#### Patron

Prof. Dr. Muhammad Ashraf Chairman Pakistan Science Foundation

#### Chief Editor

M. Javed Igbal **Education Programmer** 



January 2016

Monthly Newsletter of Pakistan Science Foundation

Vol. 14 No. 1

#### From the Chairman



Pakistan is one of those fortunate countries having bestowed with abundance of natural resources by Allah Almighty. It has all four seasons, a good system of rivers, land ranging from sea shores, deserts and plains as well as mountains covered with natural vegetation and snow. Though Pakistan is an agrarian country and lion share of its economy is based on agriculture, it is not fully utilizing this gift of God for getting maximum yield out of it as vast tracks of land are lying barren. Many countries got independence after Pakistan but they made tremendous progress in agriculture by utilizing Continued on page 2

### **NSLP Board of Governors Meets**



Federal Minister for Science and Technology Rana Tanveer Hussain chairs 5th meeting of NSLP BoG.

Sciences Linkage Programme

The 5<sup>th</sup> Meeting of Natural (BoG) was held on January 11, 2016 in the Committee Room / Chairman BoG Rana Tanveer (NSLP) Board of Governors of PSF. Federal Minister for

Science and Technology

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## **46TH Meeting of PSF Board of Trustees Held**



PSF Chairman Prof. Dr. Muhammad Ashraf presides over 46th Meeting of PSF Board of Trustees on January 26, 2016.

The 46th Meeting of PSF Board of Trustees was held on January 26, 2015, which was presided over by the Foundation Chairman, Prof. Dr. Muhammad Ashraf.

Almost all members of the Board attended the meeting which took important decisions on the Foundation's policy and administrative matters. The Board also reviewed progress on minutes of the last meeting and expressed satisfaction over



#### From the Chairman

every inch of their land and appropriate technology. South Korea is one such example which is even growing vegetables and flowers on medians of roads. Many developed countries have established multi-storied fields to overcome the problem of land and water scarcity by introducing technologies like hydroponics.

*In the wake of present day* challenges of food security and water scarcity, it is imperative to focus on innovation in agriculture sector with the use of appropriate technology and value addition to our agriculture products.

Pakistan Science Foundation is making strenuous endeavors to introduce innovation in this sector through its Research Support and Natural Sciences Linkages Programmes. PSF is offering funding for projects aimed at agriculture sector development through science and technology. It is need of the hour that scientists may come forward and submit needbased research projects to convert our un-utilized land into green fields of crops, gardens and orchards and contribute to our national economic development.



A group photo of PSF Board of Trustees after the meeting.

performance and measures of the Foundation in propagating science culture in the country. Those who attended the meeting included Prof. Dr. Anwar-ul-Hassan Gilani. Chairman, Pakistan Council for Science & Technology, Islamabad; Prof. Dr. M. Qasim Jan, Advisor, COMSTECH, Islamabad; Prof. Dr. Nilofar Shiekh, Vice Chancellor (VC), Preston University, Karachi; Prof. Dr. M.D. Shami, Former Chairman, PSF, Islamabad;

Prof. Dr. A.Q. Ansari, Rector/VC, Al-Khair University, Islamabad; Prof. Dr. M. Masoom Yasinzai, Rector, International Islamic University, Islamabad; Prof. Dr. M.A.K. Malghani, Pro-VC, Balochistan University of Information Technology and Management Sciences, Quetta; Prof. Dr. Bhwani Shankar Chaudhary, Dean, Faculty of Electronical, Electronics and Computer Engineering, Mehran University of Engineering & Technology, Jamshoro; Prof. Dr. Ikram-ul-Haq, Professor Emeritus, Institute of Industrial Biotechnology, Government College University, Lahore; Prof. Dr. M. Aslam Baig, Consultant, National Centre for Physics, Quaid-i-Azam University, Islamabad; Prof. Dr. Muhammad Akram Shaikh, Member Science, PSF, Islamabad and Mr. Hasnat Ahmed Qureshi, Member Finance, Islamabad.

