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From the Chairman



When you set your location and destination in Google Map, it starts navigation to guide you. If you don't follow its instructions to turn left or right and change the track, it does not scorn or humiliate you and starts showing next nearest exit to reach the destination. It keeps on guiding you with patience until you reach your destination. Exactly the teacher has same responsibility to perform while guiding its students in learning and ultimately making them able to perform his/her responsibilities in national development as a responsible citizen. And this task cannot be achieved without modern teaching and learning techniques and change in attitude of the teacher.

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5-day Workshop on Inquiry Based Science Education Masters trainers' capacity building vital to produce quality science teachers: Secretary Education Modern teaching techniques vital to science culture: Secretary S&T

A 5-day capacity building workshop for master trainers (teachers) on Inquiry Based Science Education (IBSE) started at Pakistan Science Foundation (PSF) on September 5, 2016.

Federal Secretary Education and Training Mr. Muhammad Humayun was the Chief Guest at inaugural ceremony of the workshop held at a local hotel.

The training programme, organized by PSF in collaboration with Economic Cooperation Organization Organization Science Foundation (ECOSF), was attended by over 57 master trainers from all over the



Federal Secretary Education Mr. Muhammad Humayun addresses inaugural session of the IBSE workshop.

country. Experts from France and Turkey conducted the workshop.

Addressing the ceremony, Mr. Humayun said that the country was facing dearth of teachers able to impart quality education

not only at school level but also at the level of higher educational institutions. He hoped that the capacity-building workshop for master trainers will help produce quality teachers. He said for producing good students we need good teachers and this training will be very fruitful to change the situation. He congratulated the organizers for the initiative much needed to break the shackles of status quo prevailing in education system.

PSF Chairman Prof. Dr. Muhammad Ashraf spoke at length about the Foundation's



Federal Secretary S&T Mr. Fazal Abbas Maken presides over closing ceremony of the IBSE workshop at Pakistan Science Foundation on September 9, 2016...

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From the Chairman

Carol B. Hillman, US early childhood educator, in his book "Creating a Learning Climate for the Early Childhood Years," said "a positive learning climate in a school for young children is a composite of many things. It is an attitude that respects children. It is a place where children receive guidance and encouragement from the responsible adults around them. It is an environment where children can experiment and try out new ideas without fear or failure. It is an atmosphere that builds children's self-confidence so that they dare to take risks."

Most of the educational institutions of Pakistan lack the above-mentioned positive learning climate due to the attitude of teachers unaware of modern teaching techniques. This situation is resulting in poor base of students, especially in science subjects. In order to overcome this problem, Pakistan Science Foundation has launched some specific programmes and Inquiry Based Science Education and Science Talent Farming Scheme are two of them. These programmes enable teachers to provide students an environment of critical thinking to find answers to the questions in their minds and ultimately lead them to become productive scientists. The educational institutions must benefit from these programmes of the Foundation and join hands with it to create a positive learning environment for the students.

new programs for strengthening base of science students in the country right from primary education level. He said that under the Science Talent Farming Scheme PSF is transforming its Science Caravans into state-of-the-art mobile science labs and the first one has been fabricated. He said that in this lab 10 students will be able to conduct experiments at a time and these labs will travel to remote area schools to facilitate them in science education.

Dr. Ashraf said that the Workshop was aimed at creating awareness about the philosophy and 10 principles of IBSE, experiencing the process of inquiry-based science teaching and learning through various IBSE lesson examples and activities.

He said that science is imperative for sustainable development, as it lays a strong foundation for originating new approaches, solutions and technologies to identify and tackle global challenges. A strong foundation of science students serves as the base for science literacy, better understanding of the national and the world problems as well as preparation for future



PSF Chairman Prof. Dr. Muhammad Ashraf addresses inaugural session of the IBSE workshop on September 5.

development and cope with emerging socio-economic issues, he said, adding, critical thinking that comes through science education is vital to the young minds for understanding the world, making choices and solving problems. The concept of "inquiry" fosters the understanding of technological innovations, which needs to be inculcated among children at primary & secondary school levels, he maintained.

ECOSF President Prof. Dr. Manzoor H. Soomro said that IBSE approach is used for teaching of Science, Technology, Engineering and Mathematics (STEM) subjects at schools with the objective to instill the willingness of children for exploring new ideas through observation, evidence and logic.

He said that the ECOSF was

specialized regional organization working for coordination and funding for R&D research projects in 10 member states.

