

**Interim Reports on Women in STEM Roadshows workshops**  
**Director: Prof. Sultana N. Nahar, The Ohio State University, USA**

**GENERAL INFO ON THE WORKSHOPS:**

**Women in STEM Roadshow (WSR) workshops**

- The project has 9 workshops, each of 2 days, and a year long monitoring and evaluation of STEM activities of the participants
- The scheduled workshops are: 2 in Delhi, 2 in Hyderabad, 2 in Kolkata, 1 in Patna, 1 in Kurnool, 1 in Aligarh
- Each workshop has been designed to demonstrate the importance of STEM and provide relevant scopes and tools

**WORKSHOP STRUCTURE**

- The workshop has 3 main sessions
  - I: Objectives, overview, why STEM
  - II: Strategy for teaching and learning skills, train for the careers
  - III: EducationUSA that provides information of US universities and how to apply for higher studies
- 2 Pre-sessions, Certificate ceremony

**WORKSHOP PARTICIPANTS**

- Participants of the workshops are students in the STEM from universities and colleges, some high school students, a few teachers in STEM, one US alumna/alumnus
- Each workshop selects two Mentor Fellows from the participating teachers for grooming students in STEM fields
- The students and mentors will report activities a few times until end of the project in Sep 2018
- The participating alumni are committed to spend two hours in high schools to encourage and answer questions to female students in STEM

**SUPPORT FOR PARTICIPANTS**

- i) Stipends for students as needed for attendance, ii) Mentor Fellowships to two participating teachers (college, high school) in STEM in each workshop

**MONITORING and EVALUATION**

- STEM related activities will be encouraged and recorded and evaluated by our team at the Indo-US APJ Abdul Kalam STEM Education and Research Center of Aligarh Muslim University and Ohio State University in Aligarh
- Participants will remain connected through networks
  - i) emails: [womenstemroadshows@gmail.com](mailto:womenstemroadshows@gmail.com),
  - ii) facebook: [womeninstemroadshow](https://www.facebook.com/womeninstemroadshow)
  - iii) twitter: <https://twitter.com/Womeninstem33>
- Updates will be posted at WSR website:  
<http://www.astronomy.ohio-state.edu/~nahar/womenstemroadshow.html>  
or [go.osu.edu/womenstemroadshow](http://go.osu.edu/womenstemroadshow) (both are the same)
- WSR in newspapers: Aligarh, Delhi, Hyderabad, Patna

**WSR TEAM MEMBERS:**

**INTERNATIONAL MEMBERS**

- Director: Dr. Sultana N. Nahar (Ph.D. Physics, USA), Astronomy (OSU), founder of international STEM programs (1995-present)

- International Expert: Dr. Nasreen Haque (Ph.D. Physics, USA), CEO, Intalage, Inc, USA, STEM education involving teachers and students in the USA
- International Expert: Dr. Karen Irving (Ph.D. Science education, USA), Teaching and Learning, OSU, developed STEM program for postgraduate Indian Graduate students under the Indo-US Knowledge Initiative award
- Consultant: Dr. Anil Pradhan (Ph.D. Physics, England), Astronomy, OSU, Director: Indo-US APJ Abdul Kalam STEM Education and Research Center of OSU-AMU

• **LOCAL EXPERTS, CONTACTS, VOLUNTEERS:**

**Delhi:**

- Local Expert: Dr. Noor-e-Zhahra (Ph.D. Engineering), recipient of national teaching award
- Local Contact: Diskshya Bhatta (Dentistry, Sharda University)
- Volunteers: Juhaid Farooq, Shah Saaib Ahmad Rabbani

**Kolkata:**

- Madiha Ahmad (B.Sc.Hon. Botany, Teacher Training Course, calcutta University, Talent Manager, Lifebushido, USA)
- Local contact: M. Sagheerul Islam (B.A, M.BA, Calcutta University, CEO, Sreemudranalaya Technology Pvt. Ltd.)
- Volunteers: i) Fatima Sultan, B.Ed from Aliah University, Park Circus campus 2) ii) Ifra Nadeem, B.Sc Psychology from Loreto College

