

Prof. Dr. Muhammad Ashraf
Chairman
Pakistan Science Foundation

M. Javed Iqbal
Education Programmer



PSF NEWS

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From the Chairman



Research and Development (R&D) organizations play a major role in socio economic development of their country and developed countries are heavily investing in them to meet the development needs through a well- defined system. Pakistan is devoid of any such system. Some of the R&D organizations of Pakistan, especially the universities have established Offices of Research, Innovation and Commercialization (ORIC) to commercialize scientific research but these are not as proactive and systematic as required to take the country ahead in this sector. These offices are also working in isolation without any strategy, policy and plan and

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25 Students of STFS Visit S&T Organizations of Malaysia and Singapore



A group of 25 outstanding students of first batch of Science Talent Farming Scheme (STFS) of Pakistan Science Foundation (PSF) went to Singapore and Malaysia during August 3-13, 2016 to visit the international S&T organizations, universities and science laboratories in these countries. Purpose of the visit was to give international exposure to high achiever students, of the world class scientific organizations, in order

to motivate them for exploring the world of science.

These students were selected through a rigorous selection process on the basis of their academic qualifications, performance in the scientific aptitude test, computer based IQ test and interview etc.

The students visited organizations like the National University of Singapore (NUS) High School of Science and Mathematics and the Science

Center of Singapore. They also attended a Science Expo in Singapore sponsored by the Agency for Science, Technology and Research which is Singapore's lead public sector agency that spearheads economic oriented research to advance scientific discovery and develop innovative technology.

In Malaysia, the students visited Petrosains Discovery Center, National Planetarium in



From the Chairman

can be termed as rudderless boats without any direction.

All the universities and other R&D organizations must establish these offices not only to facilitate researchers in selection of need-based projects but also help them in patents and property rights through awareness programmes. They should be integrated and adopt holistic approach to devise a plan to analyze the industrial requirements of the country. They should also motivate the researchers thorough awards and appreciation.

Pakistan Science Foundation (PSF) awards students and researchers for their innovative projects and facilitate them in commercialization of these works. PSF has established R&D Industry Linkage Programme in order to analyze the research needs of industry and conduct research accordingly through projects funding. It has plans to establish a database of R&D organizations and Industries which will be connected online. Under a vigorous programme the R&D institutions will be facilitated and encouraged to develop indigenous technologies and make Pakistan self-reliant in this sector as well as enable the country compete the international market.

PSF under its programme intends to play a proactive role that all the relevant institutions work in complete harmony to avoid duplication of work and wastage of national resources. A conference of offices of research and innovation representatives will also be convened to develop plan, policy and strategy for conducting projects of applied research.

The R&D organizations and offices of research, innovation and commercialization are invited to join hands with PSF to facilitate the researchers and industry in letter and spirit for making Pakistan self-reliant in science and technology.

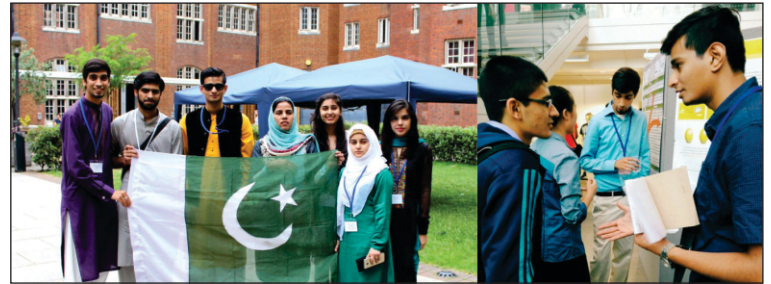
the National Space Agency of Malaysia, Perdana School of Science, Technology and Innovation Policy in the University Management Technology, the Aquaria KCCL and Malaysia Japan International Institute of Technology.



Seven Pakistani Students Participate in 58th LIYSF

Seven Pakistani students from various universities participated in 58th London International Youth Scientific Forum (LIYSF) for two weeks from July 27 to August 10, 2016. They visited various academic and science institutions. They were selected through rigorous process conducted by Pakistan Science Foundation (PSF), Ministry of Science and Technology, Islamabad.

The aim of the programme was to give a deeper insight to the students into science and its applications and how science can benefit mankind. This year the theme was "Great Scientific Discoveries". Students from 75 countries attended this Conference which enabled young people to develop a



(Left) Pakistani students group photo at Imperial College London. (Right) Pakistani students interacting with participants from other countries at LIYSF 2016.

better understanding of science and its applications. The Pakistani students presented their projects at the Conference and received a great deal of encouragement from academia and researchers. They also performed at cultural show and got second position amongst overall.

