



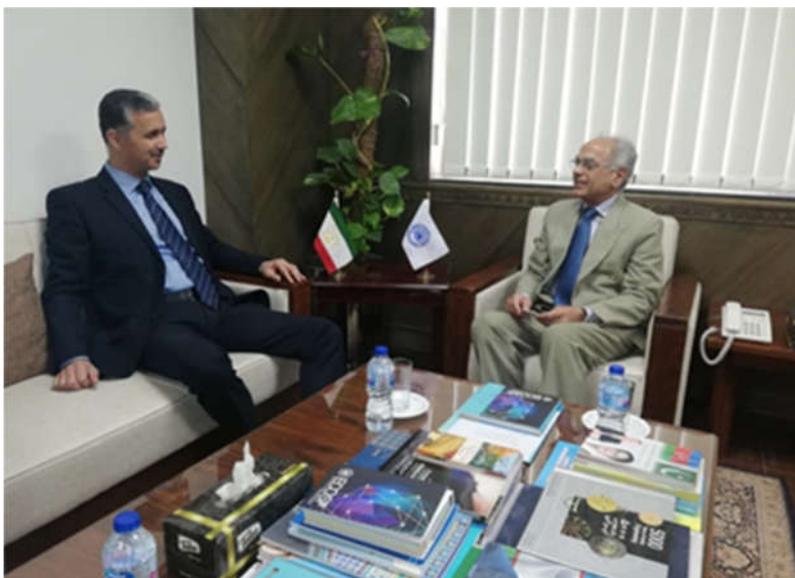
# ECOSF NEWSLETTER



## Ambassador of Tajikistan to Pakistan appreciates the efforts of ECOSF for promotion of STI in ECO region

The new Ambassador of Tajikistan to Pakistan H.E. Mr. Ismatullo Nasredin visited ECOSF Secretariat on 19 April 2019. He was warmly welcomed by President ECOSF Prof. Manzoor H. Soomro on his maiden visit to the Foundation.

President ECOSF thanked the Ambassador for the visit and briefed him about the aims and objectives as well as the ongoing activities and initiatives of the Foundation. He shared with the Ambassador that the Foundation has developed working relations/collaborations with international organizations such as; UNESCO, International Science, Technology and Innovation Centre for South-South Cooperation under the auspices of UNESCO (ISTIC), Kuala Lumpur, La main a la pate Foundation of France (LAMAP), Children and Youth Science Centre of China Association of Science and Technology (CYSCC), Islamic Development Bank (IsDB) and other renowned organizations.



Prof. Soomro also informed the Tajik Ambassador that the Inquiry Based Science Education (IBSE) programme for ECO region was launched from Astana (Nur Sultan), Kazakhstan in 2015 where participants from all ECO member countries including two from Tajikistan had participated and were trained on IBSE methodology for teaching STEM subjects in their respective countries. The programme is successfully being implemented in Pakistan and Iran and discussions are undergoing with Academy of Sciences of Tajikistan and Pedagogical University Dushanbe to launch it in Tajikistan. President ECOSF also shared with H.E. Mr. Nasredin that Engineering Qualification Standardization and Accreditation is also one of the main programme of ECOSF which is being implemented with the support of UNESCO and Federation of Engineering Institutes of Asia and the Pacific (FEIAP) based in Kuala Lumpur. The programme is to make the engineering qualification of ECO countries at par with international standards. In this context, a meeting was also arranged in Dushanbe in March 2017 in collaboration with the Academy of Sciences of Tajikistan and Tajik Technical University wherein representatives from UNESCO, FEIAP, ECOSF and participants from Azerbaijan, Iran, Kazakhstan, Kyrgyzstan, Uzbekistan and IEEE attended.

It was further added by Prof. Soomro that the collaboration with Chinese organizations has been established under the One Belt One Road Initiative of China. Under this collaboration, the scientific and educational community of ECO region is facilitated to participate in the various programmes. One of the programmes is "Teenager Makers Camps and Science Teachers Workshops" initiated in 2017 and held annually. The teams comprising of students and teachers from world participate in the camp. ECOSF invites nominations from its member countries and since last year (2018), a team from Tajikistan also participated in the camp.



This year, 3rd teenager maker camp will be held from 24-30 September 2019 at Nanning China, wherein, the teams from 7 ECO countries viz., Azerbaijan, Iran, Kazakhstan, Pakistan, Tajikistan, Turkey and Uzbekistan will participate.