**Patna::**

- Local expert: Syed Hasanain (B.A.,M.A., Patna University, involved with charity work, human resources in teaching)
- Volunteers: i) Zoheb Hasan and ii) Kaustabh Singh

**Hyderabad::**

- Local Expert: Meherunissa Nida Mir (B.Sc. Biotech, M.Sc. student in Psychology, St. Francis College, project involved with issues of minority women)
- Volunteers: Sara (B.Sc. student), Syeda Talat, Captain M.S. Ali

**Kurnool::**

- Local Expert: Catain M.S. Ali
- Local contact: Abdul Aziz Siddiqui (District Coach, Sports Authority of India)
- Local contact: Dr. Jahanara Momin (Osmania College)
- Volunteer: Dr. Nasreen Haque

**Aligarh::**

- Local Experts: i) Prof. Furukh Arjmand, ii) Dr. Sabiha Parveen, iii) Swaleha Naseem
- Volunteers: i) Siffen Lehra (PG Chemistry, AMU), ii) Dr. Mehammad Usman (Chemistry, AMU)
- Each workshop had several additional volunteers

## CHIEF GUEST

- Each workshop has a symbolic Guest - a role model/ promoter/ or activist of women education and empowerment

### Delhi:

- Workshop 1: Chief Guest Dr. Najma Heptullah - a role model of achievements for females - career expanded from Ph.D. in Zoology to philanthropy to leadership
- Workshop 2: Chief Guest Dr. P. Basak, Director of Science Institute of Meerut University, a promoter of women education in STEM

### Kolkata:

- Workshop 3: Chief Guest Chief Minister Mamata Banerjee deputed by Minister Chandrima Bhattacharya
- Workshop 4: Chief Guest Prof. Ghazala Yasmin, Journalism, Alia Government Urdu University

### Patna:

- Workshop 5: Dr. Sister Marie, A.C., Principal. Patna Women's College

### Hyderabad:

- Workshop 6: Dr. Farida Hussain (Economics, a well known activist for women empowerment, Elected joint secretary, Vice President, President (current) of All India Women conference (AIWC), involved with projects for women amputated limbs, natural renewable energy. natural humidifiers etc,
- Workshop 7: Dr. Syed Najamul Hasan, Dean of School of Sciences and Head of Department of Mathematics, Maulana Azad National Urdu University, Hyderabad, promoter of women education  
Prof. Syed Najamul Hasan, hasan.najam@gmail.com

### Kurnool:

- Workshop 8: Nafis Khizer (M.A. Chennai University), teacher, entrepreneur, now founder of a NGO for training poor women from computer usage, tailoring, embroidery stitching, etc financial independence and one free health clinic.

### Aligarh:

- Workshop 9: Guest of Honor 1: Dr. Hameeda Tariq (Pediatrician), Guest of Honor 2: Prof. Naima Khatoon (Principal of Abdullah Women's College of Aligarh Muslim University)

## **NEW and MEDIA COVERAGE**

- The local experts and contacts communicated to media for cover the workshops and the objectives to reach out to the larger community of students. Coverage was made on the TV in 3 locations and in many newspapers in 5 locations.

Followings are the covered collected by the Director

### **ALIGARH:**

Pre-workshop: Newspapers: Several announcements were made in newspapers

During and Post-workshop: i) Newspapers: Many newspapers made extensive coverage of the events for a days (many are available at the official WSR website)

ii) TV: No channel in Aligarh

### **DELHI:**

Pre-workshop:

During and Post-workshop: i) Newspapers: Many newspapers covered the event for a few days (number of the are available at the official WSR website)

ii) TV: Channel DurDarshan broadcasted the news in the evening of the first workshop

### **HYDERABAD:**

Pre-workshop: News item announcing the workshop was submitted to newspapers but did not get published

During and Post-workshop: i) Newspapers: Reporter and cameraman came and took interview with pictures. Several newspapers covered the news. (The newspapers were not collected)

ii) TV: Hyderabad TV Channel broadcasted the news in the evening

### **KOLKATA:**

Pre-workshop:

