Patron

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From the Chairman



Inspiration, motivation and competition are the key elements which play their role in excelling in any field of life and also bringing improvements for s o c i o - e c o n o m i c development in the country.

Many activities and forums inspire and motivate people, especially students, and provide them opportunities to compete others for standing tall among them. National Science Fairs and exhibitions are on top of the list of such important platforms and activities which provide the students and general public an environment of learning, inspiration, motivation Continued on page 2

<u>Weeklong National Science Fair at PMNH Opens</u> Science Fairs play role in shaping future of nations: S&T Minister

Pakistan Museum of Natural History (PMNH), Pakistan Science Foundation (PSF) and Ministry of Science and Technology organized a weeklong National Fair at PMNH on December 2-7, 2016.

Over 100 organizations participated in it and set up over 150 stalls. The theme of the Fair was "Science and Technology: For Better Future". Different scientific organizations showcased their scientific work in the exhibition. There were four pavilions including S&T, Schools/Colleges/Universities, Unique Research Projects and Special Attractions for entertainment of the public.



Federal Minister for Science and Technology Rana Tanveer Hussain and other dignitaries visit stalls during National Science Fair 2016 at Pakistan Museum of Natural History.



Federal Minister for Science and Technology Rana Tanveer Hussain cuts ribbon to inaugurate National Science Fair 2016 at Pakistan Museum of Natural History on December 2, 2016.

The pavilion for special attractions had food court, handicraft stalls, book stalls, nature painting, Lok Virsa theatre, putli tamasha, planetarium world, nature products, booth for health check, pets pavilion, aquaria, 3-D movies, dinosaurs show. PMNH remained open for public to see various exhibits including the biggest fish in the world, blue whale, animated dinosaurs, 30 million years old Balochitherium, biodiversity

hall, world of birds, world of insects, world of fishes, Marine life, fossils gallery, precious minerals gallery, rock types of Pakistan, cave life and rock garden etc.

Federal Minister for Science and Technology (S&T) Rana Tanveer Hussain along with other dignitaries inaugurated the Fair on December 2, 2016. Federal Secretary for S&T Mr. Fazal Abbas Maken, PSF Chairman Prof. Dr. Muhammad Ashraf, heads of



From the Chairman

and competition as well as invention and innovation. But holding these fairs and exhibitions on regular basis is pre-condition to achieve the required objectives.

Pakistan Science Foundation has launched over 12 programmes for popularization of Science in the country and provides the students and general public platforms of learning, inspiration, motivation and competition. These platforms include regularly holding International Science Day, International Travelling Science Expos, National Science Fairs, Science Competitions and Science Caravan Exhibitions across the country.

These science activities are playing a very important role in popularizing science a mong students and motivating them towards invention and innovation.

It is needless to say that the efforts of Pakistan Science Foundation alone could produce the desired results unless other science and educational institutions don't play their proactive role. PSF would welcome the collaboration and suggestions of science and educational institutions to hold these activities on regular basis as well as make them more targetoriented and meaningful.



Federal Minister for Science and Technology Rana Tanveer Hussain addresses the inaugural ceremony of National Science Fair 2016 at Pakistan Museum of Natural History on December 2, 2016

S & T organizations, educational institutions and students attended the inaugural ceremony. The Minister cut the ribbon to formally inaugurate the Fair and appreciated the effort during visit to the stalls.

Addressing the inaugural ceremony the Federal Minister said that Science Fairs play a significant role in shaping future of nations as they provide a golden opportunity to public, especially the youth to learn about latest developments and innovations in the field of science and motivate them to adopt science as a career. He said that the Science Fairs provide opportunity of learning experience to students and general public and bridge gap between science organizations and public.

The Science Fairs are an important mean of informal education and we must adopt it

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to spread information about science and technology, he added.

Addressing the ceremony, PSF C h a i r m a n P r o f . D r . Muhammad Ashraf said the National Science Fair is aimed at creating awareness among the masses about developments in the field of S&T in Pakistan, dissemination of information about research, development, advancement and innovation in science and technology and encouraging education and career development in S&T.

