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PSF NEWS

January 2015

Monthly Newsletter of Pakistan Science Foundation

Vol. 13 No. 01

From the Chairman



I insist you to strive. Work, Work and only work for satisfaction with patience, humbleness and serve thy nation.

(Muhammad Ali Jinnah)
Creativity not only improves educational scores/grades, but it also contributes in inspiring students to become curious, engaged, and interested in the world around them and within them. The great engine that drives innovation and invention in society comes from people whose flame of creativity was kept alive in childhood.

Every invention, both practical and imaginative, is the product of creativity.

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PSF-Intel join hands for promotion of science

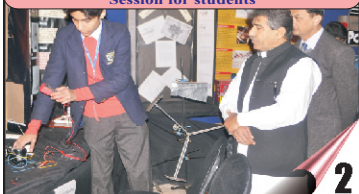
Since 2003, PSF and Intel Education Initiative, Pakistan have been joining hands in organizing Science Fairs at Provincial and National levels. Major objective is to motivate the young students towards science education, which is the ultimate ladder for socio economic development of the nation. The grand winners of the Science Fairs get an opportunity to showcase their research projects in Intel International Science and Engineering Fair (ISEF) at USA.

Each year, approximately 7 million high school students around the globe develop their research projects and present their work at local science competitions with the hope of making it to the Intel International Science and Engineering Fair at USA. About 1,800 winners of these competitions are invited to share ideas, showcase cutting-edge research, and compete for more than USD 5 million in awards and scholarships. The procedure for initial screening of the students starts all over the country by

involving Provincial Education Departments, Science Caravan offices, teachers and scientists. Training workshops and Mentorship session are also organized as part of the students' selection process. For the year 2014-15, the first phase of the Intel Science Fair was started in May-June 2014 and continued till January 2015. Orientation sessions and Science excel camps were arranged by PSF, Intel, Federal Directorate of Education, Provincial Education Departments and



Group Photo of Grand Winners of Intel National Science Fair with Prof. Dr. Khalil Ahmed Ibupoto, Chairman PSF and distinguished guests



From the Chairman

The car we drive, the clothes we wear, the music we hear, some television shows we watch, the books we've read, medicines that have cured our ills and all technological inventions came from a creative mind, someone who could take existing information and knowledge and modified it slightly to make something totally new and original. Project-based instruction and constructive learning can provide some interesting ideas that may inspire creativity in our young minds. As there are many sources for creative projects, the only issue is placing attention.

PSF is dedicated to empower young students with best opportunities to functionalize their thoughts successfully in creating a science-learning community in Pakistan. Participation of students in science and technology fairs can provide a platform to show their creative thoughts in an innovative way. For promotion and popularization of science and technology, PSF joins hands with Intel Education Initiative, Pakistan for holding Science and Engineering Fairs at Provincial, National and International levels. These fairs are meant for capacity building and to foster creativity among the students.



Intel National Science Fair Winners receiving appreciation certificates from Prof. Dr. Khalil Ahmed Ibupoto, Chairman PSF

other stakeholders. Initially, more than 12,000 students took part in the Provincial Science Fairs arranged at Karachi, Quetta, Peshawar, Lahore, and Islamabad. For the final i.e. National Science Fair, about 100 group and individual projects, prepared by 193 students were selected and showcased at Sir Syed Memorial Complex, Islamabad on 27 to 31 January, 2015. In addition, hundreds of students, teachers and scientists from the twin cities also visited the Science Fair. In order to make arrangements for the Fair, a number of officers from PSF, PMNH and PASTIC performed their duties as Volunteer judges for assessment of the best

projects.