During and Post-workshop: i) Newspapers: Number of newspapers were approached but no positive response

ii) TV: Could not be approached

### **KURNOOL:**

Pre-workshop:

During and Post-workshop: i) Newspapers: Not known

ii) TV: Urdu Channel (broadcasts to 36 countries) "Baaz E Aaina" interviewed and posted a long news item

### **PATNA:**

Pre-workshop: Extensive coverage in newspapers

During and Post-workshop: i) Newspapers: Extensive coverage of the event

ii) TV:

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## INTERIM REPORT

Workshops 1,2 - Delhi, February 5-6 & 7-8, 2018

- The first two of the nine workshops were held successfully at Jamia Millia Islamia (JMI) University in Delhi during Feb 5-6 and 7-8 respectively
- Number of participants: 33 (1st workshop), 55 (with a contingent of 20 JMI students, 2nd workshop). They were
  - i) students from a number of colleges/universities in and around Delhi,
  - The Delhi participants include 10 students from Kashmir
  - ii) several high school students
  - iii) 6 teachers from colleges and high schools
  - iv) two US alumni
- The Honorable Dr. Najma Heptullah (Ph.D. Zoology and university teacher at age 22), Governor of Manipur and Chancellor of JMI, accepted to be the Chief Guest at the inaugural session on Monday Feb 5, much before JMI was chosen to be venue. She traveled to Delhi for the workshop.
  - The session was presided over by the Vice-Chancellor of JMI, Prof. Talat Ahmad
- Dr. P. Basak (Ph.D. Engineering, Director of Science Institute, Meerut University) was the Chief Guest of the 2nd workshop
- The introductory session consisted of presentations by the Director Prof. Nahar, International Expert Prof. Karen Irving, and Consultant Prof. Anil Pradhan.
  - The third international expert, Dr. Nasreen Haque, could not attend owing to an accident in the family before the event. Ms. Swaleha Naseem, Indo-US scholar in nanotechnology from the Aligarh Muslim University (AMU), substituted for Dr. Haque, with Prof. Pradhan as support in the 1st workshop. Prof. Pradhan and Prof. Irving substituted Dr. Haque in the 2nd workshop
- Presented talks began with general inspirational and scientific material by the Director, and guided the students through issues faced in STEM careers, applications to US universities, CV/Resume writing, passport/visa applications, sources of funds, overcome cultural barriers topics
- Interactive sessions consisted of pattern recognition and relation to STEM problems by Karen Irving, and EducationUSA resource by the Director
- Local expert: Dr. Noor Zahra (Ph.D. Engineering, recipient of national teaching award) presented Indian female scientists who won the challenges and became successful, and provide logistics for the WSR network activities
- Dr. P. Ramarajan from US Embassy talked about profession and how to stay in it during family breaks
- NEXUS representatives from US Embassy in Delhi briefly discussed entrepreneurial opportunities
- Alumni shared their experiences on easy access to teachers, advantages of midterm, extra benefits of seeing a rich country, forming international friends and building a stronger personality
- There were about half an hour of problems with slow internet and technical difficulties in Session 2, Day 1. Participants were used it and were not bothered. The problems were overcome by re-organization of the online material.
- Students were highly enthusiastic and expressed inspired by the speakers. One Kashmiri student expressed at the end on behalf of the participants the gratitude on the workshop opportunity
- There were pre- and post-surveys of all students in writing. First reading shows highly positive comments about how the workshops met their expectations, how much they learned, and how they would follow up.
  - Prof. Noor Zahra has a preliminary analysis and all responses have been archived.
- Second Chief Guest, students and teachers received stipends
  - The selected Mentor Fellows (teachers) who will focus on engaging students to STEM activities received honorarium. The Mentor Fellows are
    1. Dr. Kashish Are Shakil, Jamia Hamdard University (shakilkashish@yahoo.6.in)), Workshop 1,
    2. H. ... (Chancellor of Jamia Millia Islamia), Workshop 1,