The Chairman said the Science Fair was a part of the World Science Day celebrated on November 10 every year. He said main activities of the Fair include exhibitions regarding development of S&T, the latest s cientific research, Environmental sciences, Science exhibitions by schools, colleges and universities, Displays of new technologies/



Federal Minister for Science and Technology Rana Tanveer Hussain and other dignitaries inaugurate visit stalls in National Science Fair 2016 at Pakistan Museum of Natural History

innovations Innovative attractions/ amusements through science displays.

All S&T organizations under the Ministry of Science and 1 Technology, all relevant ministries like Ministry of Education, Ministry of Information and Communication Technology, Ministry of Natural Resources, Ministry of Climate Change, Ministry of Industry, Ministry of Public Health, Ministry of Defense, Ministry of Interior, Ministry of Culture etc., educational institutions including universities, colleges and schools, Science Societies, NGOs, Defense organizations, agricultural departments, biodiversity, natural resources, wildlife, fisheries and environment departments, community hygiene and health organizations, Tourism Department, CDA, Firefighting Department, horticulture, handicrafts, OGDCL/oil exploring companies and Meteorological Department participated in the National Science Fair. The Fair attracted huge crowds during all the days from December 2 to December 7.

Prof. Dr. Muhammad Ashraf, Chairman PSF was the Chief

PSF Chairman Prof. Dr. Muhammad Ashraf addresses the inaugural ceremony of National Science Fair 2016 at Pakistan Museum of Natural History on December 2, 2016

Quote-of-the-Month-

"Perfect as the wing of a bird may be, it will never enable the bird to fly if unsupported by the air. Facts are the air of science. Without them a man of science can never rise."

-Ivan Pavlov

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PSF NEWSLETTER

Guest at the Closing Ceremony of the Fair on December 7, 2016. Country Director FAO Mr. Patrick T. Evens, PMNH Director General Dr. M.K. Leghari, Deputy Director General Dr. Muhammad Rafiq, PSF Member Science Dr. Akram Shaikh, heads and representatives of S&T organizations, educational institutions and a large number of students were present at the closing ceremony.

Speaking on this occasion Dr.Ashraf said from onwards National Science Fair will be a regular feature every year in order to make people aware of developments in the field of



PSF Chairman Prof. Dr. Muhammad Ashraf addresses at closing ceremony of National Science Fair 2016 at PMNH

science and technology as well as forge cooperation among science and technology institutions. The Chairman said overwhelming response of general public and students to the Science Fair was very encouraging. He said the Fair attracted huge crowds of general public, especially the students and teachers evinced keen interest in different products displayed at over 150 stalls set up by



PSF Chairman Prof. Dr. Muhammad Ashraf awards shields to students at closing ceremony of National Science Fair 2016

various public and private sector organizations. He appreciated the participants and organizers of the Fair. The PSF Chairman and other guests also distributed shields among winner stall-holders.

Pakistani Student wins Bronze Medal in International Junior Science Olympiad

Six Pakistani students participated in the International Junior Science Olympiad (IJSO) 2016, which was held in Bali, Indonesia from December 2-11. Out of the six students from Pakistan, Yusra Nadir was awarded a Bronze Medal in Experimental Design Competition.

The Olympiad is an annual individual and team competition in the field of natural sciences for students who are under 16 years of age on 31st December of the competition year. The competition is held in the first



week of December every year, in different countries. Currently, around 50 member countries participate in IJSO every year. IJSO was established in recognition of the significance of the Natural Sciences in the general education of young people and in all aspects of their lives. With the efforts of Pakistan Science Foundation (PSF) Chairman Prof. Dr. Muhammad Ashraf, Pakistan became a member of IJSO this year. PSF, after strict written test and interview selected six students for participation in the event. The

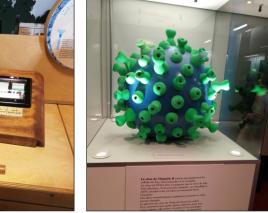
students' team led by PSF's Senior Science Promotion Officer Syeda Rehana Batool took part in the event first time and won laurels for the country. The PSF Chairman has termed the Pakistan team's success a very astounding achievement indeed.

