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From the Executive **Director's Desk**

The scientific & technological advancement during the last few decades has literally transformed the overall standards of living across the globe. For any invention to be completely exploited, we need effective commercialization practices. The technologically advanced countries have successfully deciphered the whole process of commercialization of technology by establishing partnerships between academia, industry and the public sector through the establishment of departments that work in coherence and synergy. These include R&D departments, Technology Transfer Offices, Intellectual Property Offices and Technopreneurship Development Centres.

Science & Technology Parks and Technology Incubation Centers have emerged as a new source of entrepreneurship, talent, economic competitiveness and are key elements of the infrastructure supporting the growth of knowledge economy. By providing a platform, Science Parks create environments that foster collaboration and cooperation among universities, R&D organizations, private companies and industry for enhancing research, development, innovation and transfer of technology.

Now, most of the developing countries have a clear vision of using science and technology as a tool for socio-economic and industrial development. They have launched various S&T programmes, including establishment of Technology Parks and Incubators, to benefit maximum from their capital and human resources. Iran, at the moment, has a total of 37 Technology Parks which are providing high-end services and support facilities, technology incubators, spin off processes and trained labour. Through these Parks, Iran has enhanced its capacity significantly and is producing a large variety of high tech equipment for their local use and export.

For swift economic growth, Pakistan ought to generate, manage and use its resources most efficiently. In this regard scientific and technological knowledge, innovation and entrepreneurship must be used as drivers of economic growth and progress. In this regard, Ministry of Science and Technology rightly deserves maximum support from the relevant quarters of Government of Pakistan in establishing its planned Technology Parks & Incubators.

National Assembly's Standing Committee on S&T visits PCSIR

The National Assembly Standing Committee (NASC) on S&T convened its meeting at PCSIR Head Office, Islamabad on January 26, 2016 to review the performance and progress of PCSIR. The meeting was chaired by Ch. Tariq Bashir Cheema, Chairman NASC on S&T, while Rana Tanveer Hussain, Federal Minister for Science & Technology and Mr. Fazal Abbas Maken, Secretary, MoST also attended the meeting.

Dr. Shahzad Alam, Chairman, PCSIR gave a brief prsentation highlighting the up-to-date progress and achievemnets of PCSIR. The Committee expressed its satisfaction over



the performance of PCSIR in various fields of Science & Technology and especially appreciated its efforts despite non-allocation of any funding for R&D. On the request of Federal Minister Rana Tanveer Hussain, the Chair and all members of NASC on S&T strongly recommended that necessary funding should be provided to PCSIR enabling it to carry out various R&D activities in a sustainable way. At the end, the Chairman alongwith other members visited the Display Centre of PCSIR

PCSIR, Lahore holds International Conference on "Halal Food, Pharmaceuticals & Cosmetics"

Pakistan Council of Scientific and Industrial Research (PCSIR) in collaboration with Islamic Food and Nutrition Council of America (IFANCA) organized one-day conference on "Halal Food, Pharmaceuticals & Cosmetics" at PCSIR Labs Complex, Lahore.

Federal Minister for S&T, Rana Tanveer Hussain was the Chief Guest at its Inaugural Session. The conference was attended by a number of renowned international and



national scientists / stakeholders. Justice (R) Khalil-ur-Rehman Khan, Chairman Punjab Halal Food Agency, Dr. Muhammad Munir Ch., President, IFANCA- USA, Dr. Mian Nadeem Riaz, Director Food Protein R&D Center, Texas A&M University, USA and Dr. Mujahid Masood, Senior Food Scientist, IFANCA-USA were the notable participants. The speakers focused on the "Development of Halal Industry and Government Regulations in Pakistan".

Federal Minister for S&T Inaugurates PCSIR's Common Facility Centre, Sialkot

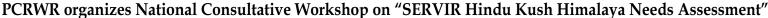
Rana Tanveer Hussain, Federal Minister for Science & Technology inaugurated the PCSIR's Common Facility Centre at Sialkot on 24th March 2016, which has been established on the demand of Surgical Instrument Manufacturers Association of Pakistan (SIMAP), Sialkot. SIMAP provided the required covered area to PCSIR for free to house its analytical testing equipments. The ceremony was attended by a large number of SIMAP members & industrialists.

