

Khwarizmi Science Society

Developing a culture of science



خوارزمی سائنس سوسائٹی

پاکستانی معاشرے میں فروغ سائنس کی علمی اور عملی تحریک

***Science Exhibition
at
Ali Institute of Education***

Tuesday, 16 April 2013

Report by

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<http://www.khwarizmi.org/activities/2013/science-exhibition-at-ali-institute-of-education>

The Khwarizmi Science Society participated, upon invitation; in a science exhibition at Ali Institute of Education on 16 April 2013. The exhibition-cum-competition was especially for the secondary and post-secondary level students in presenting innovative models. They have invited Khwarizmi Science Society to participate in this exhibition and deliver the best of science that the children could be fascinated.

In the exhibition, experiments and models on a vast area of subjects including biology (animal cells, functions of a kidney), physics (telecommunication, series and parallel circuits, solar system, windmill), chemistry (distillation), harnessing energy from muscles to water to electricity (tidal energy), environmental change were presented by the different students from grade 6 to grade 10. The practical demonstration on wind mill and hydel power generation was highlighting the need of cheap energy resources.



The organizers of the exhibition arranged a separate room for our team. Our members were ready to convey all the information that they have regarding their own subjects but did not participated in the competition of best scientific model. The team consists of six members including two volunteers at six different stalls. The topics include Earthquakes and Seismometer, Weather and Atmosphere, Mercury spectrum and colors of light and Astronomy which also include the experiments regarding Moon Craters and Phases of the Moon.

The exhibition started after the keynote lecture of the director of Ali Institute. The students and teachers were allowed to visit stalls that were adorned by different schools.

First stall was hosted by Mr. Ahmed Waqas Zubairi of eddy currents followed by the second on Earthquakes and Seismometer. Students as well as their teachers found the tube exciting. They were surprised to see the magnet moving very slow in the copper tube and this creates thirst in knowing more about science. He beautifully explained the occurrence of earthquakes in



different parts of the world especially in Pakistan. He further explained and demonstrated the recording mechanism for earthquakes through seismometer. Students themselves produced artificial earthquake and showed deep interest in knowing the seismic activity. A round of applause for the seismic demonstration was heard in the room.



The third stall was of a volunteer Ms. Maham Masood Sadiq on measurement of different weather components. The excitement of the students was seen on the home-made experiments which made their concepts clear. She demonstrated different experiments regarding how weather differ in different parts of the world. She also revealed the students that how rainfall, air pressure and air speed is measured in the weather observatories. The demonstration on the intensity of sunlight was extended to the seasons.



The Astronomy setup was hosted by Mr. Kumail Abbas. The students take much interest in gaining information regarding the basics of Astronomy and their Universe which were explained through wonderful pictures and animations. He also gives further information on phases of the moon. Lunar craters were exhibited through an experiment containing a sand box and spherical bobs of different masses.



Ms. Arifa Mirza introduced the Mercury Lights and explained the spectrum of Mercury through a spectrometer. Starting from the atomic structure to the spectrum of mercury light which consists of different peaks at different wavelength, she demonstrated on how different colors in our life has been seen. The demonstration made the teachers thrilled and helped the secondary level students a better understanding of light spectrum.



Teachers were interested in our setups and got new ideas of demonstrations for themselves. It was a positive feedback from the visitors and the hosts. The Khwarizmi Science Society and its participants were provided with the certificates.