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M. Javed Iqbal Education Programmer



# PSFNEWS July 2017

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#### From the Chairman



Experimentation is a prerequisite to science education as well as invention and innovation, which are imperative for socio-economic development of a country as a whole and betterment of humanity all over the world in particular.

Science experiments are also vital to find answers to questions arising in young minds and generating their interest in science.

In Pakistan most of the educational institutions in small cities and rural areas of the country lack facility of science laboratories where they could learn about the phenomenon of science by performing experiments and find answers to the questions in their minds. Pakistan Science

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**Summer Camp Under STFS Organized** Fleet of Nine Mobile Science Labs Launched

Government Committed to provide Educational Opportunities to Students: S&T Minister Under Vision 2025 Govt will Make Pakistan One of Top 25 Economies of World: Ahsan Iqbal Laptops Distributed Among 300 Students of 2<sup>nd</sup> Batch

The Government is committed to provide maximum educational facilities and opportunities to the students and launching of a fleet of nine mobile science labs under Science Talent Farming Scheme testify this resolve, said Rana Tanveer Hussain, Federal Minister for Science and Technology (S&T) on July 7,2017.

He was addressing the closing ceremony of weeklong Summer Camp for 2<sup>nd</sup> Batch of 300 students of the **Development Project "Science** Talent Farming Scheme" (STFS).

Prof. Ahsan Iqbal, Federal Minister for Planning, Development and Reforms, Fazal Abbas Maken, Federal Secretary, Ministry of S&T, Prof. Dr. Muhammad Ashraf, Chairman Pakistan Science Foundation (PSF), Mr. Jamil Oureshi, Project Director STFS, scientists, teachers and students were present on this occasion.



RanaTanveer Hussain, Federal Minister for Science and Technology and Prof. Ahsan Iqbal, Federal Minister for Planning, Development and Reforms cut ribbon to inaugurate a fleet of nine Mobile Labs at Pakistan Science Foundation.

Federal Minister for Science and Technology (S&T) and Prof. Ahsan Iqbal, Federal Minister for Planning, Development and Reforms inaugurated a fleet of nine Mobile Labs at Pakistan Science Foundation. These Earlier, Rana Tanveer Hussain, mobile labs equipped with e-

learning system will travel to far flung areas' schools of the country having no or inadequate facilities of science practical.

The S&T Minister said that despite hurdles the present government has set a direction to make Pakistan strong and

**TUBITAK and PSF Discuss Avenues** PMNH Geological Research Team **PSF Director Research Support** of Joint Cooperation Attends International Symposium **Explores Gilgit-Biltistan Areas** 

#### PSF NEWSLETTER

#### From the Chairman

Foundation is making its earnest efforts for popularization of science in the country especially generating students' interest in science through inquiry based science education at grassroots level.

During last couple of years it has launched different programmes in this regard and Science Talent Farming Scheme (STFS) is one of them. Under STFS, the Foundation has embarked upon a program of mobile science labs equipped with e-leaning management system and state-of-the-art equipment for practical science. These mobile labs travel to remote area schools and provide them this modern facility of learning science. Presently nine mobile labs are ready for travelling to remote areas' schools and colleges to cater the students need for science experiments and efforts are being made for fabrication of more such labs.

The provincial governments besides equipping the educational institutions in their respective provinces should also initiate such modern model labs programme for upgrading the science education system in the country. Only by strengthening science base of students right from the primary education level we would be able to achieve the objectives of socioeconomic development in this age of global competitive economies.

prosperous.

He said that the success of Science Talent Farming Scheme would be a moment of satisfaction for him. The Minister said that no doubt the scheme would produce best scientists in near future. Work on establishment of National Science School is also going on, he added.

Federal Minister for

and Reforms Mr. Ahsan

Iqbal said that science is a passion and quest for knowledge. He asked Pakistan Science Foundation to award students every year for best innovation and science research articles. He said that under Vision 2025 the government has envisioned to make Pakistan one of the top 25 economies of the world. He said that STFS will help materialize this dream.

