



# ECOSF NEWSLETTER



## 4<sup>th</sup> Asian Innovation Forum Organised by STPI Taiwan and KISTEP Korea in partnership with ECOSF at Taipei, Taiwan

In partnership with ECO Science Foundation (ECOSF) and S&T Policy Research and Information Center (STPI) of Taiwan and the Korea Institute of S&T Evaluation and Planning (KISTEP), the 4<sup>th</sup> Asian Innovation Forum was organized in Taipei, Taiwan on July 10<sup>th</sup>, 2018. The Forum focused on the themes of Science, Technology and Innovation (STI) policy management, Emerging Technologies and National Strategy for STI for the sustainable future. The major goal of organizing this Forum was to address the key challenges facing Asia and to seek creative solutions, collaborative efforts for inclusive and sustainable growth in the region. The Forum provided a platform to seek new possibilities by bringing together innovation leaders, policy makers, researcher and STI program developers by sharing the knowledge and experiences in STI in the Asian region.



A large number of innovation leaders, policy makers and research scientists, entrepreneurs, scholars and representatives of leading STI organizations and academia from across the region attended the Forum. The Asian Innovation Forum is held annually, since it was launched in 2015 and brings together global leaders in their respective fields of STI to discuss and exchange ideas on various topics such as value creation in innovation economy, evidence-based policy making, sustainable development and inclusive growth. It is important to mention here that ECOSF is the founder member of the AIF and the Asian STI Think Tanks Networks (ASTN). On behalf of ECOSF, Prof. Dr. Manzoor H. Soomro President ECOSF and Engr. Khalil Raza Scientific Officer ECOSF participated in the Forum. During the Forum, Prof. Soomro also moderated and chaired one of the sessions organized by the ECOSF.

The Forum was formally opened by H.E. Liang-Gee Chen Minister for Science and Technology (MoST), Taiwan. In his welcome address, Minister Chen acknowledged all the partners for their contributions to the Forum. This Forum is an opportunity to seek

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creative solutions by bringing in collaborative efforts and strengthening partnership with leading STI organizations and partners, he added. Minister Chen stressed over the importance of STI policy interventions to address the challenges in the region. He shared that MoST Taiwan launched a major STI Policy shift in recent years to close the gaps between the academia and university, and catalyze the disruptive technologies such as artificial intelligence. Thus, one needs to adapt to this change and take necessary steps to tackle this challenge and turn it into an opportunity to improve the stagnant economic growth and work towards more job creation and sustainable economic development, he added.

Later during the Forum, Dr. Se-In Park, Policy Advisor KISTEP and Dr. Yuh-Jzer Joung Director General STPI gave their welcome remarks. During the Forum, Prof. Patarapong Intarakumnerd of National Graduate Institute for Policy Studies (GRIPS), Japan and Dr. Prof. Laoucine Kerbache of Qatar Foundation delivered their keynote speeches.



The session on “Emerging Technologies and Public Engagement” was organized by the ECOSF. The objective of holding the session was to highlight and generate a dialogue on challenges, adoption and potential risks related to new and emerging technologies such as autonomous vehicles, impact of crypto currencies, smart cities, the Internet of Things (IoT), AI and the implications for cybersecurity. The session brought together expert panelists from diverse backgrounds where they discussed the role of governments, academia and businesses to promote and develop the emerging technologies and industry in Asia to achieve the sustainable future. Prof. Dr. Manzoor H. Soomro President ECOSF introduced each speaker, steered and moderated the panel discussion during the session.