By the end of the national Science Fair, Intel and PSF were able to select 9 students with three individual and two group projects for participation in the Intel ISEF 2015 to be held in USA during May this year. Mr. Qaiser Majeed, Additional Secretary, CADD, Mr. Naveed Siraj, Country Manager, Intel Pakistan, Prof. Khalil Ahmed Ibupoto, Chairman, PSF and a number of other dignitaries and scientists were present in the closing ceremony. The enthusiasm of the winner students was worth seeing. Cash Prizes and Certificates were announced for the outstanding projects. The Chairman, PSF highly

appreciated the motivation and devotion of the students. Three individual Projects of Mr. Habab Idrees (Dewan Daram Jethmal Sindh Govt. School Karachi); Mr. Shadad Rasool Buriro (PakTurk International School and Colleges Khairpur) and Mr. Muhammad Ahsan Nawaz (Govt. Higher Sec. School, Vehari) were selected for the Intel ISEF. In addition, two group projects of Mr. Amir Hussain Khan, Mr. Ali Ahmed Karim & Ms. Kiran Karim (Agha Khan Higher Secondary School, Karachi) and Mr. Aurengzeb Ahmed, Mr. Tohami Bin Shafiq, Mr. Syed Ali Ahsen & Muhammad Jafery (Beaconhouse School system, Lahore) were also among the lucky winners for showcasing their project in USA.

Mr. Naveed Siraj, Country Manager and Ms. Khadija Bashir, Project Manager, Intel highlighted the role of PSF and its support in organizing Provincial and National Science Fairs and lauded the services of scientists for promotion of science in the country.

PSF organizes one Day Interaction Session for students

More than 350 students and teachers from Sindh, Balochistan, Punjab, KPK, Gilgit Baltistan gathered at Islamabad and presented their ideas through innovative projects on the occasion of Intel National Science Fair 2014-15.

During the Fair, PSF arranged presentations and lectures for the “young scientists” on 30 Jan, 2015. Visit to the Pakistan Museum of Natural History and a Cultural Show was also held.

Dr. Hassan Abass,

UNESCO Chair on Water, CIIT-Wah Cantt delivered his talk on “New Science of Managing River Water” and shared a number of modern techniques for managing water related issues. He discussed the Indus river irrigation system and

Quote of the Month

“To raise new questions, new possibilities, to regard old problems from a new angle, require creative imagination and marks real advance in science.”

Albert Einstein

described important aspects of natural, biological and physical phenomenon of river ecology, which are disturbing water balance. He also introduced new techniques of managing water to cope the water conservation issues. The students and teachers showed keen interest in the presentation and appreciated the ideas.

Maj. Dr. Tariq Malik from AFIRM (Armed Forces Institute of Rehabilitation Medicine) introduced Rehabilitation Medicine during his talk. He discussed different types, symptoms and treatment of amputee limbs and physical disabilities. He also showed facilities available within AFIRM. He disclosed a number of special therapies and equipment present in the institute.

The next speaker was Dr. H.U. Khan, CSO, who involved the students in his discussions on leadership and change. In his opinion, curiosity is the base of



Chairman, PSF and Dr. Hassan Abass (CIIT, Wah Cantt.) visiting projects of students

change. To do something innovative, curiosity is always behind it. He advised the students to think for positive change for a prosperous Pakistan. He exemplified his talk with the curiosity and vision for change of renowned Scientists and famous personalities.

He concluded that positive change is essential for

progress and prosperity of our country.

Prof. Dr. Khalil Ahmed Ibupoto, Chairman, PSF was the Chief Guest on this occasion. He visited the projects of the students and appreciated their efforts. In his remarks, he lauded the importance of promotion of science for our national development and appreciated Intel & PSF

team to organize this event. A large number of students, teachers, researchers and scientists/officers from PSF, PMNH and PASTIC were also present.

Ms. Khadija Bashir, Project Manager, Intel Education Initiative, Pakistan thanked speakers from CIIT, AFRIM, PSF and participants for joining the students in the session. She highlighted the role of PSF in making the event a successful story. Afterwards, students along with their teachers and mentors visited Pakistan Museum of Natural History, Islamabad. In the evening, students from all the provinces presented their folk songs and items and entertained the participants.



Dr. Hassan Abass, Maj. Dr. Tariq Malik and Dr. H. U. Khan delivering lectures

Intel acknowledges service of PSF Coordinator

PSF is collaborating with Intel Education Initiative in organizing Science Fairs by

providing support of its outreach program 'Science Caravans' in all Provinces of

Pakistan. The winner students of Intel Fairs are also awarded cash prizes and certificates by PSF. Services of Scientists as Mentors and Judges is another important facet of this collaboration. PSF also collaborate with FDE and other partners for organizing Science Excel Camp and interaction sessions to tap the students for Science Projects.