It is pertinent to mention that the 58th LIYSF was granted UNESCO patronage for the very first time and. The

UNESCO Director General, Irina Bokova, wrote the following while granting patronage to LIYSF:

"LIYSF contributes to UNESCO's aim to build capacity in science for youth and is in line with the Organization's core belief that sharing knowledge in the sciences is pre-requisite for sustainable development."

The students led by Syeda Rehana Batool, Senior Scientific Officer, Pakistan Scientific Foundation (PSF), also visited the Pakistan High Commission, London and met with H.E. Syed Ibne Abbas, Pakistan High Commissioner to United Kingdom. They shared their projects and experiences of their two-week stay in London.

The High Commissioner appreciated their achievement



A group photo of Pakistani students and team leader Syeda Rehana Batool with Pakistan High Commissioner to UK Syed Ibne Abbas.

QUOTE OF THE MONTH

Minds are like parachutes, they only function when they are open.

—James Dewar

and hoped that country would benefit from their knowledge and expertise in various fields

in future. The High Commissioner also assured of all possible support to the

Pakistan Scientific Foundation (PSF), in enhancing the number of students so that more

brilliant students could participate and benefit from this opportunity.

PSF & NESCOM to Initiate Joint Research Projects of Commercial Importance

Pakistan Science Foundation (PSF) Chairman Prof. Dr. Muhammad Ashraf paid a visit to National Engineering and Scientific Commission (NESCOM) on August 11,



NESCOM Chairman Dr. Nabeel Hayat presents NESCOM shield to PSF Chairman Prof. Dr. Muhammad Ashraf during latter's visit to NESCOM.

2016. Prof. Dr. Muhammad Ashraf and NESCOM Chairman Dr. Nabeel Hayat held a meeting, which was organized by Technology, Innovation and Commercialization Wing of the Foundation to establish research-based cooperation between both the organizations. Heads of both the organizations discussed areas of cooperation. It was decided that the areas of cooperation will be prioritized and PSF and NESCOM will have joint research projects of commercial importance which could lead to the socio-economic development of Pakistan.



PSF Chairman Prof. Dr. Muhammad Ashraf and NESCOM Chairman Dr. Nabeel Hayat discuss areas of cooperation between PSF and NESCOM.

Committee to Chalk Out More Areas of Cooperation between PSF and DoST

A team of officers from Department of Science and Technology (DoST), Khyber Pakhtunkhwa (KP), visited Pakistan Science Foundation (PSF) on August 11, 2016.

The team members included Mr. Imtiaz Ayub, Additional Secretary to Government of KPK, Science and Technology and Information Technology

(ST&IT) Department, Mr. Zahoor-ul-Haq, Director Science & Technology, KP, Peshawar and Ms Shaista Afridi, Project Manager, DoST. Different matters of cooperation science and technology came under discussion.

The DoST officers also held a meeting with the PSF

Chairman, Prof. Dr. Muhammad Ashraf and thanked him for his support in their different programmes. A committee comprising PSF and DoST officers was constituted to chalk out further avenues of cooperation between both the organizations.

Later on, the team visited

outcomes of the Pakistan Science Foundation funded programmes displayed at the Foundation. The team also visited the state-of-the art Science Talent Farming Scheme mobile lab and evinced keen interest in it for promotion of science education in Khyber Pakhtunkhwa province.



PSF Chairman Prof. Dr. Muhammad Ashraf chairs a meeting of PSF and KP officers for further cooperation between the Foundation and DoST, KP.



KP officers visit display of PSF funded projects outcomes during their visit to the Foundation.

Pakistani Students Participate in 10th Asian Science Camp 2016 in Bangalore

Pakistan Science Foundation (PSF) has the mandate to popularize and promote science at grass root level in the country. Capacity building of Pakistani youth and sponsoring them for participation in international scientific events is one of the important activities of the Foundation. PSF, being a focal organization for Asian Science Camp (ASC) coordinated with the organizers for participation of Pakistani students in ASC-2016. This year Asian Science Camp was held at Bangalore, India.