Read more: <http://eco4science.org/4th-Asian-Innovation-Forum-1>

### The 2<sup>nd</sup> ASTN Round Table Meeting organized by STPI and KISTEP in Taipei, Taiwan

President ECOSF Prof. Dr. Manzoor Hussain Soomro as one of the Founder Members of ASTN participated in the 2<sup>nd</sup> Asian STI Think Tanks Network (ASTN) Round Table Meeting. The Round Table Meeting was organized by Science & Technology Policy Research and Information Centre (STPI) & Korea Institute of S&T Evaluation and Planning (KISTEP) on July 9th, 2018 in Taipei, Taiwan. ECOSF became the founder member of this Network during its launch in 2015, which was established to provide a cooperating platform for institutes in Asia specializing in policy, research and education for science, technology and innovation (STI) for sharing and exchanging unique knowledge and experiences to enhance STI capacity of the region. This round table

meeting was convened on the eve of the 4th Asian Innovation Forum (AIF) to share the insights, review and discuss the achievements and prospects of the future AIF. A total of twenty institutes from across the Asia representing S&T policy making, research and education are members of the ASTN. Four new members joined this network during the meeting.



The roundtable meeting was opened by Dr. Yuh-Jzer Joung, Director General STPI and delivered his welcome remarks and appreciated all the partner institutions for their participation. Dr. Joung emphasized that in order to promote STI development for better Asia, the ASTN network has to play its vital role in discussing and identifying the emerging issues and challenges in STI, seek opportunities for knowledge and research exchange, and strengthen communication and collaboration among member institutes. On behalf of KISTEP, Dr. Se-In Park Policy Advisor also delivered his welcome remarks. Dr. Park encouraged the representatives to put forward practical ideas and suggestions for greater interaction among the participating ASTN institutions and ways to improve the effectiveness and impact of this initiative.

Prof. Dr. Manzoor H. Soomro in his speech in the Roundtable, congratulated KISTEP and STPI for organizing the ASTN Roundtable Meeting and 4th AIF. Prof. Soomro reassured the partners to work closely with KISTEP and STPI for strengthening the STI sector in the region. Prof. Soomro briefly introduced the roles and objective of ECOSF and shed light on various initiatives undertaken by the Foundation to promote cooperation among scientific community of the ECO region and beyond, help build the capacity and science popularization programs. He also highlighted some of the flagship programs of the Foundation, such as promotion of Inquiry Based Science Education and Engineering Qualification and Accreditation and Standardization etc.

Read more: <http://eco4science.org/2nd-ASTN-Round-Table-Meeting>

### **ECOSF participated in the International Conference on STI Policy organized by STPI Taiwan at Taipei, Taiwan**

Science and Technology Policy Research Information Center (STPI) - a partner institution of ECOSF under the flag of Asian Innovation Forum (AIF) organized an “International Conference on STI Policy: Navigating the Innovations through Evaluation” on July 11th 2018 in Taipei, Taiwan; it was sponsored by the Ministry of Science and Technology, Taiwan. The International Conference focused on STI policy to address problems of innovation system based on the market-failure or system-failure rationales. The conference also highlighted the daunting challenges for the policy makers who often work within limited budget to catalyze the innovations by identifying the gap of national innovation system and reframing the innovation policy making. A large number of innovation leaders, policy makers and research scientists, scholars and representatives of leading STI organizations and academia from across the region attended the Forum. On behalf of ECOSF, its President Prof. Dr. Manzoor Hussain Soomro and Engr. Khalil Raza Scientific Officer participated in the event.



The conference was formally opened by H.E. Liang-Gee Chen Minister for Science and Technology of Taiwan. In his message, he congratulated the organizers and welcomed the participants. He elucidated that innovation concerns not only the technology progress but also the use of that technology to create values which involves intensive interactions and collaborations among industries, academia, government and society.

During the inaugural session, Dr. Yuh-Jzer Joung Director General STPI welcomed the renowned speakers and participants to the conference. He shared that STPI proactively cultivates the monitoring and evaluation of STI policies and assists MOST in modifying the existing monitoring and evaluation. This conference will bring inspiring insights and deliberations. The conference included keynote sessions and panel discussion on a number of thematic and emerging areas of STI policy and innovation management.