During the closing ceremony, Intel highly appreciated the PSF support and acknowledged the

services of Mr. Abdul Rauf, SSO /National Coordinator PSF Caravans on his devoted services during the whole process of Intel Provincial and National Science Fairs. Appreciation Certificate and Intel Memento was presented by the Country Manager, Mr. Naveed Siraj. The awardee thanked Intel and PSF management and vowed his best possible services for joint science promotional activities.



Mr. Abdul Rauf, SSO/Coordinator PSF receiving Intel Appreciation Award

Honorary Consul General of Lithuania Visits PSF

As part of its International Liaison programs for promotion of science in the country, PSF is continuously striving to get support of other countries to wonder for some mutual collaborative activities. In this regard, the Honorary



Dr. Khalil Ahmed Ibupoto presented souvenir to Honorary Consul General of Lithuania, H.E. Mr. Mohamed Masud Khan. Mr. Haider Zaman Khattak, Secretary PSF is also present

Consul General of Lithuania, H.E. Mr. Mohamed Masud Khan visited PSF on 14th January 2015. A modest meeting was held on this occasion in PSF Committee Room. PSF team headed by the Chairman interacted with the Consul General. Dr. H. U. Khan, CSO, PSF gave a brief presentation about PSF activities. A number of scientific fields were discussed for joint activities with Lithuania.

The Consul General highlighted Lithuania's expertise in S&T especially in Laser Technology,



Dr. H. U. Khan, CSO PSF giving presentation during the meeting

Biotechnology and ICT Infrastructure. The Consul General highly appreciated the Foundations programs for promotion and popularization of science and research funding in the country.

He alongwith Chairman

PSF and other officers also visited star lab Planetarium and admired this activity. Dr. Khalil Ahmed Ibupoto presented souvenir to the honorable guest. Afterward, he also visited Pakistan Museum of Natural History, Islamabad.

PTV televised "Youth Voice" from PSF

PSF liaise with print and electronic media for promotion and awareness of its science propagation activities. Talk Shows/Interviews on TV



Group Photo of students with Chairman, Senior Officers of PSF and PTV Team

channels, coinciding with major science popularization activities are also telecasted. In this regard, PTV news team visited PSF on 6th Jan, 2015. The team interacted with students who were invited from different universities/educational institutes. They were interviewed for a programme "Youth Voice". The opinion of young generation for National Security Action Plan was obtained. Students also highlighted the role of science and education for eradication of ignorance in the society. The team recorded perspective from PSF's Chairman,



Chairman PSF, Dr. Khalil Ahmed Ibupoto interviewing PTV Team

and some officials also gave their suggestions. The program was telecasted on PTV News on 9th Jan, 2015.

PSF & AFIRM plan joint activities

Chairman PSF, Dr. Khalil Ahmed Ibupoto alongwith Mr. Haider Zaman Khattak, Secretary PSF and Dr. Naushaba Nadeem, PSO visited AFIRM (Armed Forces Institute of Rehabilitation Medicines) on 16th January 2015 for possible collaborative research and awareness.. Maj. General Dr. Akhtar

Waheed, Commandant AFIRM and Dr. Aamir Waheed Butt welcomed PSF team. A brief presentation delivered by AFIRM officer. The Commandant, AFIRM offered the detail visit of organization. All section of the institute were visited and concerned officials briefed about them. Dr. Akhtar Waheed introduced PSF



Chairman PSF, Dr. Khalil Ahmed Ibupoto, Mr. Haider Zaman Khattak, Secretary and Maj Gen. Dr. Akhtar Waheed during their visit to AFIRM

Team with highly motivated patients who were rehabilitated with the efforts of dedicated staff of AFIRM.