Mr. Olivier Huynh-Van, Cooperation Attaché, Embassy of France, said that *La main à la pâte*- LAMAP (Inquiry Based Science Education) was a very important programme in France. He said that LAMAP was very important not only to develop science but also research. He invited Pakistani scientists to participate in climate change programme of France.

PSF Member Science Dr. Akram Sheikh thanked Ministry of Science and Technology, ECOSF, Embassy of France, Academy of Sciences France and others for cooperation in organizing this workshop.

The concluding ceremony of the workshop was held at PSF on September 9, 2016. Federal Secretary Science and Technology Mr. Fazal Abbas Maken was the Chief Guest on this occasion.

Mr. Maken said that strengthening science base of the students at primary and middle level in the country was imperative to promote science culture in the country and produce best scientists and



ECOSF President Dr. Manzoor H. Soomro addresses inaugural session of the IBSE workshop on September 5, 2016.

Quote of the Month

"There is no teaching until the pupil is brought into the same state or principle in which you are; a transfusion takes place; he is you, and you are he; then is a teaching; and by no unfriendly chance or bad company can he ever lose the benefit."

—Ralph Waldo Emerson



PSF Chairman Prof. Dr. Muhammad Ashraf addresses closing ceremony of IBSE workshop at Pakistan Science Foundation on 9-9-2016.

technologists. He said that only able and dedicated teachers well-equipped with latest methods and techniques of science education could strengthen the science base of the students to develop the element of critical thinking among them. He said that to achieve this objective the training of teachers was a must to revolutionize the prevalent methods of science teaching. He said that critical thinking among students could not be

developed unless they are encouraged to ask questions and find their answers in their own way by providing them opportunity of thinking with open mind. He hoped that the master trainers would implement the IBSE system in their educational institutions. PSF Chairman Prof. Dr. Muhammad Ashraf highlighted the Foundation's new initiatives for strengthening base of science students in the country right from primary education

level. He said that without strengthening base of science students by improving the status of science labs in schools and bringing change in teaching methodology which is based on cramming, the targets of socio-economic development through science could not be achieved. He expressed his resolve to improve the status of science labs in schools with the help of national and international organizations for providing students best

opportunities of learning science through observation, experimentation and inquiry. ECOSF President Prof. Dr. Manzoor H. Soomro, representatives of French Embassy, British Council Pakistan and French Resource Persons also addressed the closing ceremony of the workshop. At the end the chief Guest distributed participation certificates among the participants.

Popular Science Lecture by Dr. Naim Syed

Outcome-based teaching, learning vital to achieve objective of education

In our society the child does not learn but he memorizes and we have to change this scenario through outcome-based science learning and teaching, said Dr. Naim Syed in his lecture at Pakistan Science

Foundation (PSF) on September 29, 2016.

A Lecture on "Why Outcome Based Teaching and Learning in the Science Curriculum is Critical" by Dr. Naim Syed, Assistant Vice President,

University of Connecticut Health Centre, USA, was arranged by PSF, under its Popular Science Lecture Series.

Federal Secretary, Ministry of Science and Technology (MoST), Mr. Fazal Abbas Maken, was the Chief Guest on this occasion. PSF Chairman Prof. Dr. Muhammad Ashraf (S.I.) was also present. Scientists, teachers and students from educational institutions of Rawalpindi and Islamabad attended the lecture. Dr. Naim Syed said that if there were no learning then it is not education, but something else. He said that the concept of homework was to assess that whether the student has learnt what has been taught and this concept is also not followed in its true sense.

through outcome and project-based learning and teaching science according to the class level of the students. He said that the outcome of the child education should be to make him able to invent some new technology, new system or application. He maintained that in present era the use of information technology (IT) could multiply the impact and outcome of learning and teaching. He said that IT should be used as a tool of teaching.

The Secretary (MoST) in his remarks said that the interest and enthusiasm of participants clearly showed that the outcome of the lecture had been achieved. He said that outcome of education was what we wanted to achieve from it. Mr. Maken said that education was a two-way communication between teacher and students and it is in fact the urge to know.



The Chief Guest, Mr. Fazal Abbas Maken, Secretary Ministry of Science and Technology speaks at a Lecture on "Why Outcome-Based Teaching and Learning in the Science Curriculum is Critical" by Dr. Naim Syed, Assistant Vice President, University of Connecticut Health Centre, USA.

He stressed the need for achieving this objective

He stressed the need for a viable system of evaluation to measure the outcome of teaching and learning.