The Federal Minister appreciated the joint efforts of PCSIR & SIMAP for establishing the Common Facility Centre that would help Surgical & Cast Metal Industry improve their products' designing & development and ultimately the manufacturing quality as well.

Dr. Shahzad Alam, Chairman PCSIR, highlighted the contributions of PCSIR in socio- economic development of Pakistan and assured the commitment of his team in providing quality services to the surgical industry through this CFC. He shared his plans with the participants to extend similar facilities to other industrial sectors of Sialkot in near future.

Mr. Muhammad Ashraf Raza, Chairman SIMAP appreciated the tireless

efforts of PCSIR in capacity building of the surgical sector of Sialkot and thanked the Federal Minister for S&T and Chairman, PCSIR for providing necessary facilities at the door steps of the surgical industry. At the end, the Chairman PCSIR & Chairman SIMAP endorsed their signatures on the MoU in respect of establishing and managing the Common Facility Centre, Sialkot.





Pakistan Council of Research in Water Resources (PCRWR) organized a National Consultative Workshop on SERVIR Hindu Kush Himalaya Needs Assessment in collaboration with International Center for Integrated Mountain Development (ICIMOD) at PCRWR, Islamabad on 23 February 2016. The SERVIR programme is a USAID-NASA joint venture, which supports developing countries to improve their environmental management and resilience to climate change through integration of earth observation information and geospatial technologies into development decision-making.

PCSIR signs MoU with ENGRO Foods Limited

Dr. Shahzad Alam, Chairman PCSIR & Mr. Babur Sultan, CEO ENGRO Foods Limited (EFL) signed a Memorandum of Understanding on 13th January 2016 at Islamabad. Under the MoU, M/s EFL will provide funding to PCSIR for need based R&D projects and quality testing/ assurance of their dairy products. PCSIR will also help EFL in certification systems as well as in accreditation & calibration of their lab equipment/ glassware. CEO, EFL appreciated the services of PCSIR to the industry and assured his best support in furthering the objectives of the signed MoU.

NIE develops Wireless High Precision Electronic Detonating System

National Institute of Electronics (NIE) developed Wireless High Precision Electronic Detonating System for Pakistan Ordinance Factories (POF), Wah. POF needed a wireless Multi-Channel Exploder (MCE) operating at VHF band capable of detonating remotely placed multiple mines. NIE, as per requirements, has developed a demo system with features such as (i) One Transmitter with Three Receiver Unit modules, (ii) 30-35dBm (Yagi antenna) Transmitting Power, (iii) Positive Logic one-shot Output Momentary, (iv) Unity Receiver Gain, (v) -100dBm Receiver Power, (vi) VHF Band and (vii) Transmitter to trigger 3 receivers individually, located at a distance of 3-5 km remotely.

NIE Designs Electronic Voting Machine

National Institute of Electronics (NIE) has designed and successfully tested its Electronic Voting Machine (EVM), which has been developed as per requirements of Election Commission of Pakistan and Ministry of Information Technology. Salient features of the machine include multi-stage verification, CNIC Scanning, biometric verification, encrypted communication and data-storage, which can be highly instrumental in conducting smooth and transparent Elections in Pakistan.



NIE successfully designs Automated Screw-Downing System for Pakistan Steel Mills

On the request of Pakistan Steel Mills (PSM), NIE is providing technical assistance in developing Modern Electronic Automation & Control for Screw-Downing Mechanism at its Steel Finishing Mills, Karachi. Through the new proposed system, the obsolete electronic components will be replaced with the state-of-the-art electronic technologies & intelligent gadgets, thereby enhancing the plant's efficiency to over 90%. NIE demonstrated the newly designed 160KW Screw up & Down Synchro System to PSM technical team who visited NIE in February 2016. Subsequently, NIE developed the prototype and conducted various field trials at PSM.

MoST holds 9th Quarterly Review Meeting on Progress / Commercialization Activities of R&D Organizations of MoST

Ninth Quarterly Review Meeting on Progress/ Commercialization activities of R&D Organizations of MoST was held on February 23, 2016 in the Committee Room of MoST. Head of R&D organizations were invited to present their progress especially related to commercialization activities. Senior officials and Heads of Wings of MoST also attended the meeting.