At the end, it was mutually agreed to promote the awareness about nobel cause of AFIRM through PSF's

Science Caravans. Dr. Khalil Ahmed also assured to facilitate the researchers from AFIRM in conducting

studies in the field of artificial limbs for amputees and also to conduct training workshops in the said field.

PSF Announces 24th Intra Board Science Essay & Poster Competitions

Organizing Science Poster Competitions among high school students, in collaboration with Boards of Intermediate & Secondary Education (BISEs) is a regular activity of Pakistan Science Foundation (PSF). So far, 23 Intra & Inter Board Competitions on a number of scientific themes have been successfully organized, which reflects the valuable support of BISEs for making the activity a success. To create awareness among the young



Glimpses of Poster Competitions organized by BISE Sukkur and Sargodha respectively

students about disadvantages of unnecessary and over usage of mobile and internet, the theme announced for PSF's 24th Intra Board Science Poster Competition is

“Disadvantages of Mobile Phones & Internet for Students” while keeping in view the importance of Science Education in present scenario, the theme selected for PSF's 24th PSF

Intra Board Science Essay Competition is: “Why Students feel Difficulty in Science Education”. Science Caravan Units and PASTIC Sub Centres are engaged to coordinate and conduct the activity in collaboration with the respective Boards in their areas. In this regards BISE of Karachi, Sukkur, Larkana, Hyderabad, Gujranwala, Bahawalpur, Sahiwal, Malakand, Kohat, Swat, Bannu, and Sargodha has conducted the competitions so far.



Glimpses of Essay and Poster Competitions organized by BISE Peshawar and BSE Karachi respectively

Cheques Distribution Among Winners of PSF's 23rd Intra Board Science Essay & Poster Competitions



PSF distributed cheques among the winners of PSF's 23rd Intra Board Science & Essay Competitions. These cheques were distributed by PSF Science Caravan's officials at Hyderabad, Quetta, DG Khan, Faisalabad, Gujranwala, Bahawalpur, Multan, Sargodha, Swat, Peshawar, Mirpur (AJK), Sukkur, Larkana, Abbottabad, Bannu and Kohat.



PSF Science Caravan Officials distributing Cheques among winners across the country

Science Caravan Exhibition

Science Caravan Jaffarabad unit arranged Science Caravan Exhibition at Murad Public School Dera Allah Yar District Jaffarabad on 13.01.2015. 285 students and teachers participated in the Exhibition.



Group Photo of Students and Teachers with PSF Science Caravan Team-Jaffarabad

Important Meetings and Events Attended

Chairman, PSF attended following important meetings;

- Presentation to Federal Minister for S&T on 1st Jan, 2015 at MoST.
- Meeting Coordinator General, COMSTECH Dr. Shoukat Hameed to discuss plan of S&T Exhibition during forthcoming 15th meeting of COMSTECH General Assembly/OIC Summit on 6th Jan.
- Meeting at PMRC for Selection of Conveners of Expert Panel and Members of Technical Advisory Committee on 14th Jan, 2015.
- Preparatory Meeting for Holding OIC Summit on S&T COMSTECH General Assembly at MoST on 15th Jan, 2015.
- Inaugural Ceremony of International Workshop “5G Emerging Technologies for Disaster Management” at Islamabad on 15th Jan, 2015.
- Attended meeting on “Developing the Roadmap on Engineering Qualification standardization on 19th Jan, 2015.
- 16th Meeting of the BoG of National Institute of Historical and Cultural Research at Quaid-i-Azam University, Islamabad on 28th Jan, 2015.
- Convocation Ceremony of Shifa Tameer-e-Millat University at Jinnah Convention Centre, Islamabad on 30th Jan, 2015.