PSF Chairman Prof. Dr. Muhammad Ashraf highlighted the problems in science education and the Foundation's different

programs to improve the education system. He said that for making Pakistan self-reliant in science and technology they have to strengthen the science-base of students. He said that tender-feet students could not compete in the race of world development and to achieve



PSF Chairman Prof. Dr. Muhammad Ashraf delivers his introductory remarks at the lecture on "Why Outcome-Based Teaching and Learning in the Science Curriculum is Critical" at PSF on September 29, 2016



Dr. Naim Syed, Assistant Vice President, University of Connecticut Health Centre, USA, delivers a lecture on "Why Outcome-Based Teaching and Learning in the Science Curriculum is Critical" at PSF on September 29, 2016.

this objective we have to change the education from memorizing to understanding. Later, Secretary MoST Mr. Fazal Abbas Maken chaired a technical session of educationists and scientists from relevant institutions to thrash out modalities for

bringing improvement in learning and teaching science through improved curriculum. In this meeting opportunities were explored to launch projects for appropriately using IT as a tool in learning and teaching to multiply the impact of education outcome.

Over 7,790 students from 27 schools visit science exhibitions in Sept. 2016

Over 7,790 students and teachers from 27 schools visited science exhibitions arranged by PSF Science Caravan units in September 2016 in different cities of the country. The details areas under:

Sukkur: The Science Caravan Sindh Unit, Sukkur arranged science exhibitions at Govt. Boys Higher Secondary School Ubauro, District Ghotki and Govt. Boys Higher Secondary School Choondiko taluka Nara District Khairpur Mirs on September 01-03, 2016 and September 21 to October 01, 2016 respectively. Over 2,950 students, teachers and other staff of 17 schools visited these exhibitions.



Students being briefed about exhibitits during science exhibitions arranged by Sukkur Unit



Faisalabad: The PSF Science Caravan, Punjab Unit, Faisalabad organized an exhibition at Govt. High School No.1 Hafizabad on August 30 to September 10, 2016. The inaugural ceremony of the exhibition was held on September 01, 2016. E.D.O.

Education Hafizabad was invited as the Chief Guest. Heads of educational institutions were also invited as the guests. Over 70 teachers and 3,000 students and general public visited this exhibition.



View of Science Exhibition and Planetarium Show arranged by Faisalabad Unit



Peshawar: The Science Caravan Peshawar Unit arranged an exhibition at Govt. Higher Secondary School, Madyan, Swat, on September 27 to October 02, 2016. Over 1,684 students and 86 teachers from nine schools participated.



Students evince keen interest in Science Exhibition arranged by Peshawar Unit



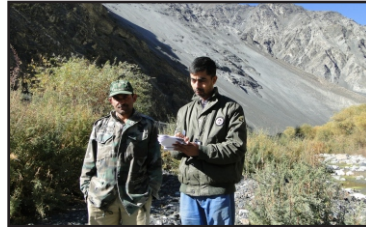
Pakistan Museum of Natural History (PMNH)

Editor: Dr. Muhammad Ismail Bhatti

PMNH Scientists Conduct Field Research in Karachi Coast, Gilgit-Baltistan Areas

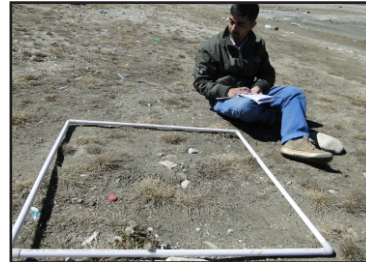
During the month of September, 2016 the scientists from Zoological Sciences Division and Botanical Sciences Division, Pakistan Museum of Natural History (PMNH) explored the two sites related to their research topic. Dr. Shabbir Ali Amir, Associate Curator ZSD along with Mr. Ibad-ur- Rehman Skeleton Preparator carried out 11 days

field work in Karachi Coast for marine fish collection on September 24 to October 4, 2016. Dr. Syed Aneel Ahmad



PMNH botanists busy fieldwork in Gilgit-Baltistan area.

Gilani along with Mr. Jamshed Saqib, and Mr. Munir, Assistant Research Associates conducted



field work in Gilgit-Baltistan area on September 21-30, 2016. The team collected samples of 166 higher plants and 150 algal plants from different localities of Gilgit-Baltistan. The collection of important floral diversity would be a source of reference for the researchers and scientists visiting the higher and lower plants herbarium of PMNH.