Federal Secretary for S&T Mr. Fazal Abbas Maken said that educated human resource is the best asset of a nation. He called upon the students to become frontline troops of the country in inventions and innovations to make the country prosperous and developed and this could be achieved by change in thinking and self-belief.

PSF chairman Prof. Dr.



RanaTanveer Hussain, Federal Minister for Science and Technology (S&T) distributes laptops among 2nd batch students of Science Talent Farming Scheme.

# cience Talent Forming Scheme(STFS) for Young Students Summer Camp, visit to S&T Organizations, Distribution of Laptops

Planning, Development Rana Tanveer Hussain, Federal Minister for Science and Technology (S&T) and Prof. Ahsan Iqbal, Federal Minister for Planning, Development and Reforms, Federal Secretary S&T and PSF Chairman at closing ceremony of Summer Camp for 2nd batch of STFS students.

Muhammad Ashraf said that the selection of STFS students is being made on merit in a very transparent manner. He deplored that the condition of Science labs in most of the schools is very pathetic and most of the rural areas schools lack this vital part of science education. He acclaimed the government's Vision 2025. He said that under the STFS Pakistan Science Foundation has transformed science caravans into state of the art mobile science labs to provide lab facility to rural areas schools for improving the science education standards. He requested government to establish at least two state of the art science labs in every district every year.

Later, the Chief Guest, the S&T Minister distributed laptops among 300 students of the  $2^{nd}$ batch of STFS students.

Under STFS, 300 students were selected from all over the country on merit and quota basis system through written, IO test and Interview for second batch. In the project, there is a provision that PSF may take

# Quote-of-the-Month

"The most important thing we can do is inspire young minds and to advance the kind of science, math and technology education that will help youngsters take us to the next phase of space travel."

- John Glenn

various activities for grooming and capacity building of these students to become future scientists and technologists. Besides, financial support in form of scholarship, PSF organized a summer camp on 3-8 July, 2017 at a hotel in Rawalpindi.

In this camp various activities; like presentations by eminent scientists, visit to S&T organizations and universities were conducted. Students

interacted with the scientists and researchers at PINSTECH, NARC, NCP, NINVAST, NUST, PMNH, PSF. Students were briefed about the research projects undertaken by these organizations and they were also brought to various laboratories and different experimental techniques and equipment were introduced to them during their visit. PSF senior officers also accompanied the group of students.



A group photo of STFS 2nd Batch Students along with PSF Officers



## 25 Students of STFS 2nd Batch Participate in LIYSF

A group of 25 students along with two Chaperons, Mr. Jamil Qureshi, Project Director, Science Talent Farming Scheme (STFS), PSF, and Mr. Abdul Rauf, SSO-STFS participated in London International Youth Science Forum-2017 at Imperial College London on July 28 to August 10, 2017. Under STFS, 300 students were selected from all over the country on merit and quota system through written, IQ test and interview. In the project, there is a provision that PSF may take various activities for grooming and capacity building of these students to become future scientists and technologists. Besides, financial support in form of scholarship, one major objective of the project is

arranging international visits opportunity to visit S&T of the outstanding students to S&T Organizations and Universities /Labs of other Universities /Labs of other developed/developing countries. As per approved PC-I, each year 25 toppers/outstanding students will be provided an

Organizations and countries. The activity, on one hand will give healthy competition environment to the students and on the other hand will develop their interpersonal skills and

capabilities. A group of 25 students were selected on the basis of their academic qualifications, performance in the scientific aptitude test, computer-based IQ test and interview. The candidates were selected as per federal govt. quota system.

# **TUBITAK** and PSF Discuss Avenues of Joint Cooperation

A 6-member delegation of the Research Council of Turkey Scientific and Technological (TUBITAK), on invitation of



Chairman PSF Prof. Dr. Muhammad Ashraf with the Scientific and Technological Research Council of Turkey (TUBITAK) delegation at PSF on July 16, 2017.