The meeting was presided over by Mr. Fazal Abbas Maken Secretary, Ministry of Science & Technology. The Head of R&D organizations presented their progress in detail especially with reference to commercialization activities. During the presentations, discussion and due deliberations, various important decisions were



made by the Chair in respect of research, innovation and commercialization activities of R&D organizations including the following:

PCSIR to promote herbal medicines and support local community in solar dehydration of fruits in Gilgit Baltistan and date processing in South for value addition. PCRWR will prepare a position paper on impact of Climate Change on surface and ground water. NIO will submit a position paper on international Expeditions to Antarctica and submit a new proposal for Pakistan's next expedition to Antarctica.

Invention to Innovation Summit 2016: Focus Group Meeting with Food Industry

The Commercialization Cell, MoST and PCSIR, Lahore, on the eve of 5th Invention to Innovation Summit, held a Focus Group meeting with Food and Food Products industry. Dr. Syed Shahid Hussain, E.D., Commercialization Cell and Dr. Skhawat Ali, DG, PCSIR Labs Complex Lahore (LLC), jointly chaired the meeting at PCSIR, Lahore.



The participants represented national and international industrial enterprises, academic institutes and scientists / technical experts from PCSIR Lahore. The industry representatives were from Nestle Pakistan Ltd, Mitchells Fruit Farms Ltd, Shezan International Ltd, Engro Foods, Asian Food Industry (Mayfair), The Hospitality Experts, Sabirs Group of Companies, Ajmair Foods (Cakes and Bakes) and Metro Cash & Carry.

Dr. Syed Shahid Hussain, E.D., Commercialization Cell MoST elaborated that the Summit provides a platform to project indigenous products developed by researchers from different universities and public sector R&D organizations and their possible commercialization through local industry and new enterprises. The Focus Group Meetings help identify industrial needs and technical issues for offering possible solutions by the researchers from Government and academic institutions. The participants pointed out various technical issues of their industries and sought technical advice from the PCSIR's technologists.

NIE and NAVTTC Organize Zonal Skill Competition-2016

Under Prime Minister's Youth Skills Development Program, National Institute of Electronics, in collaboration with National Vocational & Technical Training Commission (NAVTTC) organized "Zonal Skill Competition 2016". The objective was to encourage and motivate youth of Pakistan to acquire technical skills. The trainees of different private & public sector TVET Institutes participated in the competition and demonstrated their skills in various diversified trades. At the end, certificates were awarded to the position holders.





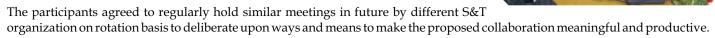
Delegation of Pakistan Red Crescent visits PCRWR

Dr. Rizwan Naseer, Secretary General, Pakistan Red Crescent, along with 5-member delegation, visited PCRWR to explore areas of mutual cooperation particularly with reference to rain-water harvesting in Thar desert. The idea behind was to start a joint venture to address the problem of very high infant mortality rate. The matter regarding procurement of PCRWR manufactured household safe waterfilter for large scale distribution in Thar areas was also discussed.

PCSIR convenes Meeting of Heads of S&T Organizations and other Scientific Institutions

Dr. Shahzad Alam, Chairman PCSIR, on the instructions of Federal Minister for S&T Rana Tanveer Hussain and Secretary MoST, Mr. Fazal Abbas Maken, convened a first-ever meeting of Heads of S&T Organizations, Pakistan Academy of Sciences and ECO Science Foundation on 27th January 2016 at PCSIR Head Office, Islamabad.

Dr. Shahzad Alam, Chairman-PCSIR, while welcoming the participants briefly explained the purpose of the meeting to establish a close liaison between S&T organizations of MoST and other national/ international scientific entities for sharing their resources to use Science and Technology as a vehicle for national development. The participants appreciating the holding of such meetings viewed that since technological and scientific revolutions underpin economic advances and improvements in health systems, education & infrastructure, this forum can help various scientific organizations in planning and executing joint projects of national interests.