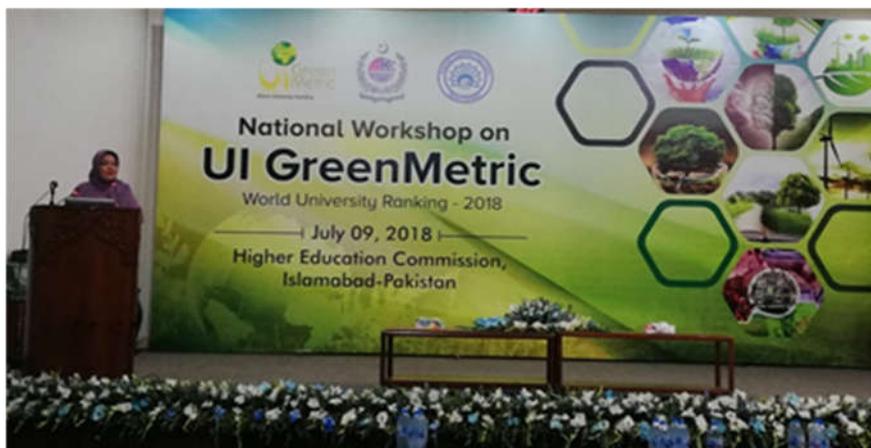
**HEC Pakistan organized the National Workshop on UI GreenMetric World University Ranking in collaboration with ECOSF and UI GreenMetrics, Indonesia**

A national workshop on UI GreenMetric World University Ranking – 2018 was held at Higher Education Commission of Pakistan (HEC) on July 9, 2018. The workshop was organized by HEC in collaboration with UI GreenMetric World University Ranking, Indonesia and ECOSF. The Chairperson of the UI GreenMetric along with an expert was invited to share the importance of GreenMetric and its mechanism for developing the eco-friendly and green campuses. The representatives comprising top management and faculty from 90 universities of Pakistan participated in the workshop. It is pertinent to mention here that ECOSF helped introduce this concept of GreenMetric Ranking Programme to HEC in Pakistan for promotion of Green and Sustainable Campuses. ECOSF had co-organised a similar international conference with Ferdowsi University of Mashhad at the University campus in February 2018, wherein, HEC representative was especially invited and sponsored by ECOSF to participate and network for launching the program in Pakistan subsequently. The conference in HEC



Islamabad was the result of that ECOSF's humble effort. On behalf of ECOSF, Mr. Ghulam Abbas Rahar Assistant Director (Admin and Programmes) participated in the event.

The event was opened by the Executive Director (ED) of HEC Prof. Arshad Ali who welcomed and thanked the distinguished guests for participating in the workshop. ED informed that so far six universities of Pakistan have been participating in the GreenMetric in their campuses. This workshop is an attempt to encourage and bring in more universities to participate in this programme, he said.



Chairperson of UI GreenMetric Prof. Riri Fitri Sari thanked HEC for inviting her in Pakistan to introduce GreenMetric World University Ranking. She was pleased to see the interest and active participation of the universities which shows the seriousness towards the matter. In her remarks, Prof. Sari briefed the participants about the UI GreenMetric World University Ranking, which is an initiative of Universitas Indonesia that was launched in 2010. She further said that the aim of this ranking is to provide the result of online

survey regarding the current condition and policies related to Green Campus and Sustainability in the Universities all over the world. It is expected that by drawing the attention of university leaders and stakeholders, more attention will be given to combating global climate change, energy and water conservation, waste recycling, and green transportation. Such activities would require change of behavior and providing more attention to sustainability of the environment, as well as economic and social problem related to the sustainability.

Read More: <http://eco4science.org/UI-GreenMetric>

### ECOSF initiates dialogue for cooperation with the National STEM Learning Centre of United Kingdom

During his holidays in the United Kingdom, President ECOSF Prof. Dr. Manzoor Hussain Soomro visited the UK's National STEM Learning Centre at York, UK on July 2, 2018 (courtesy of Mr. N.M. Juna of Kew Gardens, London).

The National STEM Learning Centre provides excellent professional support services for the betterment in teaching of STEM (Science, Technology, Engineering and Mathematics) Subjects. The purpose to create this Centre is to provide state of the art facilities to access subject-specific, high impact professional development and quality-assured resources and to develop a direct positive impact on teachers while teaching, Students, Schools and colleges. These workshop/trainings are led by the paramount team of experts in the field of STEM education.