- Some pictures from the two Delhi workshops are given below: group with certificates, attending participants, Chief Guest Dr. Najma Heptullah interacting with WSR participants, a representative participant expressing gratitude for the workshop



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**INTERIM REPORT**

**Workshops 3,4 - Kolkata, February 9-10 & 11-12, 2018**

- The 3rd and 4th of the nine workshops were held successfully at The Pearl Hotel, 35-Z Radha Madhab Dutta Garden Lane, (Opp of Salt lake Stadium VIP Gate on Em Bypass), Kolkata 700010 during Feb 9-10 and 11-12 respectively
- Number of participants: 28 (1st workshop), 27 (2nd workshop). They were
  - i) students from a number of colleges/universities in and around Kolkata
  - ii) several high school students
  - iii) 3 teachers from high schools
  - iv) two US alumni (both joined via zoom)
- The Chief Guest for workshop 3 the Honorable Chief Minister Mamata Banerjee was deputed by Minister Chandrima Bhattacharya who spoke about the Indian constitution of equal right regardless of religion and government support for minorities
- The Chief Guest for workshop 4 was Prof. Ghazala Yasmin, a faculty in Journalism of Alia Urdu University who spoke about the need for minority women to go for education
- The introductory session consisted of presentations by the Director Prof. Nahar, Chief Guest, International Expert Prof. Karen Irving, Dr. Nasreen Haque (via zoom) and Consultant Prof. Anil Pradhan
- Presented talks began with general inspirational and scientific material with examples of current outstanding scientific problems affecting our daily lives by the Director, and guided the students through issues faced in STEM careers, applications to US universities, CV/Resume writing, passport/visa applications, sources of funds, overcome cultural barriers topics
- Interactive sessions consisted of points related to graduate studies- current trend on emphasis on undergraduate research, years of studies in the home institutions, TOEFL and IELTS, GRE (general and subject), practice on preparing the CV, research statements, venues of getting financial support etc by Sultana Nahar, Anil Pradhan, Karen Irving. EducationUSA was also presented by US Consulate representative Chandrima
- Local expert: Madiha Ahmad presented STEM importance, showed example of female scientist - Dr. Nahar, challenges and how to be successful, and provide logistics for the WSR network activities
- Representatives from US Embassy and American Center, Sheena Hall (workshop 3) and Jaimie Dragon (workshop 4) encouraged students in pursuing their dreams of achievement and provided information available to students and educators
- Alumni shared their experiences on easy access to teachers, advantages of midterm, extra benefits of seeing a rich country, forming international friends and a network
- Students were highly enthusiastic and expressed being inspired by the speakers.
- There were pre- and post-surveys of all students in writing. First reading shows highly positive comments about how the workshops met their expectations, how much they learned, and how they would follow up.
- The workshops in Kolkata went exactly as planned in schedule and content.
- Participating students and teachers received stipends
  - The selected Mentor Fellows (teachers) who will focus on engaging students to STEM activities received honorarium.1. Shabana Yasmin, AJP School (shabanayasmin27@gmail.com) 2. Sumbul Ahamad, Saifee Hall School (sumbul77@rediffmail.com) workshop 4

- Some pictures, including those of each group with certificates from the two Kolkata workshops, are given below.