NIE signs MoU with Air University

National Institute of Electronics (NIE) signed an MoU with Air University (AU), Islamabad to foster bilateral linkages and cooperation in research and human resource development in hightech areas of renewable energy, energy efficient systems and energy conservation. Both the parties agreed to exchange visits of researchers, develop and undertake join research projects and organize seminars & workshops. NIE will provide calibration, testing and software services to AU Laboratories and also let students/faculty of AU use NIE lab facilities for different research projects.



CWHR provides stat-of-the art facilities for Quality Assessment of Concrete through Non-Destructive Testing

Council for Work and Housing Research (CWHR) has acquired the capability to access the quality of various concrete structures, through Non Destructive Testing and suggest measures for retrofitting of under designed, damaged or deteriorated structures, using stat-of-the art equipment. CWHR recently performed NDT Services for RCC Column of Shell Pump Station, DHA Phase-VIII, Karachi. The construction sector is benefiting from these services of CWHR.

PCSIR participates in Food Festival at GC University, Faisalabad

The Scientists of Food and Biotechnology Research Centre (FBRC), PCSIR participated in an international conference on "Global Trends in Safe & Healthy Foods & Lyallpur Food & Poultry Products Festival" held at GC University, Faisalabad. Dr. Shahzad Alam, Chairman, PCSIR and Dr. Sakhawat Ali, DG, PCSIR Lahore chaired the technical sessions of the festival.





Leather Research Center, PCSIR participates in International Exhibition

PCSIR, Leather Research Center (LRC) participated in an international exhibition "The Pakistan Mega Leather Show" which was organized by PTA in Expo Centre, Lahore on January, 27-29 2016. LRC exhibited its testing & training facilities on stalls. European Union (EU) ambassador to Pakistan Jean Francois Cautain visited Leather Research Centre Stall and appreciated the research products as well as testing & training facilities of the Centre. The event helped out LRC-PCSIR to publicize its products, technologies and analytical services for commercialization.

Business Incubation Centre, CIIT arranges Q&A session with Chairman PTA, CEO ICT R&D Fund

An interactive Question & Answer session was held at Business Incubation Center, CIIT Islamabad with Dr. Syed Ismail Shah, Chairman PTA, CEO ICT R&D Fund regarding funding opportunities available for innovative ideas. Dr. Ismail Shah explained the procedure, interacted with audience and answered their queries regarding the funding opportunities available with ICT R&D fund.



PSF, PASTIC, IRP, Punjab University & MoST jointly organize 5th Invention to Innovation Summit at University of the Punjab, Lahore

Pakistan Science Foundation (PSF) brought hundreds of public and private sector institutions displaying their indigenous technologies, varieties, products, processes, posters presentations and documentaries etc under one roof in the two-day "5th Invention to Innovation Summit-2016" at PU, Lahore. This event is an annual activity of Institute of Research Promotion (IRP), in collaboration with R&D-Industry

Programme of PSF, PASTIC and University of the Punjab, Lahore.

Fifteen different workshop sessions of industry, academia & R&D experts were arranged from different technology sectors. Besides, PSF also organized a session on "PSF Fund Winning Opportunities for Academia & Industry" to guide researchers about how to make effective proposals and win R&D funds from PSF.

Prof. Dr. Muhammad Ashraf, Chairman, PSF while addressing at the inaugural session encouraged scientists to harness funding from the international organizations. He enlightened audience about various other programmes of the Foundation, especially for the researchers.



The Chief Guest Prof. Dr. Mujahid Kamran, VC, University of the Punjab in his address focused on the need of knowledge as basic pillar of success for the nations. The most innovative technologies, finalized by the panel of judges, were given Innovation Awards.

PCSIR Peshawar holds Training Course on "Herbal Material Medica, Alternative Medicine & Health Products"







A two-day Training Course was organized by PCSIR Laboratory Complex, Peshawar on "Herbal Materia Medica, Alternative Medicine and Health Products" at its premises. Dr. Shahzad Alam, Chairman PCSIR was the Chief Guest at the occasion. A large number of Hukma and Homeopathic doctors participated and benefitted from the training. At the end, the Chief Guest awarded certificates to the participants.