He further added that ECOSF, Academy of Engineering and Technology of the Developing World (AETDEW) Malaysia and Sugon Ruiyi Technology are partnering on Digital @ Belt and Road Double Hundred Universities Cooperation Program (DHUCP) under the Belt and Road initiative of China. So far, 12 universities from Afghanistan, Iran, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan and Turkey have joined in. Under this program, the capacity and capability of the universities will be enhanced in the fields of ICTs, AI and Big Data.

President ECOSF emphasized on the much needed support of the Member Countries and said; if the member countries provide more support, the Foundation can launch more programmes in its member countries.

H.E. Mr. Ismatullo Nasredin said that the Foundation is very important specialized agency of ECO and highly appreciated the contribution of ECOSF for linking the scientific community of ECO region with international communities and organizations. He assured cooperation and support of Tajikistan for realization of ECOSF objectives and said, he will take up the matter with their Ministry of Foreign Affairs on priority.

The Ambassador also shared that the institutes of Tajikistan are also making a good progress in the field of science, geology, astronomy, he specially mentioned the state of the art observatory of Tajikistan installed at its Pamir region.

President ECOSF again thanked the Ambassador for their support and assured him for more benefits through the Foundation to Tajikistan and other ECO countries for economic development.

At the end, Prof. Soomro presented the insignia of ECOSF to H.E. Mr. Ismatullo Nasredin and thanked him for visiting ECOSF.



**Students from the Government Schools showcased their innovative projects in the 1<sup>st</sup> Islamabad Science Festival (ISF)**

1<sup>st</sup> Islamabad Science Festival was jointly organized by ECO Science Foundation (ECOSF), Campaignistan and Local Administration of Islamabad in collaboration with other organizations on 27-28 April 2019 at Awan-e-Quaid, F.9 Park, Islamabad. The Festival was inaugurated by the Deputy Commissioner of Islamabad Mr. Hamza Shafqaat and President ECOSF Prof. Manzoor H. Soomro.



The purpose of the festival was to provide the platform to the students especially from government schools to showcase their creative ideas and projects through dynamic models. It was encouraging to witness that a significant number of girls participated in the Festival. The objective of holding this Festival was to fuel the public interest for science and technology and aware them of boundless benefits of science for the society. Another target of the festival was to encourage the kids of the government schools to participate and to boost their curiosity and motivate them to pursue careers in Science and Technology.

Over 40 school teams participated and majority of them represented the government schools where they showed working models and innovative exhibits. National University of Sciences and Technology (NUST) and Institute of Space Technology (IST) also participated and setup their exhibits at the Festival, while several private and public science organisations contributed to the event including Pakistan Science Foundation, Engineering for Kids, Science Fuse, Learn-O-Bots, Robo Minors.



**ECOSF hosted the Panel Discussion on  
“Science, Technology and Innovation (STI) for the Sustainable Development”  
during the 1<sup>st</sup> Islamabad Science Festival**

During the Festival, ECOSF organised and hosted a panel discussion on “**Science, Technology and Innovation (STI) for the Sustainable Development**”. This panel discussion focused on the linkages between the Science, Technology & Innovation and Sustainable Development. Engr. Khalil Raza, Scientific Officer ECOSF moderated the panel discussion and generated a meaningful debate on significance of science for a progressive society. The session brought together expert panelists who highlighted and shared their wisdom on developing strong linkages between Science and Technology and the Sustainable Development.



**The panellists in the session included:**

1. **Mr. Imtiaz Ali Rastgar, Founder and Chairman of Rastgar Group**  
*Critical Role of Science and Technology and its significance for the Sustainable Economic and Industrial Growth*
2. **Dr. Fauzia Idrees Abro, Cyber Security Professional, Pakistan Airforce**  
*Importance of Women Working in the Science, Technology, Engineering and Mathematics (STEM) fields.*
3. **Mr. Syed Moazzam Ali Hashmi, Senior Journalist and Security Analyst**  
*How Pakistani media can play its role to promote Science and Technology (S&T) and why is it important for addressing the socioeconomic challenges for the country?*
4. **Prof. Dr. Bushra Mirza, ISESCO Women Science Chair and Professor of Biochemistry at Quaid-i-Azam University Islamabad**  
*Fostering Innovation, Creativity & Critical Thinking Skills in Student*

The panellists deliberated in depth on linkages between science and sustainable development and various aspects of promotion of STI through non formal science education, science literacy among general public, encouraging more women to pursue careers in science, role of parents, teachers and media in promoting science education and the emerging role of new & digital technologies. The panel discussion concluded with Q&A, feedbacks and active interaction with the audience.