The idea of ASC was proposed after the Lindau Science Meeting 2005 by Prof. Yaun-Tseh Lee, the 1986 Nobel Laureate in Chemistry and Prof. Masatoshi Koshihara 2002 Nobel Laureate in Physics to



enlighten Science Talented Youth. The ASC International Advisory Committee approved that Thailand should host the ASC in 2015. The ASC-2015 was 9th in the series. Following successful camp at Taipei (2007), Bali (2008), Tsukuba (2009), Mumbai (2010),

Daijeon (2011), Jerusalem (2012), Tasukuba (2013), Singapore (2014) and Thailand (2015), the Asian Science Camp 2016 (ASC 2016) was held on August 21-27 at Bangalore, India.

The Pakistani delegation comprising five students along

with the Team Leader Mr. Muhammad Hasnain, Deputy Director (STI), PSF participated in the event. The Camp activities included plenary lectures by the Nobel Laureates, Panel Discussion, Group discussions and Poster presentations.



Chairman PSF Prof. Dr. Muhammad Ashraf presides over a meeting with Chinese delegation and Vice Chancellor of Gilgit-Baltistan University at PSF on August 4, 2016.



Chairman PSF Prof. Dr. Muhammad Ashraf chairs a meeting with representatives of British Council Islamabad at PSF on August 2, 2016.



Mr. Olivier HUYNH-VAN, Cooperation Attache, Embassy of France in Pakistan, called on Prof. Dr. Muhammad Ashraf, PSF Chairman, on August 19, 2016 to discuss joint programmes.

Pakistan Museum of Natural History (PMNH)

Editor: Dr. Muhammad Ismail Bhatti

PMNH, Lok Virsa Sign MoU of Cooperation



PSF Chairman Prof. Dr. Muhammad Ashraf witnesses the signing ceremony of the MoU between PMNH and Lok Virsa on August 9, 2016

Pakistan Museum of Natural History (PMNH) and National Institute of Folk & Traditional Heritage (Lok Virsa) signed a Memorandum of Understanding (MoU) at Lok Virsa Heritage Museum, Shakarparian on August 9, 2016.

Lok Virsa Executive Director Dr. Fouzia and PMNH Director General (DG) Dr. Muhammad Khan Leghari signed the MoU on behalf of their respective organizations. Pakistan Science Foundation (PSF) Chairman Prof. Dr. Muhammad Ashraf (S.I.) witnessed the signing ceremony as the Chief Guest.

Under the MoU, PMNH and Lok Virsa will promote exchange of information and materials of mutual interest for furtherance of objectives enshrined in their respective mandates.

Speaking on the occasion, the Chairman PSF said that PMNH

and Lok Virsa are neighboring organizations situated on Garden Avenue, Shakarparian, Islamabad and working for promotion of culture and information regarding natural resources and heritage of Pakistan through exhibits, cultural and scientific fairs, etc. through different activities/events/programs. He said that PMNH is a subsidiary of Pakistan Science Foundation, which is working under Ministry of Science and Technology. Highlighting the mandate of PSF, he said, the Foundation is striving hard to create a culture of knowledge-based economy through

promotion of scientific research in the country and in this regard it has under-taken various programmes such as Science Talent Farming Scheme, Inquiry-Based Science Education, Science Caravans, funding for research projects, Academia and Industry Linkage programme and Natural Science Linkage Programme etc.

Lok Virsa Executive Director Dr. Fouzia and DG PMNH Dr. Muhammad Khan Leghari also spoke to media and they highlighted achievements of their respective organizations as well as their areas of mutual interest.



PSF Chairman Prof. Dr. Muhammad Ashraf speaks to the participants of signing ceremony of the MoU between PMNH and Lok Virsa on August 9, 2016

PMNH Imparts Internship to Over 30 Students of Geology

Earth Sciences Division (ESD), Pakistan Museum of Natural History (PMNH)

provided internship facility to the students of Department of Geology, University of Haripur

during the Month of August 2016. The experts of ESD, Mr. Hammad-ur-Rahim, Research

Associate, Mr. Aamir Yaseen, Associate Curator, Mr. Khalid Ahmed Mirani, Associate Curator and Mr. Muhammad Imran, Research Associate provided the training to the students. The main objective of the internship programme is providing practical work experience to students about collection, curation and identification of minerals, fossils and rocks etc. Over 30 students were trained during this internship programme.



35 Students of Haripur University Trained in Forestry

A group of 35 students from Department of Forestry and Wildlife Management, University of Haripur received two days training at Pakistan Museum of Natural History, Islamabad.

