , Fax(optional): , URL(optional):
Email (required):

To: ISMWS <nahar@astronomy.ohio-state.edu>

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