Chairman PSF Visits France to Discover New Vistas of Joint Cooperation

Pakistan Science Foundation Chairman Prof. Dr. Muhammad Ashraf on an



invitation of French Embassy, Islamabad, visited the leading French organizations in Paris on December 18-21, 2016 to explore the areas of joint cooperation with French



View of exhibits at *Exploradome and* French Museum of Natural History

counterpart organizations. The places visited during the tour included UNESCO Head Office, Universite Pierre et Marie Curie (UPMC), National Museum of Natural History, LAMAP, Universcience, Planete sciences and Exploradome. The visit to France will help in developing effective and viable linkages with many organizations in France. PSF aims to effectively implement the linkages developed in true spirit for the benefit of scientific community in Pakistan.

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French Embassy Delegation Meets PSF Chairman

Delegation from Cultural and Cooperation Department, French Embassy, Islamabad met with Chairman, PSF Prof. Dr. Muhamamd Ashraf on

December 29, 2016. During the meeting different areas of future collaboration such as establishment of Pak-France Science Center, Establishment of

permanent Inquiry Based Science Education Centre in Pakistan and organizing traveling expos were discussed.

Over 40,000 Persons Visit Science Caravan Exhibitions in Dec. 2016

Over 40,000 persons including students, teachers and general **Sukkur**: The Science Caravan public visited the Science Caravan exhibitions all across the Sukkur Unit arranged a Science



Inside view of Planetarium show arranged by Federal Unit at PakTurk International School & Colleges, Islamabad

country in December 2016. The Detail is as under:

Federal: The Science Caravan Federal Unit arranged an exhibition during National Science Fair at PMNH on December 2-7. Dinosaurs models were also showcased which attracted huge number of

visitors. The exhibition was visited by over 21,000 persons. A Planetarium Show was arranged at Pak-Turk International



Planetarium and Dinosaur Show during National Science Fair-2016 at PMNH Over 40,000 persons including students, teachers and general public visited the Science Caravan exhibitions all across the



Visitors are being briefed about exhibits and models inside Mobile Science Lab during National Science Fair 2016 at PMNH

country in December 2016. The Detail is as under:

Federal: The Science Caravan Federal Unit arranged an exhibition during National Science Fair at PMNH on December 2-7. Dinosaurs models were also showcased which attracted huge number of visitors. The exhibition was visited by over 21,000 persons.



Science Caravan activities at Rajanpur, Khairpur

A Planetarium Show was arranged at Pak-Turk International School & Colleges, Main Campus, Islamabad, on December 14, 2016. Over 250 students from 2 campuses participated in the activity.

Sukkur: The Science Caravan Sukkur Unit arranged a Science Caravan exhibition at Govt. Girls High School Ranipur District Khairpur on December 06 -16, 2016. Over 1,800 students, teachers from 14 schools visited the exhibition. A popular science lecture on the theme of "Basic Rules of Mathematics" was also



Mr. Muhammad Naeem, delivers lecture on "Basic Rules of Mathematics"

arranged at Sindh Educational Academy (SEA) on December 28. Mr. Mohammad Naeem, Ex-Principal, Govt. Elementary College for Women, Khairpur, delivered the lecture. Mr. Shahid Hussain, Principal, SEA, vice principal and teachers were present.

Peshawar: The Science Caravan Peshawar Unit arranged science exhibition at Abasyn School System, Chakdara, on December 08-18 and Abdali School & College Mingora on December 19-22. The exhibition was visited by 2,934 students from 17 schools.

The unit also organized popular science lecture on "The role of chemistry in our daily life" on December 17 at GHSS Chakdarra. The lecture was delivered by Muhammad Naveed Umer, Professor, Malakand University. The lecture was attended by 640 students.