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## INTERIM REPORT

### Workshops 5 - Patna, February 13-14, 2018

- The 5th of the nine workshops was held successfully at Hotel Gargee Grand, Plot no 825, Exhibition Road, Patna
- Number of participants: 61. They were
  - i) students from a number of colleges/universities in and around Patna
  - 4 travelled over 20 km from APJ Abdul Kalam Engineering College to attend the workshop
  - ii) several high school students
  - iii) 8 teachers from high schools
  - iv) one US alumnus (via zoom)
- The Chief Guest for workshop was Dr. Sister Marrie Jessi, A.C., the principal of the Patna Women's College who spoke about importance of focusing and encouraged them to focus on education
- The introductory session consisted of presentations by the Director Prof. Nahar, Chief Guest, International Expert Prof. Karen Irving, Dr. Nasreen Haque (via zoom) and Consultant Prof. Anil Pradhan
- Presented talks began with general inspirational and scientific material with examples of current outstanding scientific problems affecting our daily lives by the Director, and guided the students through issues faced in STEM careers, applications to US universities, CV/Resume writing, passport/visa applications, sources of funds, overcome cultural barriers topics
- Interactive sessions consisted of points related to graduate studies- current trend on emphasis on undergraduate research, years of studies in the home institutions, TOEFL and IELTS, GRE (general and subject), practice on preparing the CV, research statements, venues of getting financial support etc by Sultana Nahar, Anil Pradhan, Karen Irving.
- EducationUSA representative from US Consulate Kolkata presented (via zoom) information about admissions and took questions in an hour long session
- Local expert: Syed Hasanain encouraged women of the minority to go for STEM subjects to be a part alongwith others for future advances, importance of independence
- Dr. Nahar discussed about challenges and how to be successful, and provide logistics for the WSR network activities
- The alumnus (online from Mumbai) talked about how much he benefitted and his attachment with his alma mater and international friends
- EducationUSA representative Chandini from Kolkata presented (on skype) the information available at the American Center, encouraged participants to visit physically or website or write email for any questions
- Students were highly enthusiastic and expressed gratitude for all the support, inspiration and information. Many of them did not have much idea about what was needed for applications
- There were pre- and post-surveys of all students in writing which show highly positive comments about how the workshops met their expectations, how much they learned, and how they would follow up.
- The workshops in Patna went exactly as planned in schedule and content.
- Participating students and teachers received stipends
  - The selected Mentor Fellows (teachers) who will focus on engaging students in STEM activities received honorarium. They are:
    1. Dr. Shahla Yasmin, Patna Women's College (shahla\_apea@yahoo.com)
    2. Zubeire Nuzhar J. Hyder, Ayub Girls High School (jawed\_irfan@rediffmail.com)

- Note on the number of participants:
  - The local experts and contacts had to make considerable effort to get the participants since "minority" category was not much welcomed at a number of institutions
  - Number of attending participants was less than that registered (e.g. Workshops 1, 3, 4) largely due to their on-going exams. So more candidates were accepted than planned. In Patna, almost all candidates who submitted CVs and met the criteria of a participant attended the workshop.
- Some pictures from Patna workshop are given below.



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## INTERIM REPORT

Workshops 6,7 - Hyderabad, February 16-17, 18-19, 2018

- The 6th and 7th of the nine workshops was held successfully at Minerva Grand Hotel, 8-2-616, Banjara Hills, Road No - 11, Hyderabad - 500034
- Number of participants: 39 (workshop 6), 36 (workshop 7). They were
  - i) students from a number of colleges/universities in and around Hyderabad
  - 5 travelled over 20 km (workshop 6) to attend the workshop
  - ii) number high school students
  - iii) 7 teachers from high schools
  - iv) Two US alumnae
- Alumnus Mohammad Omar Hussain (engineer) traveled from Oman to Hyderabad for two days to participate in the workshop as he felt the need to contribute for the WSR cause
- The Workshop 6 Chief Guest for workshop was Dr. Farida Hussain (Economics), current President of All India Women Conference who spoke how her work relates to STEM fields in working with village women health losing limbs due to poisonous bites during taking care of toilet needs in the open field at night time, renewable energy, natural humidifiers etc as these are all part of life. She brought samples of natural products for demonstration, and encouraged participants to focus on education
- In Workshop 7 Dr. Syed Najamul Hasan expressed his realization that his upbringing by his working mother had made him respect women professional and that no female in his research group showed lower performance than the male members. He encouraged students to apply to his institution
- The introductory session consisted of presentations by the Director Prof. Nahar, Chief Guest, International Expert Prof. Karen Irving, Dr. Nasreen Haque and Consultant Prof. Anil Pradhan
- Presented talks began with general inspirational and scientific material with examples of current outstanding scientific problems affecting our daily lives by the Director, and guided the students through issues faced in STEM careers, applications to US universities, CV/Resume writing, passport/visa applications, sources of funds, overcome cultural barriers topics
- Interactive sessions consisted of points related to graduate studies- current trend on emphasis on undergraduate research, years of studies in the home institutions, TOEFL and IELTS, GRE (general and subject), practice on preparing the CV, research statements, venues of getting financial support etc by Sultana Nahar, Anil Pradhan, Karen Irving.
- EducationUSA representative Sraavani from US Consulate Hyderabad presented information about admissions and took questions in an hour long session
- Local expert: Meherunnisa Nida Mir encouraged women of the minority to go for STEM subjects to be a part alongwith others for future advances, importance of independence and showed examples of Indian women pioneers including Sultana Nahar
- Dr. Nahar discussed about challenges and how to be successful, and provide logistics for the WSR network activities
- The alumnus M. Omar Hussain talked about how the training in the USA made him. Originally from Kashmir he is committed to spend two hours in a girls school in Kashmir for the project. Alumna Vijaya Tirmalareddy in Hyderabad expressed gratitude for her education in the USA and helping her successful
- EducationUSA representative Sraavani in Hyderabad presented the information available at the American Center, offered suggestions and encouraged the participants to make appointments for any questions
- US Consulate representative Akash Suri spoke about women power and Joe Christopher spoke about various educational scopes under exchange programs