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Hussain chaired the meeting. Co-Chairman of the Board Mr. Fazal Abbas Maken, Federal Secretary, Ministry of Science and Technology and esteemed members hailing from different national ministries and institutions attended the meeting.

Muhammad Ashraf, PSF being Chief Executive of NSLP and Secretary of the Board welcomed the Members. The Chairman of the Board, Mr. Rana Tanveer Hussain, Federal Minister for Science and Technology said that agriculture was a very PSF Chairman Prof. Dr. important sector. He

emphasized that special efforts should be made to provide research opportunities to the researchers for development of this sector. The Board confirmed minutes of its 4th meeting held on March 14, 2013 and provided guidelines on different policy matters of the NSLP Endowment Fund.

### Quote of the Month

"Agriculture is not crop production as popular belief holds - it's the production of food and fiber from the world's land and waters. Without agriculture it is not possible to have a city, stock market, banks, university, church or army. Agriculture is the foundation of civilization and any stable economy."

-Allan Savory

### Project Formulation Workshop at GCWU Faisalabad

### Research Proposal Writing Skills of 71 Scientists Enhanced

Pakistan Science Foundation (PSF) under its Natural Sciences Linkage Programme (NSLP) has been organizing a series of Project Formulation Workshops for the capacity building of researchers. So far, 13 workshops have been organized across the country.

A2-day workshop on project formulation was held on January 20-21, 2016 at the Government College Women University Faisalabad (GCWUF). The workshop was aimed at increasing the research proposal writing skills of scientists working in GCWU and Government College University, Faisalabad (GCUF).

Addressing the inaugural session of the workshop, GCWUF Vice Chancellor Dr. Noreen Aziz Qureshi thanked PSF for organizing the workshop in Faisalabad.Mr. Muhammad Israr, Scientific Officer, NSLP, explained main objectives of the workshop



Participants attend technical session of the of the training workshop.

and the role of PSF in promotion of Science and Technology in the country. He said the workshop was aimed at training the researchers in good proposal writing, create awareness about PSF-NSLP funding process and procedures and to encourage scientists to prepare need based research proposal within the NSLP priority areas.

Scientists were trained on different aspects of proposal

writing by renowned scientists. Workshop concluded with certificate distribution ceremony. Mr. Hasnat Ahmed Qureshi, Member Finance, PSF, distributed certificates among the participating scientists. Speaking on the occasion Mr. Hasnat Ahmed Qureshi stressed scientists to focus their research on economic well being of the country. He also congratulated the

participating scientists for successfully completing the training.

During the workshop 71 scientists were trained about the different aspects of project writing by PSF experts in different technical sessions. Workshop aided in raising the skills of researchers about formulating research proposals before submitting to PSF and elevating standards of research in the country.



PSF Member Finance Mr. Hasnat Ahmed Qureshi distributes certificates among participants of the workshop.

PSF NEWSLETTER

## 60 Teachers of Hazara Region, AJK Trained on IBSE

PSF under its Science Popularization Programme trained 60 teachers of Hazara Region and Azad Jammu and Kashmir (AJK) in January 2016.

Hazara Region: PSF and Directorate of Science & Technology (DoST), Khyber Pakhtunkhwa (KP) has signed m e m o r a n d u m o f Understanding (MoU) for mutual cooperation to develop

science culture in the society. Under this MoU, PSF is conducting teacher training sessions on Inquiry Based Science Education (IBSE) in different districts of KP. In this regard, a teachers training session was organized for the teachers of Hazara Region on January 6, 2016 at Abbottabad. Mr. Abdul Rauf, SSO, conducted the training session participated by 35 teachers of

the region. The PSF resource person along with the participants performed various IBSE hands on activities. All the teachers appreciated the efforts of PSF.

**Dadyal, AJK**: A teachers training session on IBSE was arranged at Govt. Pilot High School, Dadyal (AJK) on January 28, 2016, which was attended by 25 teachers from the said school and surrounding

area schools. Miss Zaiban Farooq, Assistant Director introduced IBSE concept to the participants. Later on, some hands on activities related to physical chemistry and biology were performed. Mr. Asadullah also guided the teachers and students while performing these activities under IBSE. All the teachers acknowledged the session and said that it is a fruitful learning process.