A training session on practical module related to forestry was conducted. Dr. Muhammad Ismail Bhatti, Associate Curator (Mycology) conducted the training session on plant diseases, identification and management

while Dr. Syed Aneel Gilani, Associate Curator (Higher Plants) gave a demonstration to students on identification, collection and curation of higher plants on August 29-30,

2016. The student took keen interest in the fieldwork and herbarium demonstration and collected the plant samples for preservation and identification. The Haripur

University faculty member, Dr. Sajida Noureen, Assistant Professor appreciated and thanked PMNH for organizing such training sessions in a short time.



Haripur University students busy in training sessions

16,794 Persons Visited PMNH in August 2016

A total of 16,794 persons including 5,000 students, 5,890 general public, 24 foreigners and 5,880 children under five years of age from different parts of the country visited Pakistan Museum of Natural

History galleries in August 2016.

The PMNH scientists provided them technical guidance and arranged film shows for the groups of visiting students. The student groups from the main

educational institutions included Holy Family Hospital Rawalpindi, Bagh College of Arts and Modern Science Azad Jammu and Kashmir (AJK), Higher Secondary School/Staff Rawalpindi, Quaid-i-Azam

University Islamabad, University of Haripur Khyber Pakhtunkhwa (KPK), Buraq School Rawalpindi, University of Kotli AJK and Army Public School & College Ordinance Road Rawalpindi.



Pakistan Scientific & Technological Information Centre (PASTIC)

Editor: Syed Aftab Hussain Shah

48 Researchers Made Aware of IPRs

Pakistan Scientific and Technological Information Centre (PASTIC) in collaboration with Ministry of Science & Technology (MoST) and Intellectual Property Organization (IPO) organized an awareness seminar on "Intellectual Property Rights (IPRs)" on August 18, 2016 at PASTIC National Centre, Islamabad. About 48

researchers and faculty members from R & D organizations along with PASTIC officers participated in the seminar.

Prof. Dr. Muhammad Ashraf, Chairman, Pakistan Science Foundation (PSF) was the Chief Guest on this occasion. The seminar was planned to orient the participants about the basics of IPRs and the essential



Prof. Dr. Muhammad Akram Shaikh, DG PASTIC giving welcome remarks during the seminar on "Intellectual Property Rights."

requirements for their protection. Participants learned about the importance of IPRs, copyrights, trademarks, patents, industrial designs, trade secrets, drafting and filing of patent application.

Prof. Dr. Muhammad Akram Shaikh, Director General PASTIC while welcoming the participants shed light on the importance of Intellectual Property and also gave a brief

introduction about PASTIC Services. The Introductory Remarks were given by Dr. Syed Shahid Hussain, Executive Director, Commercialization Cell, MoST.

Ms. Humaira Shakeel, IPO resource person delivered a presentation on "Overview of IPRs and functioning of IPO Pakistan." Later on, Mr. Zahoor Ahmad, IPO resource

person delivered two presentations on "Patents for promotion of science and technology" and "Patentability and the patent registration system in Pakistan," respectively.

An elaborative session of questions and answers was held at the end of presentations highlighting both the importance and issues related to patent filing, processing time

and online availability of patents. At the end, the Chief Guest, presented shields to the IPO resource persons. The certificates were also distributed among the participants by Prof. Dr. Muhammad Akram Shaikh, Director General PASTIC. The closing remarks were delivered by Prof. Dr. Muhammad Ashraf, Chairman, Pakistan Science Foundation.



Prof. Dr. Muhammad Ashraf, Chairman, Pakistan Science Foundation giving shields to the resource persons from IPO-Pakistan during the seminar on "Intellectual Property Rights."

PASTIC Organizes a Seminar on "Ethics in Research"

PASTIC National Centre, Islamabad organized a one-day seminar on "Ethics in Research." on August 29, 2016. About 20 students from Quaid-i-Azam University, Islamabad attended the seminar. PASTIC officers were also present on this occasion to strengthen their knowledge on different aspects of research ethics.

Muhammad Aqil Khan, Additional Director (STI),

PASTIC gave the introductory remarks about the seminar. Dr. Farhan Saif, Professor, Department of Physics, Quaid-i-Azam University was the key speaker of the seminar. He highlighted the ethical principles for researchers, research management policy, research planning and execution in the form of publications thus generating new ideas.