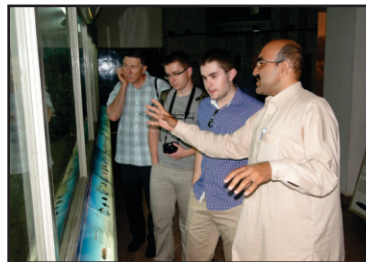
Belarus Delegation Visits PMNH

A delegation from Belarus visited Pakistan Museum of Natural History (PMNH) on September 23, 2016. The 8-member delegation was in Pakistan to attend the second meeting of Pakistan-Belarus Joint Commission on Science & Technology (JCST) at Ministry of Science & Technology, Government of Pakistan. PMNH Director General Dr. M. K. Legrahi along with the Museum

scientists received the guests. The delegation visited different galleries and repositories of the Museum. The PMNH scientists briefed the dignitaries about the

museum functions, collection, achievements, displays and future plans. After the visit the delegation had a formal discussion with the PMNH

Director General. The guests appreciated the efforts of PMNH scientists to promote scientific activities in the country.



Belarus delegation members visit different displays at PMNH

Master Trainers Visit PMNH under PSF's IBSE Capacity-Building Programme

The participants of a capacity-building workshop for master

trainers (teachers) on Inquiry Based Science Education

(IBSE) visited PMNH on September 8, 2016 as a part of their training programme. The Workshop attended by over 57 master trainers from all over the country, was organized by Pakistan Science Foundation in collaboration with Economic Cooperation Organization Science

Foundation at a local hotel from September 5-9, 2016. Experts from France and Turkey conducted this workshop. The workshop participants visited different dioramas and repositories of the Museum, which are important sources of learning science.



30 Geology Students of Haripur University Complete Internship at PMNH

A group of 30 students from Geology Department, University of Haripur,

received training at PMNH from August 25, 2016 to September 9, 2016. They

received training in the field of paleontology, sedimentology, gemology, petrography and minerals identification. On completion of their internship programme, a certificates distribution ceremony was organized at PMNH. PMNH Director General Dr. Muhammad Khan Leghari was



the Chief Guest on this occasion. PMNH Earth Science Division's Director Dr. Ghazala Roohi, faculty members and Advisor of University of Haripur also participated in the ceremony.

Over 10,000 Persons Visit PMNH in September 2016

A total of 10,209 persons including 2,680 students, 4,300 general public, 34 foreigners and 3,195 children under five years age visited the museum galleries in September 2016.

The student groups from main educational institutions visiting PMNH in September included Al-Habib Science College Muzaffarabad, Azad Jammu and Kashmir (AJK), Shama Public High School Abbottabad, The University of Poonch Rawalakot, AJK, International Islamia



University School Islamabad, Beacon House School System Islamabad, Women University Bagh, AJK, Higher Secondary School Haripur, Govt. Girls Higher Secondary School



Behali, Mansehra KPK, Unique Model College AJK, The Islamic University of Bahawalpur, Pakistan Forest Institute Peshawar, IMCG I-9/1 Islamabad, EMS High



School H-11/4 Islamabad and Safena-e-Muhammad English Public School Bhalwal. The students were provided facility of guided tour and documentary shows.

PMNH Scientist Receives “Catfish Hatchery” Training in Philippines

Dr. Muhammad Rafique, Deputy Director General PMNH/Director ZSD successfully completed five days international training on “Catfish Hatchery and Grow-out” held at Southeast Asian Fisheries Development Center, Aquaculture Department, Tigbauan, Iloilo, Philippines from September 19-23, 2016.

The training was aimed at enhancing the capacity of scientists and build collaboration with other



organizations. The training was sponsored by International Finance Corporation.

Another scientist of PMNH Mr.



Mishkat Ullah, Research Associate ZSD, participated in three days training workshop on “Introduction to DRIFT Assessment of Environmental Flows” organized by International Finance Corporation; Australian Aid and Hagler Bailly Pakistan at a hotel of Islamabad from September 6-8, 2016.

Pakistan Scientific & Technological Information Centre (PASTIC)

Editor: Mrs Rahila Khurram

62 Students Trained on Automation & Information Handling in Hyderabad

PASTIC regularly organizes workshops for Library & Information Personnel in the field of Library Management & Automation. One such workshop was organized by

PASTIC on September 21-23, 2016 in collaboration with Isra University, Hyderabad.