# 25th Intra-Board Science Essay, Poster Contests Held at BISE Karachi & DG Khan

Science Essay and Poster Competitions on the theme "Importance of light for life" was held on January 19. 2016 at Board of Intermediate and Secondary Education (BISE) Karachi, Mr. Khalid Hussain Soomro, Assistant Director, Science Caravan Tandojam Unit represented Over 280 students PSF. participated in this competition. The Chairman and the Secretary BISE Karachi visited the event and appreciated PSF's such activities to generate students'interest in science. 25th Science Essay and Poster Competitions were

PSF's 25<sup>th</sup> Intra-Board held at BISE Dera Ghazi 2016. Mr. Ammar Umer, Science Caravan Punjab Science Essay and Poster (DG) Khan on January 11, Planetarium Assistant, Unitrepresented PSF.



The Chairman and Secretary BISE Karachi along with Assistant Director Science Caravan Tandojam Unit visit the students taking part in poster competition at Karachi.

### 10,372 Students, Teachers Participate in Science Caravan Activities in Jan. 2016

Science Popularization, especially among the young students in the country, is one of the major objectives of PSF. To achieve this objective PSF Science Caravan Units arrange various activities across the country all over the year. Over 10,372 students and teachers from 60 schools participated in these activities in January 2016.

Federal Unit: Science Caravan Federal Unit arranged Science Exhibition at Govt. Pilot High School, Dadyal, Azad Jammu and Kashmir (AJK) on January 25-30, 2016. Assistant Commissioner, Dudyal, Ch. Muhammad Ayub inaugurated the Exhibition which was visited by 2,293 students and teachers from 16 schools of surrounding areas. Media personnel also visited the exhibition.



Students and teachers take part in different activities under Science Caravan Exhibition at Govt. Pilot High School, Dadyal AJK.

**Faisalabad Unit:** The Science Caravan Faisalabad Unit arranged a planetarium show at GIFT University Gujranwala on January 17-20, 2016, which was visited by over 1,700 students.

**Peshawar Unit:** The Science Caravan Peshawar Unit arranged exhibitions at Govt. Shaheed M. Ghassan Centennial Model High School-1 and Govt. Shaheed Behram Ahmad Khan Higher Secondary School Serai Naurang District Lakki Marwat on January 04-13 and January 14-24, 2016 respectively. As many as 6,043 students and 151 teachers from 42 schools participated in these exhibitions.



View of Science Exhibition arranged by Peshawar Unit

Jaffarabad Unit: The Science Caravan Jaffarabad Unit arranged a one-day awareness seminar on Drinking Water Related Issues in Remote Areas at Govt. Girls High School Usta Muhammad on January 26, 2016. Mr. Jan Muhammad Soomro, Deputy District Education Officer and Prof. Khalid Hussain, Govt. Degree College spoke on the occasion. Over 185 students and teacher participated in the seminar.



Students attend a Seminar on Drinking Water Related Issues at Govt. Girls High School Usta Muhammad

# Pakistan Museum of Natural History (PMNH)

Editor: Dr. Muhammad Ismail Bhatti

## 11.5 ft Long Specimen of Indian Rock Python Found in Islamabad



ZSD staff skinning the Python specimen



Finishing touches being given to the stuffed specimen of Python at PMNH Taxidermy lab for display.

A dead specimen of Indian Rock Python Pythus morulus (Pythonidae: Squamata) was collected from the vicinity of Islamabad by PMNH Zoological Sciences staff including Imran Abbas, Collection In charge and Khuram Hussain, Skeleton Preparator on January 1, 2016. The specimen of female python was 11½ feet long and 50 kg in weight. It's skinning and stuffing process was carried out at Zoological Sciences Division. It is first ever longest PSF NEWSLETTER



A comparison of stuffed python specimen with stuffed wolf specimen

specimen of Python added to PMNH collection.