Major takeaways of this Panel Discussion are as follows:

**Mr. Imtiaz Rastgar** emphasized over the need to encourage young students and kids with proactive and interactive learning of science by doing not just at the schools but also at their homes. Parents should play an important role to inspire their kids to take part in experimenting science with low cost tech gadgets. He also called for developing a lab with provision of scientific equipment to make science more interesting and effective for students. For which he said the capable and creative teachers are a key players. Mr. Rastgar stressed that strong S&T base at schools can contribute to development of qualified work force for Small and Medium Industries with a potential to pull Pakistan out of the economic challenges. He concluded that innovation is key to achieve the economic development as science plays a key role in supporting the innovative ecosystems.



**Dr. Fauzia Idrees Abro** underscored the importance of women in STEM fields. She said that globally, there are only 28% women in STEM fields. While women in Pakistan make almost 50% of population but majority of them are deprived of STEM education. By depriving them, we are decreasing chances of employment for half of our population and hence wasting 50% of our talent and destabilizing our economy, she added. Dr. Abro further said that world is moving towards Artificial Intelligence, Machine learning and coding needs to be the base to keep up with these future changes. Dr. Abro spoke about the development of a coding platform, which she intends to launch to encourage girls and women to acquire necessary digital and coding skills to excel in the STEM fields. Dr. Abro shared her

personal and inspiring story as to how she overcame many challenges to pursue a career in STEM despite the fact that it is extremely challenging to achieve big milestones especially for a girl from a very remote area of Sindh.

**Mr. Syed Moazzam Ali Hashmi** highlighted the role of media in promoting science for the sustainable development. He said that media is an effective tool for perception building and at times it may create negative narratives due to lack of trained journalist in Pakistan. However, journalists as responsible professionals should play their role to promote scientific culture in our society. He pointed out that science journalism is an specialized track and expressed his concern over lack of training opportunities in this field. Without training, the science reporting in mainstream media will be difficult to flourish, he added. He also added that media should not be solely blamed for lack of coverage as there is no demand from public at large for scientific news. Mr. Hashmi said that there is a gap in the academic discourse and practical or field journalism, which is also true in case of science journalism. Therefore, academia and media should work together and take this responsibility of bridging the gap between the two narratives.



**Prof. Dr. Bushra Mirza** shared that kids are actually born scientists and usually they have the spark for innovative ideas due to their inherent nature of thinking out of the box rather without a box! However, when they join schools and go through formal learning at schools, we kill their curiosity and critical thinking skills and put them in boxes by discouraging them not to think innovatively, she added. Kids and young students should be encouraged to make observations and ask questions surrounding their environment so that they can comprehend the nature and environment more vividly, which is one of the key characteristics of a scientist. She also underscored that overall state of science teachers in Pakistan is quite inadequate due to lack of training, incentives and privileges duly required for the most

important job for a teacher to prepare the future of a nation.



**President ECOSF Prof. Dr. Manzoor Hussain Soomro** gave his concluding remarks at the end of panel discussion. He appreciated all the esteemed panellists and the moderator for their contributions and generating a useful discussion on this very important topic. Prof. Soomro proposed the idea of establishing a Fabrication Lab (FabLAB) for kids to encourage innovation, creativity and critical thinking skills. He expressed his gratitude for the event organizers; Campaignistan and City Administration for their commitment, efforts and making this Festival a successful event.