The objective of the workshop was to acquaint the library/information personnel

with the latest library and information handling software for use in the libraries enabling them to automate their libraries and render better services. Muhammad Usman, Web

Manager PASTIC as a resource person imparted the training on Koha Library software. Over 62 participants, mainly Library Science students, librarians from Isra University and



Prof. Dr. Muhammad Akram Shaikh, DG, PASTIC, Prof. Dr. Hameedullah Kazi, Pro-VC, E&MS, Isra University, at the Workshop on KOHA ILS at Isra University, Hyderabad.



A glimpse of the participants of the workshop at Isra University, Hyderabad.

different organizations participated in the workshop. The workshop was inaugurated by Prof. Dr. Hameedullah Kazi, Pro-Vice Chancellor, E&MS,

Isra University. Prof. Dr. Muhammad Akram Shaikh, Director General, PASTIC / Member Science, Pakistan Science Foundation was the

Chief Guest at the closing session of the workshop. They both emphasized on the importance of libraries and the information services provided

by them, which cannot be rendered properly unless modern tools for information management and automation are used.

PSF Chairman Reviews PASTIC Progress

Pakistan Science Foundation (PSF) Chairman Prof. Dr. Muhammad Ashraf presided over a follow up meeting of PASTIC Annual Review on September 28, 2016 at PASTIC National Centre, Islamabad. PASTIC Director General Dr.

Muhammad Akram Sheikh along with the Director and Sectional Heads attended the meeting. Item-wise progress was discussed and actions taken were briefed to the worthy Chairman.

The Chairman emphasized on adopting

more pragmatic approaches regarding S&T information services being provided to the scientist community by PASTIC. Many suggestions were also deliberated upon to improve the current scenario of IT tools being used by PASTIC.

34 Trained on Research Tools & Techniques

PASTIC organized a training workshop on "Research Tools



Certificates being awarded to participants of the workshop.

& Techniques" on September 2, 2016. Thirty-four participants from different universities and institutes participated in the said workshop mainly conducted by Mr. Muhammad Usman, Web Manager, PASTIC. The participants took a keen interest in understanding the fundamentals of research methodology, statistical tool-SPSS. They also suggested organizing an advance level

workshop in continuation of this workshop.

The closing remarks were given by Ms. Nageen Ainuddin, Director PASTIC. She congratulated the participants and assured to facilitate them as far as their information needs are concerned and arrange advanced level workshops in future so that researchers could apply the skills in analyzing



A group photo of the participants of the Workshop on "Research Tools & Techniques" with Director, PASTIC and other officers.

their data properly. The certificates were also distributed among the participants by the Director.

104 Made Aware of "Information Literacy Skills" in Rawalakot

PASTIC Sub-Centre, Muzaffarabad in collaboration with the University of Poonch, Rawalakot, Azad Jammu and Kashmir (AJK), organized a seminar on "Information Literacy Skills" on September 30, 2016.

The key objective of this seminar was to create awareness among M.Phil, Ph.D research scholars and faculty members of the University of Poonch about latest developments in access, searching and retrieval of



Ms. Nageen Ainuddin Director PASTIC presenting the opening remarks during the Seminar on Information Literacy Skills held on Sept. 30, 2016 at University of Poonch Rawalakot, AJ&K.

information and also how PASTIC is serving the scientist community in this respect.

Ms. Nageen Ainuddin, Director PASTIC, during her opening



Ms Nageen Ainuddin Director PASTIC presenting PASTIC shield to Registrar, University of Poonch,

remarks highlighted the PASTIC initiatives that could be fruitful to the scientific community.

During the Technical Session, Mr. Muhammad Altaf, Deputy

Director, PASTIC-Muzaffarabad, Mr. Saifullah Azeem, Principal System Analyst and Syed Habib Akhter Jaffri, Principal Librarian, PASTIC-Islamabad delivered presentations on PASTIC services, digital library and different searching techniques and tools which are helpful for the researchers if properly utilized. The seminar was interactive and informative and was attended by 104 participants from different Departments of the aforesaid University.

Researchers Imparted Training on Statistical Data Analysis



Syed Habib Akhter Jaffri, Principal Librarian giving Introduction of the workshop on SPSS held from September 28-30, 2016.

PASTIC organized a training workshop on "SPSS" on September 28-30, 2016 in Islamabad. The target audiences were researchers from different universities and institutes including PMAS Arid Agriculture University, Government Girls College, Peshawar, KPK, PIDE, PIMS,



Ms. Nageen Ainuddin, Director PASTIC giving the opening remarks of the workshop on SPSS.