This specie is native to India, Pakistan, Sri Lanka, and Nepal. It is a carnivore and feeds upon live prey including, small animals and birds. It kills prey by suffocating and swallows it

as whole. It is listed in Appendix I of CITES appendixes that prohibits its international trade for commercial purpose. After stuffing process this specimen will be displayed for general public in PMNH very soon.

## Progress on Establishment of Science Museum at Tando Muhammad Khan Discussed

Pakistan Science Foundation's Member Science Dr. Muhammad Akram Shaikh and Pakistan Museum of Natural History (PMNH) Director General (DG) Dr. Muhammad

Khan Leghari held two meetings with Senator Dr. Karim Khawaia at Parliament Lodges Islamabad. These meetings regarding establishment of Science and

Natural History Museum at Tando Muhammad Khan Sindh were held on January 12 and January 20, 2016. The meetings discussed in detail progress on the project. It is

pertinent to mention that the Senator is taking special interest in establishment of the Museum for promotion of informal education in remote area of Sindh.

### **AASSA Delegation Visits PMNH**

A 4-member delegation from the Association of Academes and Societies of Sciences in Asia (AASSA) headed by Executive Director, Prof. You Han Kim visited display galleries of Pakistan Museum

of Natural History on January 22, 2016. They were received by the Director General, PMNH Dr. M.K. Leghari, and senior scientists. PMNH scientists briefed the delegates about the displays. All

members were surprised and said that it was not only the museum but also the unique source of informal education for the students of all levels. They hoped that museum will play its role in disseminating scientific knowledge among the youth of our country. PMNH scientists thanked the members from (AASSA) for their visit to the museum and hoped that their coordination will continue in future.



## Geology Students of Haripur University Start Internship at PMNH

A group of 12 students of Bachelor of Science, Geology Department, University of Haripur, Haripur has started

Museum of natural History Rehman and Mr. Khalid under the Co-Supervision of Ahmed Mirani. It is a 6-month geology experts Mr. Aamir internship programme and

internship at Pakistan Yaseen, Mr. Khalil-ur-

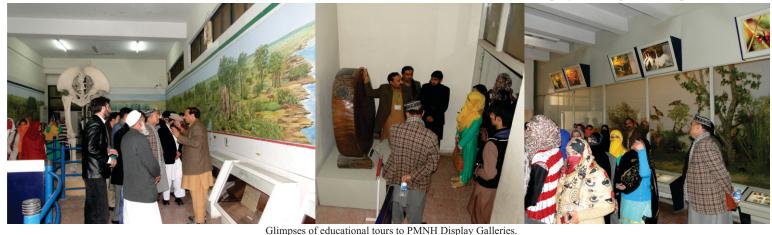
students will be provided training in laboratory work and field work at different sites.

## 5,343 Persons Educated on Natural History in January 2016

role in promotion of science through scientific research and informal education. As a part of its educational activities, PMNH

PMNH is playing an important Public Services Division peoples including 910 students, arranges and conducts group visits of students from different educational institutions. In January 2016 a total of 5,343

2714 general public and 29 foreigners as well as 1690 children under-12 years of age visited the PMNH Display galleries. The visitors were provided facilities of guided tours and during their visit they learnt about natural history of Pakistan through various questions.



# Pakistan Scientific & Technological Information Centre (PASTIC)

Editor: Mrs Rahila Khurram

### **PASTIC Primary Scientific Journal to be Launched Soon**

Technological Information Centre (PASTIC) is on its way to launching a primary scientific journal namely Pakistan Journal of Computer Science and Information System. This initiative of PASTIC is aimed at providing a platform to researchers and professionals of Computer Science & Engineering, Information and

and Library & Information Science for sharing and disseminating their findings and to publish their original and cutting-edge research. This will be a peer reviewed open access journal intended to publish high quality papers on theoretical development as well as practical applications in all fields of Computer Science and Engineering, ICT Communication Technologies and Information Science.