Chairman PSF, Prof. Dr. Muhammad Ashraf, visited Pakistan on July 16-19, 2017. The TUBITAK team was headed by Dr. Orkun HASEKIOGLU, Vice President TUBITAK. He was accompanied by the senior members from TUBITAK Marmara Research Center and TUBITAK (BILGAM). The delegation held meetings with many organizations such as National Radio Telecommunication Cooperation, Haripur, Pakistan

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Aeronautical Complex, Kamra, Pakistan Atomic Energy Commission, COMSATS, COMSTECH, National Center of Physics and Ministry of Science and Technology, Islamabad.

The meeting of TUBITAK delegation with PSF was held on July 16, 2017. During the meeting various aspects of future joint collaboration were discussed. PSF and TUBITAK agreed to launch 2<sup>nd</sup> call of joint proposals by Pakistani and Turkish scientists in various scientific fields. Priority areas of joint proposal submission were also finalized during the meeting. PSF and TUBITAK also agreed to conduct joint workshop on key scientific areas. Possible future avenues of joint cooperation between PASTIC and PMNH with TUBITAK were also discussed during the meeting.



Dr. Orkun Hasekioglu, Vice President of the Scientific and Technological Research Council of Turkey (TUBITAK) presenting souvenir to Prof. Dr. Muhammad Ashraf, Chairman, PSF during the Visit of TUBITAK delegation to Pakistan Science Foundation on July 16, 2017.

#### Funding Science and People Cooperation for prosperous belt and Road **PSF Director Research Support Attends International Symposium**

Dr. Mirza Habib Ali, Director Symposium on "Funding 04, 2017 at Beijing, China. Research Support/ Science and People The symposium was organ International Linkages Cooperation for Prosperous attended International Beltand Road" held on July 02-



Dr. Mirza Habib Ali presenting the activities and working of Pakistan Science Foundation at International Symposium on "Funding Science and People Cooperation for Prosperous Belt and Road, on July 02-04, 2017 in Beijing, China

by the National Natural Science Foundation of China (NSFC). The symposium was attended by the policy-makers and scientists from 50 different countries. The symposium was

aimed at discussing the role of The symposium was organized science for sustainable development along the belt and road region. Dr. Mirza Habib Ali also gave a detailed presentation on the role and working of Pakistan Science Foundation.



Dr. Mirza Habib Ali with the participants of the International Symposium on "Funding Science and People Cooperation for Prosperous Belt and Road," held on July 02-04, 2017 in Beijing, China.

# **PSF Conducts Interviews of Students for Selection of STFS 3rd Batch**

(PSF) has conducted the interviews for selection of Karachi, Quetta, Islamabad, 300 students of Science

Pakistan Science Foundation Talent Farming Scheme (3<sup>rd</sup> Batch) across the country in Peshawar, Faisalabad,

Lahore, Sukkur and Multan various educational institutes and external members from students.

on July 17-20, 2017. The and universities conducted panel of PSF senior officers the interviews of the



Glimpses of interview of students for selection of STFS 3rd Batch

#### **PSF, Alif Ailaan Plan Joint Ventures** for Science Popularization

Ms. Nimra Tariq, Regional Campaign Lead Alliances, Alf-Ailaan, an NGO, visited Science Centre Faisalabad on July 20, 2017. The agenda of the meeting was discussing the possibilities of future co-

operations regarding the popularization of science. Mr. Jamil Qureshi, Project Director, STFS and Mr. Hasnain, Deputy Director (STI), were present during the meeting.



Mr. Jamil Qureshi, Project Director, STFS, holds meeting with representatives of Alf Ailaan at Science Centre Faisalabad on July 20, 2017

### **Science Caravan Exhibition**

The Science Caravan Federal Unit arranged an exhibition at Institute of Space Technology, Islamabad on July 18-19, 2017 during Space Summer Camp. Over 375 students along with teachers participating in the camp visited the exhibition.