Science Caravan Peshawar Unit busy with students during exhibition at Abasyn School, Chakdara **Quetta**: The Science Caravan Quetta Unit arranged a science exhibition in District Harnai on December 13-20, which was visited by 2,870 students and teachers for 14 schools of the area. The Disaster Kit & Science Encyclopedia set were also handed over to the Principals of the Girls and Boys High Schools of the District Harnai.

Jaffarabad: The Science Caravan Jaffarabad Unit arranged an exhibition at District Sibi on December 4-12, which was visited by 5,335 students and 112 teachers from 27 schools and one college. Deputy Commissioner Sibi Mr. Saifullah Khetran inaugurated the science exhibition at Govt. Girls High School Railway Colony, Sibi. Former Chief Minister of Balochistan Mr. Nawab Ghous Bux Khan Barozai inaugurated the Exhibition at



Glimpses of exhibition and walk arranged by Science Caravan Jaffarabad Unit in Sibi

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Glimpses of science exhibition arranged by Science Caravan Tandojam Unit at Taluka Mirpur Sakro, District Thatta

Govt. Boys High School Ghareebabad Sibi. Additional Commissioner Sibi Mr. Rehmatullah Gishkori, Assistant Commissioner Bakhtiarabad and other officials also visited the exhibition. A walk for science awareness was also arranged which was participated by the Deputy Commoner Sibi along with the students.

Tandojam: The Science Caravan Tandojam Unit arranged an exhibition at Govt. Boys High Schools Taluka Mirpur Sakro,



Students visiting Science Centre, Faisalabad



Students perform hands on science activities during Science Caravan exhibition at a school in District Okara

District Thatta on December 06-15, which was visited by 1,590 students and 67 teachers from 11 schools.

Faisalabad: The Science Caravan Faisalabad Unit arranged an Exhibition at District Okara on December 05-16. Over teachers and 4,200 students visited the exhibitions. As many as 500 visitors from various schools visited the Science Centre, Faisalabad during December 2016.

Pakistan Museum of Natural History (PMNH)

Editor: Dr. Muhammad Ismail Bhatti

National Ethno-Botanical Seminar National Display Centre of Medicinal Plants a Must, Says Federal Secretary PMNH to establish world class Botanical Garden: Dr. Ashraf

Pakistan Museum of natural History (PMNH)/Pakistan Science Foundation (PSF), IUCN, Mountain and Marketing (M&M) Project and UNDP jointly organized the National Ethno-Botanical Seminar at PMNH on December 29, 2016.

Syed Abu Ahmed Akif, Federal Secretary, Ministry of Climate Change, was the Chief Guest at the inaugural session of the Seminar. Chairman PSF Prof. Dr. Muhammad Ashraf, Advisor to PM on Climate Change Mr. Rizwan Mehboob, Ministry of Climate Change Inspector General Forest Syed Mehmood Nasir, IUCN Country Representative Mr.



Syed Abu Ahmed Akif, Federal Secretary, Ministry of Climate Change, Chairman PSF Prof. Dr. Muhammad Ashraf and other join hands to cut ribbon at inaugural ceremony of the National Ethno-Botanical Seminar and Exhibition at PMNH

Mehmood Akhtar Cheema and PMNH Director General Dr. M.K. Leghari were present. A large number of botanists, botany students and teachers,



Chairman PSF Prof. Dr. Muhammad Ashraf addresses the inaugural session of the National Ethno-Botanical Seminar at PMNH on December 29, 2016.

Syed Abu Ahmed Akif, Federal Secretary, Ministry of Climate Change and Chairman PSF Prof. Dr. Muhammad Ashraf visit the stalls set up during Exhibition and National Ethno-Botanical Seminar at PMNH on December 29, 2016.

representatives of NGOs etc. marketing purposes. were also attended the seminar. An attractive exhibition of medicinal plants and products was also established on this occasion.

Addressing the inaugural session, Syed Abu Ahmed Akif, said that Pakistan needs proper documentation of work being done on medicinal plants in the country and also establish a national display center to exhibit these plants for the

The Federal Secretary said that a lot of work is being done at community level regarding ethnobotany, especially drying vegetables, fruits and sea buckthorn products etc. in the country. He said this work should be highlighted through short documentaries for benefit of the people.