- There were pre- and post-surveys and their verbal statements show that all students felt highly positive about the workshop, materials they learnt, hope to pursue their dreams for higher education, and how much they were inspired by meeting the scientists.
- The workshops went exactly as planned in schedule and content.
- Participating students and teachers received stipends
  - The selected Mentor Fellows (teachers) who will focus on engaging students in STEM activities received honorarium. They are:
    1. Sujatha Kolikipamla, Government Junior College (sujatha.kolikipamla@gmail.com), Bollaram, Secunderabad, 2. Bushra Shireen, Shadan College, Hyderabad (bsmeraj4292@gmail.com), Workshop 7
    3. Siddiqua Samreen, Ravindra Bharti School (samreen4ru@gmail.com), Hyderabad, Workshop 7
- Two local TV channels broadcasted workshop news and news was published in newspapers
- Pictures below from Hyderabad workshops show Chief Guest Dr. Farida Hussain with demonstrating items on the table (L, top), Dr. A.K. Pradhan responding to questions (R, top), groups of certificate ceremony (bottom two)



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**INTERIM REPORT**

**Workshops 8 - Kurnool, February 20-21, 2018**

- The 8th of the nine workshops was held successfully at Mourya Inn, Kurnool
- Number of participants: 51
- 46 students from a number of colleges/universities in Kurnool
- 4 teachers,
- Alumna Aditii Rajput (online from Mumbai)

Note: About 30 additional students with two teachers gathered outside the conference room after WSR session started. However, they had to be turned away as we were already in full capacity

- The Chief Guest for workshop Nafis Khizer, who runs a large charity organization for women and a free clinic, spoke about priority on economic independence for women and most crucial need for STEM education.

- The first day session consisted of presentations by the Director Prof. Nahar, Chief Guest, International Expert Prof. Karen Irving, Dr. Nasreen Haque, Consultant Prof. Anil Pradhan, and alumna Aditi

- Presented talks began with general inspirational and scientific material with examples of current outstanding scientific problems affecting our daily lives by the Director, and guided the students through issues faced in STEM careers, applications to US universities, CV/Resume writing, passport/visa applications, sources of funds, overcome cultural barriers topics

- Consular Chief Mulligan started his speech with the exemplary entrepreneur woman, Prophet Muhammad's wife Khadija, emphasized importance of STEM subjects, and advised on information on US visa. Chief of American Center Hyderabad, Gabriel Hons-Olivier, provided information on the various helps in the embassy, American Center, EducationUSA

- Interactive sessions consisted of points related to graduate studies- current trend on emphasis on undergraduate research, years of studies in the home institutions, TOEFL and IELTS, GRE (general and subject), practice on preparing the CV, research statements, venues of getting financial support etc provided by Sultana Nahar, Anil Pradhan, Karen Irving.