Students visit Science Exhibition at IST

Science Centre, Faisalabad: Over 75 students and teachers visited Science Centre, Faisalabad and they were briefed about different galleries and exhibits of the Centre.





Teachers during the visit to the Science Centre, Faisalabad

# **Pakistan Museum of Natural History (PMNH)**

Editor: Dr. Muhammad Ismail Bhatti

# **PMNH Geological Research Team Explores Gilgit-Baltistan Areas**

The Geological research team of Earth Sciences Division (ESD), including Mr. Yaseen Aamir, Mr. Khalil-ur-Rehman and Mr. Zeeshan Arshad explored Gilgit-Baltistan areas on July 21-30, 2017.

Dr. Ghazala Roohi, Director ESD/Secretary PSF later on also joined them to supervise the team. The research team visited Karimabad, Aliabad, Ahmed Abad Gulmit and Khunjarab, Yasin Valley,

Shighar & Shangus valleys. gradation of PMNH Display researchers.

Ghahkuch, Chtore Khand, Gallery. The research team collected many samples for the The team also purchased some repository of PMNH which will gemstones crystals from be good reference source for different mines for the up- young scientists and



The Research Team inside the gemstones' mine in Shangus Valley, Gilgit-Baltistan



Some gemstones collected during the research visit

## **New Birds Diorama Preparation Underway**

Birds are one of the important animals and popular among the naturalists for their beauty, shape, colors and vocal sounds. According to IUCN Red List, Pakistan avifauna comprises

609 species, of which five Birds play an important habitat degradation, air and species are critically endangered, nine are predator, carnivore, endangered, 18 are vulnerable insectivore, pollinators, and 28 species are near frugivore and omnivores. threatened.

ecological role in food chain as Environmental issues such as



water pollution, deforestation, introduction of exotic species are affecting bird fauna globally. Keeping in view the importance of avifauna, PMNH has planned to add a new Bird Diorama in display area for students and public awareness and education. The work of wooden frame fabrication. background canvas pasting, branched tree specimen placing and birds' specimens' selection and stuffing has been completed and the diorama will be opened soon for visitors.

Over 34,000 Persons Visit PMNH in July 2017

general public, 45 foreigners and 12,850 children under-5-year of Islamia University Bahawalpur also visited PMNH. Dr. age visited the PMNH Display Galleries in July 2017. The Museum is an important source of entertainment, information and in detail about PMNH and its objectives. education on natural history of Pakistan.



## **PMNH Participates in Comsats** Abbottabad Campus activity

Department of Electrical Engineering, COMSATS Abbottabad Campus organized a one-day Open House activity to provide opportunity to students for displaying their new projects. Dr. Muhammad Ismail, Associate Curator participated in the activity. A meeting was held with Professor/Chief Engineer Dr. Abdur Rashid regarding participation of students in different PMNH activities.



As many as 34,389 persons including 370 students, 21,124 A group of students with Dr. Sangum, Associate Professor, Muhammad Ismail Bhatti, Associate Curator BSD briefed them



**PMNH Lotus Pond** Attracts Visitors

A small but beautiful Lotus pond, which is now in full bloom, is attracting huge crowds of visitors to PMNH. These beautiful flowers open in summer.



PMNH Attracts Print and Electronic Media Nowadays publicity of an organization through print media and TV channels play an important role in attracting and educating people. Media teams of PTV News, The Khyber and The Express Tribune visited PMNH, prepared and aired/printed special packages on the activities of the organization.