He called upon the IUCN, UNDP and other stakeholders to join hands for documenting

the traditional knowledge about various uses of plants.

PSF Chairman Prof. Dr. Muhammad Ashraf on this occasion announced that a world class Botanical Garden will be established at PMNH. He deplored that Pakistan has only 6,000 listed species of plants whereas as large number of oceanic flora still needs to be explored and listed. Dr. Ashraf said that in the absence of plants DNA Bar Coding there is



Dr. Gilani presenting the oral presentation at the National Seminar of Ethnobotany a potential risk of exploitation of medicinal and other valuable plants through illegal export.

PMNH Mycologist Explores Peshawar area

The PMNH lower plants expert, Sadia Munir, Associate Curator, along with Muddassar



Fida, Sr. Collection In-charge, visited Peshawar and adjoining areas to collect seasonal variation of macro and micro fungi. The research team collected over 135 samples with relevant information during the 13-day research survey. This research will help analyze seasonal variation of macro fungi. The collected specimens will be preserved in mycological herbarium of PMNH.

Over 15,000 persons visit PMNH in December

A total of 15,073 persons University of Science and including 6,600 students, 4,000 general public, 4,450 children and 23 foreigners visited the galleries of PMNH in December 2016.

The main educational institutions that visited PMNH this month included Dar-e-Argam Islamabad, Govt. Frontier College for Women Peshawar, University of KPK, Victoria High School, Chakwal, Islamabad Lyceum Rawalpindi, Indus College, Air Foundation School System Mandi Bhauddin, Mirpur



Technology, NUML, British School System Sialkot, OPF Public School Mirpur, Allied School Gujranwala, University of AJK Muzafarabad, Govt. High School Gujrat, Siddeeq Public School Rawalpindi, Punjab Group of College Mandi Bhauddin, Shaheed Benazir Bhutto University Indus College Wah-Cantt, Igra Model High School Gujranwala, Postgraduate College AJK, Beaconhouse School System Islamabad, Kalar Kahar Science College Chakwal, The Educator Mardan, USWA Public High School Faisalabad, Al-Qalam Masali High School Gujranwala, Igra Model High School Gujranwala, Baghdad Model School Mardan and T.C.F Secondary School Faisalabad.

He stressed the need for DNA Bar Coding on urgent basis to preserve and protect the valuable medicinal plants and traditional knowledge.

Syed Mehmood Nasir, IG Forest and National Director of M&M Project said that 177 countries signed the Convention on Biological Diversity. He said that according to the Convention all signatory governments are bound to respect the knowledge of local people and the pharmaceuticals using this knowledge are bound to share the profit with the local communities. He was of the

view that due to side effects of allopathic medicines various medicine companies are again using herbal medicines.

IUCN Country Representative Mr. Mehmood Akhtar Cheema and PMNH Deputy Director General Dr. Muhammad Rafiq also spoke on this occasion. They said our life and comforts depend upon plants which greatly influence our culture and shape civilizations.

Dr. Syed Aneel Gilani, Botanist of PMNH, gave presentation on "Ethnobotany in Pakistan; Present and Future Perspective" and highlighted the present and future prospects of ethnobotany along with the connection between the people and plants. He emphasized the importance of indigenous plants and its usage by the local people and their role in their lives. He further highlighted the importance of conservation of the medicinal and Ethnobotanically important plants for the future generations.

PMNH Geologists Conduct 11-Day Field Research Work in Gilgit-Baltistan



PMNH Earth Sciences Division Scientists examine the rock sample and formation in Gilgit-Baltistan area

The PMNH Earth Science Division's scientists Mr. Aamir Yaseen, Mr. Khalil-ur-Rehman and Mr. Hamad-ur-Rahim carried out 11 days field work in the areas of Gilgit-Biltistan



Inside view of Gemstone Mine in Shigar Valley, Gilgit-Baltistan

for the collection of rocks, minerals and gemstone. They conducted research work in Chilas, Yasin Valley, Hunza, Khunjarab, Skardu and Besham areas and collected 245 samples of Granite, Granodiorite, Serpentinite, Slate, Diorite rocks, Epidote, Tourmaline, Quartz, Feldspar, Muscovite, Biotite, Norite, and Phosphorite. They also visited gemstone mine in the Shigar Valley.