Mr. Muhammad Usman, resource person on SPSS software holding interactive session during the workshop on SPSS.

NUST, AIOU, COMSTECH and QAU.

Ms. Nageen Ainuddin, Director PASTIC, highlighted the importance of statistical software. She said that data analysis plays a pivotal role in accurate interpretation of the data. The quality of research and research results mainly

depend on the quality of data interpretation, finally paving way for publication in a peer reviewed journal or preparation of a dissertation. Therefore, researchers must choose the software which has fewer limitations and gives accurate results.

Mr. Muhammad Usman, Web

Manager PASTIC as the resource person delivered the theoretical as well as practical applications of the SPSS statistical software to the participants.

Dr. Raja Razi-ul-Husnain, Additional Director (A&F) PASTIC, concluded the workshop on September 30, 2016. He said that students may seek any kind of statistical advice from PASTIC whenever they face any difficulty in its application. The certificates were also distributed among the

participants by Dr. Raja Razi-ul-Husnain, Additional Director (A&F) PASTIC. The participants appreciated PASTIC efforts and provision of fundamental training on the SPSS tool.



Certificates being distributed at Closing Ceremony of the workshop

PASTIC Islamabad organizes an Orientation Session for QAU Students

PASTIC Islamabad organized an Orientation Session about PASTIC activities for the students and faculty members of the Department of Animal Sciences, QAU, Islamabad, on September 21, 2016.

Mrs. Kausar Sohail, Sr. Scientific Information Officer, PASTIC, delivered a presentation on PASTIC Information Services and gave a demonstration on searching International Databases available at PASTIC. Mr.



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

Saifullah Azeem, Principal System Analyst delivered a comprehensive presentation on Internet Searching Techniques. About 30 students and a faculty member attended the seminar.

PASTIC Sub-Centres Organize Awareness Seminars

Karachi: PASTIC Sub-Centre Karachi in collaboration with ORIC, University of Karachi and Essa Laboratory & Diagnostic Centre organized a one-day seminar on "Congo Virus & its Preventive Measures" at the University of Karachi on September 6, 2016. Mr. Abdul Fatah, SSIO gave a presentation about PASTIC services on this occasion. Dr. Sadaf and Dr. Muhammad Khan Bugti from Essa Laboratory & Diagnostic Centre delivered lectures on Congo virus. Over 150 participants attended the seminar.

PASTIC Sub-Centre, Karachi also organized a PASTIC Services Awareness Seminar at "Civil Engineering Department, NED University.", on September 8th, 2016. Miss. Afsheen Tariq,



Mr. Abdul Fatah, SSIO giving a presentation on PASTIC services during the Awareness seminar held at the University of Karachi.

A.S.I.O delivered about the PASTIC Information Services to the students, researchers & faculty members.

Quetta: Mr. Faisal Hilal, Acting Assistant Director, (STI), PASTIC Sub-Centre, Quetta delivered an awareness seminar on PASTIC Services at IMS Department, University of Balochistan Quetta, on September 24, 2016. Ph.D. scholars and students were briefed about the databases and literature acquisition facilities available at PASTIC.



Ms. Afsheen Tariq Raja, ASIO delivering a presentation during seminar on SPARK III-Re-Ignited at NED University, Karachi.



Group photo of participants after the seminar held on September 6, 2016 at the University of Karachi.

S&T Information at Doorstep of Researchers

Islamabad: PASTIC-Islamabad organized two days Services Stall during the Asian Libraries Conference organized by the National Library of Pakistan, Islamabad on September 5-6, 2016. Ms. Saima Siddique Tariq, Editor, PASTIC and Mrs. Rahila Khurram, SIO, PASTIC briefed the conference participants about PASTIC services and facilitated them in filling of forms for PASTIC free membership.

Karachi: PASTIC, Sub-Centre, Karachi organized PASTIC Service Stalls during "Awareness Seminar on Congo Virus & its Preventive Measures", on September 6, 2016 at Arts Auditorium,

University of Karachi. The second stall was organized during a seminar entitled "SPARK III - Re-Ignited" on September 8, 2016 at Civil Engineering Department, NED University. Third and fourth awareness stalls were arranged during Health Asia International exhibition and ITCN Asia International exhibition at Expo Centre, Karachi on September 20-22, 2016 and September 27-29, 2016, respectively. A documentary about PASTIC, PMNH and PSF was also screened through multimedia during the events. A large number of students, researchers and guests visited the PASTIC Stall.

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