#### PSF NEWSLETTER

# Pakistan Scientific & Technological Information Centre (PASTIC)

Editor: Rahila Khurram

## **Training Workshop on "Mendeley Tool" at PASTIC**

In order to enhance the research capabilities and to inculcate modern thesis writing trends in researchers. PASTIC regularly organizes training workshops on Mendeley. Currently PASTIC organized a training workshop on "Make your research life easier with Mendeley Tool" on 19-20<sup>th</sup>



A group photo of the participants of the Workshop



Dr. Maryum Ibrar Shinwari, Senior Scientific Information Officer (PASTIC) giving demonstration on "MENDLEY'

Islamabad.

The objective of this workshop was to build the capacity of young researchers and to Dr Mona Lisa, Chairperson enhance their skills in literature search, citation, sharing and discovering of new research.

July, 2017 at PASTIC National The workshop included Centre, Quaid-e-Azam practical sessions where in an University Campus, opportunity was provided to learn and practically use different features in Mendeley application.

> Department of Earth Sciences, Quaid-i-Azam University Islamabad was the Chief Guest

of the Closing Ceremony. She appreciated PASTIC efforts and also distributed certificates among the participants. Dr. Maryum Ibrar Shinwari, Senior Scientific Information Officer (PASTIC) and Mendeley Advisor was the resource person of the workshop. 20 Participants both students and faculty members from academia (Quaid-e-Azam University, International Islamic University, NIHCR) participated in this hands- ontraining workshop. PASTIC has been regularly organizing this series of workshop on monthly basis to train the young researchers on modern tools and techniques.

## Training workshop on "Research Tools & Techniques (SPSS)"

PASTIC regularly organizes training workshops on Research Methodology. This program is for MSc, MS/M.Phil and Ph.D students and scholars. The objective of such workshops is to provide basic understanding about qualitative and quantitative research concept, methods and capacity building of researchers in collecting, managing and analyzing data for qualitative and quantitative research. In continuation of this regular activity a three days training workshop was organized at PASTIC National



Syed Tahir Abbas Shah, Assistant Professor, Department of Bioscience, CIIT, Islamabad distributing certificates to the participants

Center, Islamabad on July 26-28,2017.

Some 30 participants from different universities (Quaid-e-Azam University, SZABIST, CIIT) attended the training workshop. Muhammad Usman, Web Manager, PASTIC was the resource person of the training workshop. Syed Tahir Abbas Shah, Assistant Professor, Department of Bioscience, COMSATS Institute of Information Technology,



A glimpse of Training Workshop

Islamabad was the Chief Guest more statistical softwares sould of the Closing Ceremony. He be included in the curriculum. also expressed his views about He also distributed certificates the training and suggested that among the participants.

#### **PASTIC Strengthens its Technology Information Resource**

Technology Information Services Section of 1.Database of Chambers of Commerce & PASTIC (TIS-PASTIC) is striving to promote Industries of Pakistan R&D in the local industry, small manufacturing 2.Database of Industrial Associations of enterprises (SMEs), their technologies, products, Pakistan and services. It has developed university-industry 3. Database of Offices of Research, Innovation linkage and industry-academia partnerships and Commercialization (ORIC) of Pakistani through Symposia workshops/seminars and Universities exhibitions for transforming knowledge and 4.Database of Overseas Investors of Industry innovative ideas into commercialization.

TIS is currently working on compilation of data Databases available online at for the following databases:

and Commerce in Pakistan

http://pastic.gov.pk/tis-databases.aspx

### National Exhibition on IT & Computer Tools to be Held in Nov. in Islamabad

PASTIC is organizing a "National Exhibition on IT & Computer Tools for Science & Education-2017" on November 17-19, 2017 at the Pak-China Friendship Center, Islamabad, PASTIC has hosted several such Exhibitions in the past bringing cutting-edge technology to the public in major cities, attracting close attention from the government, scientific and academic as well

as industrial/commercial circles. The main purpose of the current exhibition is to provide an opportunity to the students, youth and the general public to know about the latest innovative developments in the IT & Telecom sector and to give a platform to the sponsors & exhibitors to promote their latest innovative products, technologies & services.