Dr. Farhan Saif, Tenured Professor, Department of Physics, Quaid-i-Azam University, Islamabad delivering a lecture on "Ethics in Research."

Ph.D. and M.Phil. Scholars Trained on Use of "Research Tools & Techniques"



Syed Habib Akhter Jaffri, Principal Librarian and chief organizer deliberating about the importance of the workshop on "Research Tools & Techniques."

PASTIC organized a training workshop on "Research Tools & Techniques" on August 31, 2016. The objective of this workshop was to build the capacity of young researchers and to enhance their analytical skills in data analysis and data mining through utilization of popular software tools. Participants of the workshop included M. Phil & Ph. D research scholars.

Syed Habib Akhter Jaffri,

Principal Librarian (PASTIC) and chief organizer of the workshop, while giving introduction of the workshop said that PASTIC in addition to its own mandatory activities, has taken the initiative of organizing workshops for capacity building of researchers, on research techniques focusing on statistical analysis, as this is the need of the time.

Ms. Nageen Ainuddin, Director

PASTIC, in her opening remarks emphasized on the research quality, which mainly depends on data analysis and its interpretation. She said that in this digital age of technology IT based scientific research tools are useful to make the research process easier and faster. She added that PASTIC has launched this training workshop to improve the skills and knowledge of participants

in preparation of their research plan, literature surveys, data collection, leading to data analysis & interpretation finally enabling them to write their dissertation.

Mr. Muhammad Usman, Web Manager (PASTIC) was the resource person of the workshop, who deliberated on various features and applications of the SPSS statistical software.



Mr. Muhammad Usman, Web Manager, PASTIC imparting skills about SPSS statistical software during the workshop.

Quaid-i-Azam University Researchers & Faculty Visited PASTIC

A group of 30 students and three faculty members from the Department of Biochemistry, Quaid-i-Azam University, Islamabad, visited PASTIC National Centre, Islamabad on August 11, 2016. Mrs. Kausar

Sohail gave an orientation lecture about PASTIC activities and services. She also gave a demonstration on how to carry out literature search using various databases.

Mr. Saifullah Azeem, Principal

System Analyst delivered a detailed presentation on Scientific Information Searching Techniques. Young scholars shared different difficulties faced during the

literature search. These were catered to by the speaker.

PASTIC membership forms were also got filled and the students were registered as free members.



Mrs. Kausar Sohail, Sr. Scientific Information Officer, delivering an orientation lecture on PASTIC services.



Mr. Saifullah Azeem, Principal System Analyst delivering a presentation on "Scientific Information Searching Techniques."

S&T Information at Doorstep of Researchers

Karachi: PASTIC Sub-Centre, Karachi organized a PASTIC services awareness stall at Federation of Pakistan Chamber of



Mr. Abdul Fatah Shaikh, SSIO briefing the Honorable Minister for Livestock and Fisheries, Sindh Mr. Ghulam Muhammad Malkani about PASTIC Services during FPCCI seminar at Karachi.

Commerce & Industry (FPCCI), Karachi on August 25, 2016 during a one-day seminar on "Emerging Threat of Congo Virus Infection and Eidul Azha." Many students, researchers and industrialists visited the PASTIC Stall on this occasion.

Lahore: PASTIC Sub-Centre, Lahore organized a stall for promotion of PASTIC Services on August 23, 2016 at Physics Department, Government College University, Lahore. Several researchers and faculty members sought information about the PASTIC services and procedure to seek literature. PASTIC membership forms were also gotten filled and the students were registered as free members.

Director General Visits PASTIC Sub-Centre Karachi

Prof. Dr. Muhammad Akram Shaikh, Director General, PASTIC visited PASTIC Sub-Centre, Karachi on August 30, 2016 and reviewed over all progress of the Centre. He also directed to proactively plan the series of popular lectures/seminars in different institutions of Sindh region as a joint venture.

Pakistan Science Foundation

Constitution Avenue, Islamabad
Phone: 9201887, Fax: 9202468
www.psf.gov.pk
E-mail: psfsecy@psf.gov.pk

Pakistan Museum of Natural History

Garden Avenue,
Shakarparian, Islamabad
Phone: 9249239 Fax: 9249240
www.pmnh.gov.pk

PASTIC National Centre

Q. A. University Campus, Islamabad
Phone: 9248103-04, Fax: 9248113
www.pastic.gov.pk
E-mail: director@pastic.gov.pk