The Centre provides an Ambassadorship to its trainers, to volunteers their services to more people in the society. Presently the National STEM Learning Centre of UK has many volunteer ambassadors around the country, who offer their time and enthusiasm to help and bring STEM subjects to life and demonstrate the value of STEM in life and careers. Those units are called as STEM Hubs.

The visit of Dr. Soomro was initiated by communication between him and Sir John Holman- a Professor of Chemistry, who patronizes the Centre. Dr. Soomro was shown around every department of the STEM Learning Centre by the staff; he admired the much appreciable approach of the Centre to build and broaden the interactive STEM learning system across the country. He also discussed the possibility of cooperation between the two institutions.

**ECOSF participated in a Round Table Meeting on Academic Governance, organized by HEC**

The Higher Education Commission (HEC) of Pakistan organized a *Round Table Discussion on Academic Governance* under the Chairmanship of HEC, Prof. Dr. Tariq Banuri on 6th July 2018 at HEC Islamabad. Professor Adil Najam, Dean of the Pardee School of Global Studies at Boston University, USA steered and conducted the round table discussion. A large number of Academic Managers and Leaders participated in the discussion. On Behalf of ECOSF, Prof. Dr. Manzoor Hussain Soomro President ECOSF and Engr. Khalil Raza Scientific Officer participated in the event. The dialogue concentrated on developing the requisite skills through targeted training programs, mentoring, international exposure and human resource development to build a cadre of professionals to achieve the academic excellence and quality in Pakistan.



**President ECOSF joins BOG of National Nematological Research Centre (NNRC), University of Karachi in its 1<sup>st</sup> Meeting**

The 1st Meeting of the Board of Governors (BoG) of the National Nematological Research Centre (NNRC) of the University of Karachi, Karachi Pakistan was held at the Centre on 31 July 2018. The meeting was chaired by the Vice Chancellor of the University of Karachi, Pakistan, Prof. Dr. Muhammad Ajmal Khan as Chairman of the Board. President ECOSF, Prof. Dr. Manzoor Hussain Soomro participated in the meeting in his personal capacity as an expert, as appointed by the Senate of the University of Karachi. The



representatives of various forums of University of Karachi, the Higher Education Commission (HEC), Pakistan Science Foundation (PSF), Pakistan Agricultural Research Council (PARC) and Department of Education and Literacy, Government of Sindh also attended the meeting as Ex-Officio Members of the Board. The Director of National Nematological Research Centre Prof. Dr. Shahina Fayyaz presented the agenda as Secretary of Board of Governors; the agenda was discussed item wise and decisions were made accordingly.

It is pertinent to mention that the NNRC is a Centre of Excellence in Nematology in the Near East region as recognized by the FAO of United Nations in 1992.

**Summer Science Camp-2018 in Karachi for the children/students concluded successfully, certificates awarded**

Summer Science Camp-2018 was successfully organized in Karachi- Pakistan by Pakistan Science Club (PSC) in collaboration with ECOSF during summer vacations (17 May – 18 July 2018) at three different locations in Karachi city. The purpose of the camp was to engage children and students during the vacation to learn Science, Technology, Engineering and Mathematics (STEM) through a hands-on Inquiry Based Science Education (IBSE) methodology.

On the completion of the camp, a certificate distribution ceremony was arranged on 30 July 2018 at Karachi, Pakistan and the certificates were awarded by President ECOSF (who was the chief guest) to the participating children/students. A large number of parents of children also attended the ceremony. During the ceremony, President ECOSF Prof. Manzoor Soomro highly appreciated the enthusiasm of little stars for science learning and their performances showcased during the camp. President ECOSF further said that teaching STEM through IBSE develops critical thinking and decision making. Keeping in view its importance, ECOSF promotes and supports IBSE in Pakistan and other ECO countries for better future.



Earlier, the Founder of PSC Mr. Abdul Rauf welcomed the distinguished guests/participants and shared the glimpses of the Camp. He said that the camp was a huge success and number of participants increased this year in comparison to previous years. A total of 97 children/students participated in the Camp and developed fantastic scientific projects through different techniques. Robotics was the most participated by field chosen by the students for making their tiny projects. He thanked ECOSF for supporting and providing scholarships to needy students. All students were provided scientific material. President ECOSF pledged the support of ECOSF for future camps as well.