- EducationUSA representative Sraavani Pere from US Consulate Hyderabad presented (via zoom) information about admissions and took questions in an hour long session

- Local expert Prof. Jahana Momin asked the students to go forward with courage and achieve the goals. She also gave information on contacts and on some STEM activities

- There were pre- and post-surveys of all students in writing which show highly positive comments about how the workshops met their expectations, how much they learned, and how they would follow up.

- Participating students and teachers received stipends

- The selected Mentor Fellows (teachers) who will focus on engaging students in STEM activities received honorarium. They are:

1. Dr. Jahanara Momin, Osmania College for Women, Kurnool (jahanara.phd@gmail.com)
2. Dr. Lakshmi Prasuna, KVR Government College, Kurnool (prasunacpl@gmail.com)

## Kurnool workshop pictures

- Some pictures from Kurnool workshop are given below: Certificate ceremony, presentation by Chief Consular of Hyderabad Mr. Mulligan, presentation by Dr. Nasreen Haque, question from a participant.



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## INTERIM REPORT

Workshops 9 - Aligarh, February 23-24, 2018

- The 9th of the nine workshops was held successfully at Abdullah Women's College, Aligarh
- Number of participants: 58. 51 students, 6 teachers, 1 Alumna They were
  - i) students from Abdullah Women's College, Zakir Hussain Engineering College, University Polytechnique
  - ii) several high school students
  - iii) 6 teachers from high schools and colleges
  - iv) one US alumna, Dr. Sabiha Parveen

Guests of Honor were Dr. Hameeda Tariq and Prof. Naima Khatoon gulzar, who presented statistics of education women, encouraged students to increase the number and to focus on education

- The first day sessions consisted of presentations by the Director Prof. Nahar on how to utilize the half of the intellectual power of the human race and current outstanding scientific problems affecting our daily lives, International Expert Prof. Karen Irving on teaching skills and hands-on activities, Dr. Nasreen Haque on STEM education and professional scopes, and Consultant Prof. Anil Pradhan on graduate admission

- Second day was on CV writings, EducationUSA via skype by a representative from Delhi office, Zafeena Suresh, who also answered many questions, sources of funds for studying in US universities, applications to US universities, passport/visa applications, overcome cultural barriers

- Interactive sessions consisted of points related to graduate studies- current trend on emphasis on undergraduate research, years of studies in the home institutions, TOEFL and IELTS, GRE (general and subject), practice on preparing the CV, research statements

- Local expert Prof. F. Arjmand emphasized how women could break the barrier to education and gave examples of past and present successful scientist and Swaleha Nasim discussed about various logistics of WSR and reporting

- The alumna Dr. Sabiha Parvin talked about her intense learning experience in the USA and opening her mind and thoughts

- The pre- and post-surveys of students in writing show highly positive comments about the workshops and how much motivated they felt

- Being the last workshop, the Indu-US STEM Center of Education and Research of OSU-AMU organized an evening ceremony for the certificates. University administrations and heads of the STEM departments were invited. - The selected Mentor Fellows (teachers) who will focus on engaging students in STEM activities received honorarium. They are:

1. Dr. Nazura Usmani (Zoology, Abdullah Women's College),
2. Ms. Safia Sultana (STEM Teacher, Abdullah Girls High School)

Sultana Nahar thanked and recognized the members of STEM Center and members of the international team with trophies and certificates. Professor Alim Naqvi, the founder of Nanotechnology Center of AMU, gave compliments to the leadership of Sultana Nahar and recognized her.

## Pictures from Aligarh workshop:

- Note on the participating institutions:
  - The local experts visited limited number of institutions in Aligarh and nearby area. However, "minority" category was not welcomed by the authorities of two of them and no application came from them
- Some pictures from Aligarh workshop are given below: certificate ceremony, inauguration session, Sultana addressing the participants, students worked on the resume writing and filled out survey forms