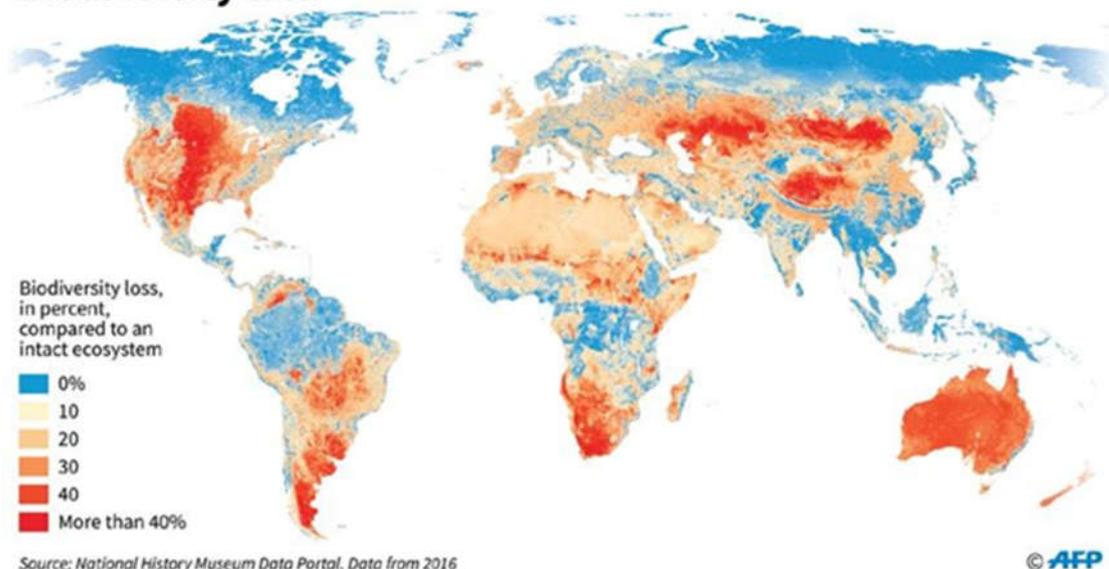
During the event, “Science Fuse” led interactive science fun activities where young participant took keen interest and participated in it. It is important to create platforms to promote such activities for children for the better future of Pakistan. In the end, President ECOSF Prof. Dr. Manzoor Hussain Soomro and Deputy Commissioner Islamabad Mr. Hamza Shafqaat distributed awards and certificates among the finalists and participating teams.

### IPBES Global Assessment Preview

IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services) was launched in 2013 with Headquarter at Bonn-Germany. The aim of the Platform is to provide opportunity to its member countries to discuss the biodiversity issues and devise the policies and plans accordingly.

ECOSF is a Stakeholder/Observer of the Platform since its inception. Since joining, ECOSF has been contributing in the programs of the Platform.

### Biodiversity loss



The 7th Plenary of IPBES was held on 29 April – 4 May 2019 at Paris-France preceded by Stakeholders Day on 28 April 2019 at UNESCO Headquarters. Nominees from ECO Member Countries are participating in the meeting. Recently IPBES has drafted a report about the State of the Biodiversity which will be presented in the 7th session. The report says that up to one million species face extinction due to human influence. The report catalogues how humanity has undermined the natural resources upon which its very survival depends. The situation is very alarming. Following map shows the biodiversity loss in the world:

The Asia Pacific region faces unprecedented threats - increasing people's vulnerability and increasing inequality. More information pertaining to the report can be downloaded from: <https://www.ipbes.net/news/ipbes-global-assessment-preview>  
Here is the short video on the assessment: <https://youtu.be/XrydiNa3s0U>

**ECOSF Team Contributes in Seminar on; “Preparing Communities and Hospitals for Heat Waves – Lessons learnt from Karachi” held on 19 April 2019 in Islamabad, Pakistan**

A dissemination seminar entitled; “Preparing Communities and Hospitals for Heat Waves – Lessons learnt from Karachi, Pakistan” was jointly organized by The Aga Khan University (AKU) and LEAD Pakistan hosted on 19th April, 2019 in Islamabad. The purpose of this seminar was to share the findings of a research project “Heat Emergency Awareness and Treatment (HEAT)” jointly partnered by The Aga Khan University (AKU) of Pakistan, Aman Foundation and Johns Hopkins University (JHU), USA. The project was funded by Research for Health in Humanitarian Crises (R2HC), UK.



The objective of the project was to prepare community and hospital emergency departments to deal with heat emergencies in a better and effective way in the wake of disruptive climatic changes recently observed in Pakistan. The event brought to together national and provincial stakeholders to explore contemporary best practices and lessons for heat wave management in Pakistan. On behalf of ECOSF, its President Prof. Dr. Manzoor Hussain Soomro along with Mr. Khalil Raza Scientific Officer and Mr. Ghulam Abbas Assistant Director Programs, participated in the event.



**Chairperson of Senate Standing Committee on Climate Change,** Senator Ms. Sitara Ayaz was the Chief Guest in the event. Senator Ayaz called for adopting effective measures to address the impact of climate change and one must not ignore various threats associated with this change. She also showed her concern that Climate Change is not been given due importance by the concerned quarters. “The threats are there such as severe heat, faster melting of glaciers, unexpected heavy rainfall that cause flooding and even damage to agriculture sector and we need to do considerable work to reduce the impact of these threats” she said.