**ECOSF highlights STI development in an article published in “Reverse Linkage: Development through South-South Cooperation” produced by IsDB**

We are pleased to share that ECOSF has developed strong working collaborations with international and regional organizations with a vision to support the Sustainable Development in the true spirit of South-South Cooperation. The Foundation is proud to partner with many of the most reputable organizations and development partners. ECOSF is especially proud to share collaborating platform with the Islamic Development Bank (IDB) on a number of projects including the promotion of Inquiry Based Science Education (IBSE) in the ECO region and IDB’s Reverse Linkage Program to build the capacity of partnering ECO member states through transfer of technology and sharing of the best practices. ECOSF has contributed to the Publication on “Reverse Linkage: Development through South-South Cooperation”, produced by the Islamic Development Bank. This publication exemplifies the initiatives and contributions of ECOSF entitled “**ECO Science Foundation – a catalyst for promoting Science Technology & Innovation in the ECO region**”. This publication showcases the significant contribution of ECOSF towards the promotion of Sustainable Development and highlights key initiatives undertaken to achieve its intended goals of promotion of Science, Technology and Innovation in the ECO region.



Read more: <http://eco4science.org/Reverse-Linkage>

**Capacity Building of Turkish Teachers on IBSE Methodology**

Through the courtesy of ECOSF, Prof. Fatih Taşar, a member of the Science Education Working Group of Turkish Academy of Sciences (TAS/TUBA) attended LAMAP’s 7th Seminar held in Paris in June 2016. After the Seminar, Prof. Taşar reported that TAS, in cooperation with the Ministry of Education and local universities, have formed teacher training groups and delivered trainings for over 500 middle school and high school science teachers in IBSE in the course of the last 2 years in 6 cities around Turkey: Ankara, Erzurum, Antalya, Istanbul, Muğla, and Samsun. The picture from Muğla teacher training workshop shows an IBSE training session.



**The Role of Pakistan in China’s Transportation Projects**

Within the framework of the New Silk Road strategy, China is focused on the implementation of its long-term strategic Belt and Road Initiative (BRI), which includes the Silk Road Economic Belt and the 21st Century Maritime Silk Road projects. Unveiled during Chinese President Xi Jinping’s visit to Astana in September 2013, the BRI was presented as a development strategy to boost infrastructure and economic connectivity throughout Eurasia. The BRI project covers a large geographical area extending

from China in the east to the Atlantic Ocean in the west, Russia in the north and Myanmar in the south, and is designed to increase mutual trade between the countries along the route. Since China attaches great importance to the transport infrastructure development, which could contribute to trade expansion between China and Europe, Pakistan occupies a special place in Beijing's plans towards improving trade flows. Due to its geostrategic location, rich human and natural resources, as well as enormous potential for economic growth, Pakistan plays a special role in the revitalization of the Silk Road. In fact, the China-Pakistan Economic Corridor (CPEC) is one of the key projects in the field of transport and communications that is funded by China under the BRI. An idea to create the CPEC was first expressed by Premier of the State Council of China Li Keqiang during his visit to Pakistan in May 2013. In July 2013, during the visit of then Prime Minister of Pakistan Muhammad Nawaz Sharif to China, the parties signed a memorandum of understanding on the CPEC, which has given a new impetus to bilateral cooperation. Finally, during Xi Jinping's official visit to Pakistan in April 2015, the parties inked agreements aimed at investing \$46 billion towards the establishment of the CPEC. A detailed master plan for the CPEC for 2017-2030 was officially made public on May 15, 2017.