Pakistan Museum of Natural History (PMNH)

Editor: Dr. Saleem Ahmad, Director, PSD

Lithuanian Consul General visits PMNH

Mr. Mohamed Masud Khan, Honorary Consul General of Lithuania, visited PMNH on 14th January, 2015. When the honorable guest arrived at PMNH along with Director General PMNH and PSF officials, senior officials of PMNH received the guests. Mr. Mohamed Masud Khan, visited the display galleries and natural history specimen repositories. He took great interest in the display galleries and reference collection of PMNH. After the visit, Director General, Directors and senior officials of PMNH held a meeting with Mr. Mohamed Masud

Khan. Dr. M. Rafique, Director, ZSD put light on the efforts of PMNH researchers for collection, preservation, research, publication and education. The Honorary Consul General showed his pleasure on the hard work of PMNH scientists for the promotion of natural history research in the country. He assured the PMNH officers that he would help for collaborative research and display work between PMNH and Lithuania. He expressed his feeling by writing in VIPs remarks' book: “It is honor for me to visit such a Museum. I hope that



Mr. Mohamed Masud Khan, Honorary Consul General of Lithuania visiting PMNH on 14th January.

Lithuania will work jointly on some projects”.

Intel Science Fair Participants visit PMNH



Group photo of the Intel National Science Competition participating students and teachers with PMNH officials on 30th January.

Intel Pakistan organized National Science Fair in association with Pakistan Science Foundation at Sir. Syed Memorial Complex, Islamabad. Some 197 young students from different schools and colleges of the country participated in the National Science Fair by submitting more than 94 science projects. At the end

of the competition, the students visited different places of Islamabad. A group of 70 students along with Mr. Hadi Raza, Intel Education Representative and PSF officials visited the PMNH on 30th of January. Dr. Saleem Ahmed, Director, PSD received the students and guests. The students were surprised and amused

to see the various displays/dioramas and exhibits that are available in this natural history museum which is the only one of its kind in the country. They took keen interest in all the galleries of the PMNH Display Centre, especially in Gemstone display, Salt Range diorama and Whale Shark display. At the end Intel Representative thanked the officials and staff of the PMNH Display Centre for arranging the visit.

PMNH Mycologists study fungi of Sindh

The Mycologists of PMNH explored different localities of Sind province to collect seasonal macro and micro fungi for the PMNH Mycological Herbarium, Botanical Sciences Division. The research team consisting of Dr. Muhammad Ismail, Associate Curator (mycology) and Mr. Muddassar Fida, Senior Collection Incharge, BSD, collected more than 140 specimens of large and small fungi belonging to various mycological

groups from the Pae forest, Sakrand, Nawbashah, Miani forest, Hyderabad, Sindh Agriculture University Tandojam, Umerkot, Mirpurkhas and Jamshoro areas. During the 11 days' field survey the research team also met with many scientists and students to brief them about the role of PSF/PMNH in the country in raising awareness about the natural wealth and its conservation in the various remote areas of the country.



Specimen of Fungi studied at Umerkot-Sindh

Pakistan Scientific & Technological Information Centre (PASTIC)

Editor: Mrs. Rahila Khurram

Workshops on “Developing Industry Driven Technologies” Organize at Karachi & Faisalabad

Pakistan Scientific and Technological Information Centre (PASTIC), Islamabad, Institute of Research Promotion (IRP), Lahore planned to organize a series of workshops on “Developing Industry Driven Technologies” at universities across Pakistan to orient researchers about approaches and practices used in industry driven technologies as well as to train them how technologies are planned, developed and commercialized. In this regard, workshops at Karach and Faisalabad were organized. The workshops were

based on case studies of industrial projects developed through identification, planning, lab works and pilot testing of different industrial products on production scale. Competent resource persons from academia and industry delivered talks and presentations.

Workshop at NED University of Engineering & Technology, Karachi

Under this series of workshops, 5th one day training workshop on “Developing Industry Driven Technologies” was organized at NED University of Engineering & Technology, Karachi on January 5th, 2015. Prof. Dr. Muhammad Akram Shaikh, Director General, PASTIC was the Chief Guest and Prof. Dr. Sarosh Lodhi, Dean, Civil Engineering, NED University, Karachi was the Guest of Honour during the Inaugural Ceremony of the workshop. More than 65 Scientists of the university participated in this workshop