Field Research Work in Laki Range Hyderabad

Sciences Division's scientists including Mr. K.A. Mirani, Associate Curator and Mr. Muhammad Imran, Research Associate, PMNH along with Field Assistant Mr. Muhammad Imran carried out field work in the North of Laki Range,

A two-member team of Earth Alipur, Hyderabad, Sindh on of rocks were also collected for December 19 to January 1, 2017 for the collection of rocks and fossils for research. They collected over 600 fossils' specimens of Brachiopods, Gastropods, and larger forams along with petrified wood fossils. As many as 50 samples

research and display purposes. They carried out detail study of Bara Formation along with the observation of structural features of the area. The scientists also visited coal mines of Lakhra area and collected coal samples.



Scientists conduct detailed study of Bara Formation

Pakistan Scientific & Technological Information Centre (PASTIC)

Editor: Saima Siddique Tariq

Training Workshop on Strengthening Innovative Library Leaders

Pakistan Scientific and Technological Information Centre (PASTIC) in collaboration with Pakistan Librarians Welfare Organization (PLWO) and University of Health Sciences (UHS), Lahore organized a two days training workshop on "Strengthening Innovative Library Leaders" on December 08-09, 2016 at University of Health Sciences, Lahore.

Major General (Retd) Prof. Dr. Muhammad Aslam, Vice Chancellor, UHS, Lahore inaugurated the workshop. In his address he emphasized on capacity building of the librarians to meet the challenges of present digital era. He appreciated and lauded the role of PASTIC and Pakistan Librarians Welfare Organization (PLWO) for taking this specific initiative.



The working session of PASTIC training workshop at UHS, Lahore

He said that such efforts should be continued for the capacity building of librarians and information professionals.

Mr. Muhammad Aqil Khan, Additional Director (STI) PASTIC, Islamabad was the Guest of Honor. He gave a brief introduction of PASTIC and its services. He said that acquiring necessary knowledge and insight about innovative options in library leadership development and library



Mr. Aqil Khan Additional Director (STI), PASTIC Prsenting the shield to Prof. Dr. Muhammad Aslam, VC, UHS

leadership competencies is the attended the workshop.

dire need of present digital era. The workshop was concluded The workshop was conducted by Prof. Dr. Kanwal Ameen, and completed in seven Chairperson, Department of sessions with focus on the Information Management, University of the Punjab. In her activities for acquainting the participants about developing concluding remarks she said innovative ideas at any that such training programs will workplace, preparing goals, be helpful in making the librarians proactive leaders in relevant action plan and executing the said action plan. their respective institutions. Overall 47 librarians and The participants acknowledged and highly appreciated this information professionals from all over Punjab and AJK workshop.

Training Workshop Research Tools: SPSS



A glimpse of SPSS training/workshop at MUET, Jamshoro

The working session of SPSS training/workshop, Islamabad

Organizing training workshops on Research Methodology is a regular feature of PASTIC. This program is meant for students, scholars of MSc. MS/M.Phil and Ph.D. The objective of these workshops is to provide basic understanding about qualitative and quantitative research concepts, methods and to build capacity of young researchers in collecting, managing and analyzing data for qualitative and quantitative research. In continuation of this regular activity, PASTIC organized three training workshops during the month of December, 2016.

Islamabad: The PASTIC National Centre, Islamabad organized a three-day training workshop on Research Tools and Techniques on December 28-30, 2016. Mr. M. Agil Khan, Additional Director (STI) gave the introductory remarks and highlighted on PASTIC activities and the need to promote the research culture in Pakistan. About 30 participants attended the course.