**Source:** Eurasian Research Institute, Kazakhstan

Read more: <https://backend.eurasian-research.org/web/web/publications/Weekly-e-bulletin-05-06-2018-11-06-2018-No-167.pdf?1528974110>

### Distinguished Visitor to the ECOSF

July 24th, 2018: President ECOSF was called upon by Dr. Mirza Habib Ali, Director (Research Support) of Pakistan Science Foundation (PSF) and Acting Chairman of Pakistan Council of Research in Water Resources (PCRWR). The two institutions have been collaborating with ECOSF for promotion of common goals. Dr. Ali discussed areas of future collaboration with special focus on IBSE in Pakistan.



### Upcoming Events posted on ECOSF website and Facebook page

#### Call for requests, inputs and suggestions on short-term priorities and longer term strategic needs for the future work programme of IPBES

The Multidisciplinary Expert Panel and the Bureau of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) herewith call for requests, inputs and suggestions on short-term priorities and longer term strategic needs that require attention and action by IPBES as part of its future work programme.

In accordance with decision IPBES-6/2, the Panel and the Bureau invite:

1. IPBES members, observers that are allowed enhanced participation in accordance with decision IPBES-5/4, and multilateral environmental agreements related to biodiversity and ecosystem services as determined by the respective governing bodies of those agreements, to submit requests;
2. United Nations bodies related to biodiversity and ecosystem services and relevant stakeholders, such as other intergovernmental organizations, international and regional scientific organizations, environment-related trust funds,

non-governmental organizations, indigenous peoples and local communities and the private sector to submit inputs and suggestions;

3. Experts on, and holders of, indigenous and local knowledge to provide inputs and suggestions through the participatory mechanism of IPBES.

Requests, inputs and suggestions should be submitted, using the template for submission, to the secretariat at [secretariat@ipbes.net](mailto:secretariat@ipbes.net) by **30 September 2018**.

<http://eco4science.org/short-term-priorities>

### **The Brazilian College Scholarships for Developing Countries**

The Postgraduate Students Agreement Program (PEC-PG), officially created in 1981, offers scholarships for developing country nationals with whom Brazil has cultural and / or educational cooperation agreement for training in courses of post-graduation strictu sensu (master's and doctorate) in Brazilian Higher Education Institutions (HEI).

<http://eco4science.org/PEC-PG>

### **35<sup>th</sup> World Conference on Science Parks and Areas of Innovation**

The 35th World Conference on Science Parks and Areas of Innovation will be organized by International Association of Science Parks and Areas of Innovation in sponsorship with **ECO Science Foundation** from 2- 5 September 2018 at Isfahan, Iran.

For More details please visit at: <http://iasp2018isfahan.com>

### **Training Workshop for IBSE Master Trainers on Climate Change Education 2018, Kuala Lumpur**

ISTIC is organizing a Training Workshop for Inquiry-Based Science Education (IBSE) Master Trainers on Climate Change Education from 27<sup>th</sup> – 30<sup>th</sup> August 2018 in Kuala Lumpur, Malaysia.

Objectives of the training workshop are:

1. To sensitise trainers on issues of climate change using IBSE as an approach to teaching climate change education
2. To enhance skills, understanding and competency of master trainers to assist teachers in implementing the approach
3. To provide the master trainers a solid framework for delivering training.

For More details please visit at: <http://eco4science.org/Climate-Change-Education>

### **Training Workshop on Big Data Technology Application for Developing Countries, 12 – 18 September 2018, Xi'an, China**

International Science, Technology and Innovation Centre for South-South Cooperation under the auspices of UNESCO (ISTIC) in collaboration with International Knowledge Centre for Engineering, Science and Technology under the auspices of UNESCO (IKCEST) will organize the Training Workshop on Big Data Technology Application for Developing Countries, 12 – 18 September 2018, Xi'an, China. This workshop is in line with the IKCEST Training Workshop in Hangzhou in 2015 and 2016 and in Kuala Lumpur, Malaysia in 2017. ISTIC and IKCEST are committed in ensuring developing countries are not left behind in the pursuit of economic development impeded by the absence of a technological capability to harness new opportunities, that will generate income, jobs and revenue for countries, therefore the Big Data Application in engineering, science and technology is a potential solution that can enhance/advance the decision making and problem solving in STI into higher level.

Read more: <http://eco4science.org/Big-Data>