Pakistan Scientific and (ICTs), Information Systems The journal will also publish new attempts on emerging topics /areas, reviews and short communications, encompassing research areas dealing with all aspects of computing and networking hardware, numerical analysis and mathematics, software programming, databases, solid and geometric modeling, computational geometry, reverse engineering, virtual

environments and hepatics, tolerance modeling and computational metrology, rapid prototyping, internetaided design, information models, use of information and communication technologies for managing information, study of information usage, information collection, processing, storage and retrieval, management information systems etc.

### Chairman PSF Visits PASTIC Sub-Centre, Karachi



Prof. Dr. Muhammad Ashraf, Chairman PSF, in review meeting with the Officers of PASTIC Sub-Centre, Karachi.

Prof. Dr. Muhammad Ashraf, Chairman PSF, visited PASTIC Sub-Centre, Karachi on January 15, 2016. Prof. Dr. Muhammad Akram Shaikh, Director General PASTIC, accompanied him during the visit.

The Chairman held a meeting with the staff to review progress of the Sub-Centre. He emphasized upon improvement and up-gradation of the services and provided guidelines in this PSF NEWSLETTER

regard. He also advised the staff industrial data from Sindh to develop and strengthen linkages with industry and chambers of commerce and industry in Sindh and collect

region. The Chairman directed the staff to identify the problems of industry and serve this segment by solving their awareness seminars and

problems through R&D process with the help of scientists. He also directed to project and promote services through services stalls in the region. The Chairman emphasized that Key Performance Indicators (KPIs) of PASTIC must be given due priority in delivery of service.

## PASTIC Holds Meeting with President of WCCI, Islamabad

Ms. Saima Majeed, Editor, PASTIC held a meeting with President, Women Chamber of Commerce & Industry (WCCI), Islamabad, on January 19, 2016

to discuss the issues regarding modalities of SAARC project proposal of PASTIC entitled "Networking & Capacity Building of Women

Entrepreneurs of SAARC Countries" which has been recently approved in principle under SAARC Developmental

## Meetings/Workshops/Trainings Attended

- Mr. Muhammad Ayub Dogar, Sr. Scientific Information Officer attended a five days training course on "Data Collection Tools & Methods for Planning, Monitoring and Evaluation" at Pakistan Planning & Management Institue (PPMI). Islamabad from January 4-8, 2016. This training course was focused on capacity building of the trainees in research methodology for project management.
- Dr Maryum Ibrar Shinwari attended 5th International and 14th National Conference of Botany organized by Pakistan Botanical Society at University of Karachi, Karachi on January 15-18, 2016 as a co author of research paper entitled "Evaluation of Phytodiversity for Allelopathic Activity and Application to Minimize Climate Change Impact: Japanese Medicinal Plants". Dr Maryum Ibrar Shinwari also visited office of the Pakistan Journal of Botany and discussed



Mr. Muhammad Ayub Dogar, Sr. Scientific Information Officer, PASTIC among the group of trainees of the training course at PPMI, Islamabad

the issues for developing collaboration in publications and management of primary journal activities.

Mr. Shahid Igbal, Superintendent (Admin), PASTIC attended a four days training course on "Managing Legal Affairs/Issues in Government Departments" at Pakistan Planning and Management Institute (PPMI), Islamabad from January 19-22, 2016. The training course was aimed at giving an overview about functioning and purview of different organs of Ministry of Law and Justice and to impart basic level skills for managing litigations arising in Government Departments.



Mr. Shahid Iqbal, Superintendent (Admin), PASTIC among the group of trainees of Training Course at PPMI,

#### Pakistan Science Foundation

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### Pakistan Museum of Natural History

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### **Forthcoming Activities/Events:**

- PASTIC Sub Centre, Faisalabad is organizing a one day workshop on "Intellectual Property Rights" at Islamia University, Bahawalpur on February 03, 2016.
- PASTIC National Center, Islamabad is organizing a three days training workshop on "Research Tools & Techniques" from February 15-17, 2016.

#### PASTIC National Centre

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Layout: Abdul Rasool, PMNH