Workshop at University of Karachi

The 6th one day training workshop of this series on “Developing Industry Driven Technologies” was organized at University of Karachi on January 6th, 2015. Prof. Dr. Muhammad Qaiser, Vice Chancellor, University of Karachi was the Chief Guest and Prof. Dr. Muhammad Akram Shaikh, Director General, PASTIC was the Guest of Honour during the Inaugural Ceremony of the workshop. More than 50 Scientists of the university



Prof. Dr. Muhammad Akram Shaikh, D.G., PASTIC addressing Inaugural Session of the Workshop at Karachi



Mr. Rahmat Ullah Chief Coordinator, IRP, Prof. Dr. Muhammad Akram Shaikh, D.G., PASTIC, Prof. Dr. Muhammad Qaiser, Vice Chancellor, UoK, Prof. Dr. Aliya Rehman, Director ORIC, UoK & Mr. Naveed Ashraf, Shafi Reso, at the Inaugural Ceremony of the Workshop

participated in this workshop.

Workshop at Bahria University, Karachi Campus

The 7th one day training workshop of this series on “Developing Industry Driven Technologies” was organized at Bahria University, Karachi Campus, Karachi. Prof. Dr. Muhammad Akram Shaikh, Director General, PASTIC was the Chief Guest and Vice Admiral (R) Khalid Amin HI (M), Director General, Bahria University was the Guest of Honour during the Inaugural Ceremony of the workshop at Bahria University, Karachi Campus on

January 7th, 2015. More than 78 Scientists of the university participated in this workshop.

Workshop on “Developing Industry Driven Technologies” organized at Faisalabad

The 8th one day training workshop of this series on “Developing Industry Driven Technologies” was organized at University of Engineering & Technology, Faisalabad Campus, Faisalabad. Thirty scientists of UET Faisalabad Campus and some R&D Managers of Sitara Chemicals and Kay & Emms industries participated.



Vice Admiral (R) Khalid Amin HI (M), D. G. Bahria University presenting a Shield to Prof. Dr. Muhammad Akram Shaikh, D.G., PASTIC

Prof. Dr. Asadullah Shah of International Islamic University of Malaysia (IIUM) Visits PASTIC

Prof. Dr. Asadullah Shah, Dean, Faculty of Information & Communication Technology, International Islamic University of Malaysia (IIUM) visited PASTIC on January 14, 2015. Director General, PASTIC briefed the guest about the activities of PASTIC. The honorable guest appreciated the efforts of PASTIC for provision of its services to the scientific community. During the meeting matters of mutual interest were discussed for

exploring different avenues of interaction between PASTIC and International Islamic University of Malaysia (IIUM). Dr. Shah proposed that PASTIC and International Islamic University of Malaysia (IIUM) should enter into an MoU for effective collaboration between PASTIC and IIUM. After the meeting he was taken around the various sections of PASTIC. He showed keen interest in the activities of PASTIC and was desirous of establishing a collaboration

with PASTIC. Accordingly Islamic University of Malaysia for benefiting initiative to enter into an MoU with International other.

PASTIC Information Services at Doorsteps of Universities /Institutions:

PASTIC regularly organizes its information services stalls at universities and R&D institutions to bring its services at the doorsteps of researchers. During January, 2015 two PASTIC services stalls were organized by PASTIC Sub-Centre Faisalabad.

i. Two days PASTIC services stall was organized at Faculty of Agriculture, University of Agriculture, Faisalabad from January 21-22, 2015. A large number of students/ researchers and faculty members visited PASTIC stall.

ii. One day PASTIC services stall was organized at ORIC, Government College University, Faisalabad on January 28, 2015.



Prof. Dr. Asadullah Shah visited the PASTIC Library along with DG PASTIC

Meetings/Workshops/Trainings Attended:

Dr. Muhammad Akram Shaikh, Director General, PASTIC attended an International meeting on “Developing the Roadmap on Engineering Qualification Standardization: Preparing Future Engineers for Sustainable Development” at Islamabad from January 9-11, 2015 jointly organized by UNESCO Regional Office for Asia & Pacific-Jakarta, ECO Science Foundation (ECOSF), Pakistan Engineering Council (PEC) and International Science, Technology and Innovation Centre (ISTIC), Malaysia.

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