Business Incubation Centre, CIIT sings MoU with SKP Group

A Memorandum of Understanding was signed on 21st March 2016 between Business Incubation Centre, CIIT Islamabad and SKP Group at Pak China Business Forum 2016. The objective was to enter into a mutual trade and business relationship with special focus on finding business opportunities as well as explore market in both China and Pakistan for each other's products. Mr. Ahsan Kamran, CEO SKP Group and Mr. Salman Saeed, Manager Legal and Marketing BIC, CIIT Islamabad signed the MoU.



IPO-Pakistan, UNIDO, HEC, MoST and NTU jointly hold a series of National IP Awareness Seminars and Training Workshops on Patent Drafting, Licensing & Valuation



Intellectual Property serves as a key policy tool for promoting and securing innovation and technological development. To promote Intellectual Property Awareness and strengthen the Patent regime in the country, IPO-Pakistan in collaboration with Higher Education Commission, Ministry of Science & Technology, National Textile University, COMSAT and United Nations Industrial Development Organization (under TRTA-II program sponsored by European Union), held a series of a weeklong Seminars / Workshops one each at Islamabad, Faisalabad and Karachi which were attended by hundreds of stakeholders from public and private sector.. The senior-most officials of the collaborating organizations including Chairman & DG IPO-Pakistan, Chairman HEC, representatives of EU and UNIDO and Chairman PCSIR also participated and shared their views on the significance of the event and Intellectual Property Rights.

The awareness seminars and training workshops were conducted by three US based international experts and a national expert. The trainees of the Workshops on Patent Drafting, Licensing and Valuation were mostly from the universities and public & private sector R&D organizations.

Certificates of participation were distributed amongst the trainees by the Chief Guests of the events. A special supplement, with messages from the Heads of the participating organizations, was published in daily "The News" on the occasion highlighting the importance of the event.

Senate's Standing Committee on Planning, Development and Reforms visits NIO

The Senate's Sub-Committee of the Standing Committee on Planning, Development and Reforms held a meeting at NIO to deliberate upon the issue and possible solutions to secure coastal areas of Pakistan from sea intrusion that was attended by a number of Senators and representatives of National and Provincial Governments of Sindh & Balochistan.



Dr. Karim Ahmed Khawaja, Convener of the Committee, stressed upon all the stakeholders to cooperate in facing the challenge of sea intrusion in all the coastal areas.

The house was informed that a Sea Water Intrusion & Land Subsidence Cell has already been established at NIO. The resource persons from NIO, Pakistan Navy and University of Sind gave presentations to highlight the issue. Different possible solutions were discussed in length. The Sub Committee members accompanied by the DG, NIO, Dr. Asif Inam made an aerial visit of the coast of Balochistan and Sindh.

PCSIR receives Technology Award in "5th Innovation to Invention Summit"

Dr. Ijaz Ahmad, Principal Scientific Officer, PCSIR Laboratories Complex, Lahore received "Technology Award" in "5th Innovation to Invention Summit" held at University of the Punjab, Lahore on March 2-3, 2016. The summit was organized jointly by University of the Punjab, Ministry of Science and Technology (MoST) and Institute of Research Promotion (IRP) for promoting research and developing linkages between Public sector R&D organizations, academia and industry.



PCSIR Technologists interact with Ceramic Industry, Gujrat

Gujrat Pottery Association expressed its interest in a research project "Development of high temperature Mullite Kiln Furniture" during visit of a team of scientists of Glass and Ceramic Research Centre, PCSIR Lahore (headed by Engr. Muhammad Saadet Khan) to Gujrat Chamber of Commerce and Industry (GTCCI). The purpose of the visit was to enhance collaboration with the ceramic industry and know their current



problems. The president GTCCI Mr. Muhammad Ijaz, and Mr. Aftab Ahmad, President Pottery Association Gujarat welcomed the PCSIR scientists and appreciated their initiative. The PCSIR team was taken to Aftab China Ceramic industry, Gujrat. During the visit, areas of future cooperation such as kiln furniture, body steatite and light weight pottery body were identified.