The major display items in the

## **Training Workshop on** "Managing Citation in Research"

PASTIC Sub-Center, Faisalabad organized a one-day training workshop at NTU Library, Faiasalabd on July 28, 2017. The objective of this workshop was to build the capacity of research Scholars and to enhance their skills in literature search, citation management, referencing etc.

The Chief Guest of the training workshop was Dr. Tanveer Hussian, Rector NTU during



Mr. Liaqat Hussain, Chairman, Department of Management Sciences, NTU distributing certificates to the participants



Dr. Tanveer Hussian, Rector NTU expressing his views during Inaugural Session

the Inaugural Session. 80 participants participated in the workshop. Mr. Muhammad Asif Munir, Director IRM, Punjab Higher Education Commission, Lahore was the resource person. During the Closing Session, Mr. Liaqat Hussain Chairman, Department of Management Sciences. NTU was the Chief Guest. He distributed Certificates, Shields and Souvenirs to the participants, Resource person and organizers.

### **PASTIC Information Services at Doorsteps** of Universities / Institutions

PASTIC regularly organizes its service stalls all over the country, wherein PASTIC publications are displayed and membership forms/pamphlets are distributed and the visitors are briefed about PASTIC services. In continuation of this regular activity PASTIC Sub-Centre, Karachi organized a stall during Symposium on Hydrogen: Carbon-Free-Fuel, Democratizing the Energy at Mövenpic Hotel, Karachi, on July 01, 2017.

#### Pakistan Science Foundation

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Pakistan Museum of Natural History Garden Avenue. Shakarparian, Islamabad Phone: 9249239 Fax: 9249240 www.pmnh.gov.pk

and innovative computer hardware and software tools, network security equipment, Telecommunication and IT gadgets as well as projects development by colleges and universities. There will be separate pavilions for each of these categories. Parallel session of conferences, seminars and workshops on emerging ICT topics will also be arranged. It is also planned to have a Software Development competition. Award distribution for best http://pastic.gov.pk/

exhibition would include latest innovative idea and stall presentation is also planned. For display of products exhibits, pre-fabricated booths 10x10 ft with basic furniture and electricity supply/sockets will be available on payment. Booking will be made on first come, first -served basis. Participating companies may book any number of stalls according to their requirement. Special discount can be requested on booking of more than one stall.

For further details please visit:

# **Awareness Seminars for the Promotion** of **PASTIC** Services

PASTIC arranged following The PASTIC Sub-Center, three awareness seminars in following Universities:

Sardar Bahadur Khan Women University, Quetta: The PASTIC Sub-Center. Quetta arranged a one-day seminar on PASTIC activities at Sardar Bahadur Khan Women University, Quetta on July 11, 2017. During the seminar, Mr. Faisal Hilal, Asstt. Documentation Officer, PASTIC, delivered a presentation on PASTIC Information Services to the students, researchers and faculty members of the department.

#### Mövenpic Hotel, Karachi:



Muhammad Khalid, Deputy Director, PASTIC Sub-Centre, Karachi, delivering a presentation on PASTIC Information Services

Karachi arranged a one-day seminar on PASTIC activities during Symposium on "Hydrogen: Carbon-Free-Fuel, Democratizing the Energy" at Mövenpic Hotel, Karachi, on July 01, 2017. Muhammad Khalid, Deputy Director, PASTIC Sub-Centre, Karachi, delivered a presentation on **PASTIC Information Services** to the students during the symposium.

University of Karachi: The PASTIC Sub-Center, Karachi arranged a one-day seminar on PASTIC activities at Center of Excellence in Marine Biology (CEMB), University of Karachi, Karachi, on July 19, 2017. Muhammad Khalid, Deputy Director, PASTIC Sub Centre, Karachi, delivered a presentation on PASTIC Information Services. Dean of Sciences, Registrar, Faculty Members and students of CEMB attended the awareness seminar.

#### **PASTIC National Centre**

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