While concluding Ms. Nageen Ainuddin, Director PASTIC anticipated that participants of training workshop will utilize

their skills while conducting their research for getting better analysis output with ease. The participants expressed their appreciation for organizing such need based training. Later on, the certificates were distributed among the participants by the Director PASTIC.

Karachi: PASTIC, Sub-Centre Karachi in collaboration with

Workshop on Research Tools: EndnoteX8

training workshop on "Citation Management Tool: EndNoteX8 on December 7-8, 2016 at PASTIC National Centre, Quaid-e-Azam University Campus, Islamabad. The objective of this workshop was capacity-building of young researchers and enhancing their skills in literature search. citation and PDF management

PASTIC Islamabad organized a through EndNote citation tool. Ms Nageen Ainuddin, Director PASTIC, while addressing inaugural ceremony said that through this training workshop the skills and knowledge of young researchers will be enhanced for preparation of their thesis. She said PASTIC regularly organizes such workshops to train the researchers on modern research

tools and techniques. Dr Maryum Ibrar Shinwari, Senior Scientific Information Officer (PASTIC) was the resource person of the workshop. Participants of the workshop included research scholars of M. Phil/ Ph. D of S&T Universities. The director distributed certificates among the participants at the end of the workshop.

Seminar on How to Search Digital Literature

A one-day seminar on How to search Digital Literature was organized by PASTIC Sub-Centre Faisalabad at National Textile University (NTU) on December 30, 2016. The objectives of the seminar were to enable the participants on retrieval of the required information and analysis and evaluation of information. Dr.

Tanveer Husain Rector NTU was the Chief Guest. Mr. Zafar Javed, Registrar NTU was the Guest of Honour on the occasion. Mr. Muhammad Hasnain Deputy Director (STI) PASTIC and Mr. Umer Farooq, UAF, were the resource persons. More than 50 participants attended the seminar.

PASTIC Services Stalls

Services and promoted, publications are displayed and m e m b e r s h i p forms/pamphlets/brochures are distributed and all the visitors are briefed about PASTIC services. In continuation of this regular activity following stalls were organized during the month of December.

Islamabad: PASTIC, Islamabad organized a 6-day stall at PMNH, during National December 19, 2016

Faisalabad: NFC Institute of Engineering & Fertilizer Research on December 07. University of Engineering & Technology UET Faisalabad Campus on December 22. NFC Institute of Engineering & Fertilizer Research on December 29, 2016 **Peshawar:**The Agriculture University Peshawar on

Mehran University of Engineering and Technology (MUET), Jamshoro organized a two-day Training Workshop on Research Tools & Techniques at Mehran University of Science, Technology & Development (MUISTD), Jamshoro on December 7-8, 2016.

Prof. Dr. Abdul Sami Oureshi, Dean, Faculty of Science Technology & Humanities, MUET, gave the introductory remarks. About 50 participants attended the Training. Mr. Muhammad Usman, Web Manager, PASTIC, Islamabad was the resource person. Prof. Dr. Mohammad Aslam Ugaili, Vice Chancellor, MUET was the chief guest at closing ceremony. While addressing the participants he applauded PASTIC for conducting the workshop. At the end of workshop Prof. Dr. Mohammad Aslam Uqaili, Vice Chancellor, MUET, distributed certificates among the participants.

Workshop on Drafting and Filing of Patent

Application Peshawar

PASTIC Sub-Centre Peshawar in collaboration with Directorate of Science & Technology and The Agriculture University, Peshawar, organized one-day workshop on December 19, 2016.

The main objective of the workshop was to orient the faculty members/researchers of Agriculture sector about the basics of Intellectual Property **Rights and Drafting and Filing** of Patent Application.

PASTIC National Centre

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PASTIC regularly organizes its service stalls throughout the country, wherein PASTIC



PASTIC Stall during National Science Fair at PMNH

Pakistan Science Foundation

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Pakistan Museum of Natural History

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A glimpse of certificate awarding ceremony at the end of seminar at Faisalabad

Science Fair on December 2-7.