Focus Group Meeting with Pakistan Tanner Association

A focus group meeting was organized by PCSIR, Leather Research Center (LRC) with Pakistan Tanners Association, Karachi at their office on

January 12, 2016. The meeting was chaired by Dr. Hafiz Rub Nawaz, Director LRC and Mr. Rehan Hannan, Chairman PTA (S.Z.). Other representatives of PTA & officers from LRC, PCSIR participated in the meeting. The Director, LRC through presentation briefed about various activities of the Centre. The PTA team admired the facilities & services of LRC and suggested to further enhance the interaction between PTA and LRC.



FRC provides analytical facilities for Thar Coal

FRC has provided analytical facilities to a number of local clients on Thar coal. In this regard a delegations comprising of Mr. Jameel Ahmed Khan Tanoli, Manager Asia Power Group Thar Coal and M/s. Afzal Anwar Associates visited FRC to discuss matters of mutual interest and get information about the laboratory facilities available at FRC. They expressed their satisfaction about the quality of testing and showed their interest to get analyzed 1000 samples of Thar Coal (Block IV) through FRC.

NIO carries out R&D Work at Gwader, Balochistan

National Institute of Oceanography (NIO) conducted coastal survey off Gwadar and collected physical, chemical, geological and biological data. Besides, possibility of establishing permanent oceanographic observation stations on the coast was also explored. During the survey, samples were also collected from 10 planned oceanographic stations, using CTD (Conductivity Temperature Density), Grab, Niskin and plankton nets.

PCRWR signs partnership agreement with WWF

An agreement was signed on January 15, 2016 between PCRWR and WWF for joint execution of ICIMOD supported project entitled "Agricultural Water, Energy and Hazard Management for Improved Livelihood in the Upper Indus Basin Area of Pakistan". Dr. Muhammad Ashraf, Chairman, PCRWR and Dr. Hammad Naqi Khan, Director General, WWF signed the agreement. The project, having objectives to improve livelihood of people in the Upper Indus Basin through research and development, will be implemented within 18 months time.



DRIP and PCRWR arranged One-Day Training on "Demonstration of Tensiometers in Sindh Area"

DRIP & PCRWR Regional Office, Lahore organized one-day training on "Demonstration of Tensiometers in Sindh Area" on January 6, 2016 at DRIP Campus, Tando Jam University. A number of officers from Federal and Sindh Govt. departments & local farmers benefitted from the training.



Dimension Stone Centre PCSIR Peshawar holds SkillCompetition in collaboration with NAVTTC

In the trade of mining and processing/value addition of marble and granite, a skill competition show was held at the Dimension Stones Centre (DSC), PCSIR, Peshawar in collaboration with NAVTTC. It was organized as a part of NAVTTC Training Programme in different technical and vocational fields throughout the country. The position holder trainees of all the trades were awarded with cash prizes and certificates by the Chief Guest, Executive Director NAVTTC Headquarter Islamabad.

Azerbaijan's Hydrographic Delegation visits Nio-Karachi

A 3-member Hydrographic delegation from Azerbaijan, accompanied by Mr. Manzoor Ahmed from Hydrography, Pakistan Navy visited NIO. The delegate was briefed about the NIO's R&D activities and its national and international collaboration in scientific research. The delegation also visited NIO laboratories and showed interest to have various collaborative programs with NIO in future.





PASTIC organizes Seminars/ Workshops on "Intellectual PropertyRights" at different cities of Pakistan

PASTIC organized Seminar/ Workshops on "Intellectual Property Rights" at Lahore, Multan, Bahawalpur, Karachi and Peshawar. Prof. Dr. Akram Shaikh, DG PASTIC, Mr. Abid HK Shirwani, President SATHA, Ms. Nageen Ainudin, Director PACTIC, Mr. Zahoor Ahmad, Patent Examiner, IPO-Lahore, Dr. Zafar Mahmood Associate Professor, FCC University, Lahore, Dr. Khalil Ahamad Arabi & Mr. Rehmatullah from IRP and Ms. Hina Allauddin, UOP, were the resource persons of the workshops.

The main objective was to highlight the importance of IP Rights and commercialization of research results through patenting and to orient the faculty members of various universities about the essential requirements for IP protection.

Seminar Regarding Entrepreneurship on "Passion into Action" at BIC, CIIT Islamabad"

A seminar on entrepreneurship titled, "Passion into Action "was organized at Business Incubation Centre, CIIT Islamabad. The purpose was to urge people to identify their hidden passion and enable / motivate them to take appropriate actions for translating these into success stories. Panel of experts consisted of M/S Saad Hamid, Shoaib Ahmed and Kashif Ahmed who are well known as Community Mobilizer / active Mentor to the Startups, Product Development Consultant and Business Development & Transformation Consultant respectively. The Panel was given small topics/problems to share their views and thoughts in 2-3 minutes time. After each problem, audience asked questions and discussed it with the guest experts.



PDC NUST and ASEF hold Workshop on "Entrepreneurship and Leadership"

Professional Development Centre, NUST, and The Asia-Europe Foundation (ASEF) jointly organized a two-day workshop on "Entrepreneurship and Leadership" at Centre for Innovation and Entrepreneurship (CIE). This workshop was part of the capacity building trainings to expose the renowned leaders from the business and public sector to motivate young leaders in the 3 selected countries namely Cambodia (2015), Bangladesh (2016) and Pakistan (2016). The Pakistan Chapter was established at PDC-NUST in March 2016.



These capacity trainings on Leadership and Entrepreneurship aimed to provide a boot camp format on questions tackling such as how to build and nourish teams that are resilient; the relationship between social innovation and business; the golden rules in pitching business ideas; and the power of strategic planning and attractive marketing.

The capacity training was attended by 29 participants, including 12 incubatees, faculty members, management and students of NUST. The training was conducted by Mr. Martin Tan, Executive Director, Institute for Societal Leadership (ISL), Singapore Management University, Singapore, who is a leading figure in this field. He was assisted by Mr. Farkas Dezso, CEO, Partnerkövető from Hungary.

PCST holds 6th Meeting of Executive Committee of National Commission for Science & Technology (ECNCST)

The 6th meeting of the Executive Committee NCST was convened on March 9, 2016 at Pakistan Council for Science and Technology, Islamabad. The meeting was chaired by Rana Tanveer Hussain, Federal Minister for Science and Technology while Prof. Ahsan Iqbal, Federal Minister for Planning, Development and Reforms/





Dy. Chairman Planning Commission was the co-chair. 27 members, out of a total of 29, attended the meeting and discussed the agenda items in detail. The agenda items for promotion of science and technology in the country were prepared by PCST in consultation with MoST and other stakeholders from public and private sector.

Minister Chairs PCRWR's Board of Governors Meeting

The 3rd meeting of Board of Governors of PCRWR was held at PCRWR, Islamabad in March which was presided over by Rana Tanveer Hussain, Federal Minister for S&T. Mr. Fazal Abbas Makan, Secretary, MoST, also attended the meeting. Dr. Muhammad Ashraf, Chairman PCRWR presented a brief on the performance of PCRWR during the last one year. The Federal Minister while appreciating the Council's current initiatives for R&D, underlined the need to take more actions for transferring necessary agriculture related information to the end users/farmers.

Prof. Gilani delivers keynote address at International Symposium on Nano-medicine and International Conference on Translational Medicine

International Symposium on "Nano-medicines: Development, Testing and Application Possibilities" organized by NORI, Islamabad on March 1, 2016. Prof. Dr. Anwar-ul-Hassan Gilani, Chairman, Pakistan Council for Science & Technology, was the Chief Guest and he



delivered a keynote lecture titled "Ethics in Toxicology Studies" at the inaugural session of the International Symposium.

Prof. Gilani also delivered a plenary keynote lecture titled "Controlling metabolic / Cardiovascular disorders with dietary supplements Translational study" at the 2nd Joint Annual International Conference on Translational Medicine: From Discovery to Health, held at Ziauddin University, Karachi on January 29, 2016.

PSTC Peshawar initiates a six months training course for FATA Students

PSTC Peshawar initiated six-month training for 280 students of FATA in seven different trades, which will complete on June 20th 2016. This training is part of the Prime Minister Youth Skill Development Programme (PhaseII), being arranged jointly by National & Vocational Training Commission (NAVTTAC) Peshawar and PSTC, Peshawar.

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