**Prof. Dr Junaid Razzak, Professor of Emergency Medicine** at Johns Hopkins University, shared results of this impact study which showed that temperature is 5-7 degrees Centigrade higher in downtown during summers compared to suburbs. Beside traffic signals, the temperatures are always 1-2 degrees higher than the temperature of the city. People walking in that area or on motorcycles are vulnerable to heat waves, he said.

**Dr Nadeemullah Khan, Associate Professor at AKU** recommended that hospitals should not only prepare themselves in advance but their managements should also keep an eye on weather predictions too. He said the most vulnerable class included; the people at lower segment of social economic class, elderly, those suffering from diabetes, heart problems and asthma and they have to be extra careful in summers.



In the end, a panel discussion was held to discuss implementation of study findings, guidelines and protocols and devise a way forward. The panel discussion generated a meaningful discussion amongst the audience. ECOSF President Prof. Soomro and ECOSF Scientific Officer Engr. Khalil Raza also contributed to discussions and shared their views and emphasized over the need to adopt indigenous knowledge systems and learn from our ancestors as to how they used to prevent themselves from various natural calamities, including the heat waves. Prof. Soomro also stressed upon incorporating the climate change issues in school curricula as well as in trainings of teachers.

**President ECOSF applauded the MagnifiScience Exhibition of The Dawood Foundation, Karachi-Pakistan**

Consequent to the visit of a representative of The Dawood Foundation Pakistan (TDF) to ECO Science Foundation and meeting with President ECOSF, Prof. Manzoor H. Soomro, he took up a visit to the MagnifiScience Exhibition of The Dawood Foundation on 06 April 2019 at Karachi. He was warmly welcomed by the Chief Executive Officer (CEO) of TDF Ms. Sabrina Dawood and the Team Leader Educational Projects Ms. Aniq Khokhar on his visit to TDF.

Ms Sabrina briefly introduced the TDF and said that TDF believes in empowering individuals through education to create a collective change. From establishing institutions, TDF has morphed into formulating spaces of learning that serve everyone. She further said that moving from formal education to informal and nonformal education is exciting, giving their projects more fluidity, dynamism, interactivity and room to try new ways of engaging with people to materialize it. She described the MagnifiScience and elaborated that it is an umbrella under which The Dawood Foundation promotes science literacy and critical thinking in youth through experiential learning. It is an inclusive platform which creates learning spaces by inviting people together from all backgrounds, irrespective of age, gender or class. MagnifiScience includes science exhibitions across the country and children’s studio. TDF MagnifiScience Exhibition is a step towards creating awareness and inducing the quest for a science museum and exhibition across the country.



Prof. Soomro was given a round of exhibition wherein the technical staff explained about the development and use of creative exhibits. The students and parents visit the MagnifiScience Centre and take keen interest in the exhibits and try to understand the scientific concepts. After the round of exhibits, a meeting was held between the CEO of TDF and President ECOSF. TDF requested for ECOSF's support for development of full scale international science center in Karachi.

President ECOSF shared the programs and activities of ECOSF with TDF leadership and assured them of all possible technical support. The following was agreed in principle:

- ECOSF will explore the possibilities of technical support from its international collaborators viz., the French institutions; Universcience and CCSTI as well as Chinese Museum of Science and Technology.
- Training of TDF school teachers on IBSE methodology for STEM education.

The meeting ended with vote of thanks from both sides.

### Science Diplomacy, Artificial Intelligence and Cyber Security Considered as Components of Science Education

A brainstorming meeting on "Science Diplomacy, Artificial Intelligence and Cyber Security as a component of Science Education" was held in ECO Science Foundation. President ECOSF Prof. Manzoor H Soomro; CEO of Pakistan Alliance for Maths and Science Mr. Salman Naveed Khan and Dr .Fauzia Idress Abro, a Specialist in Artificial Intelligence and Cyber Security joined the Meeting .



It is pertinent to mention that ECOSF runs a programme of capacity building for school teachers in the "Inquiry Based Science Education-IBSE" and plans to include Artificial Intelligence and Cyber Security in IBSE curricula. ECOSF came into being as a result of Strong Science Diplomacy and the Foundation practices it in all its programmes in the ECO Region and beyond. The Foundation also promotes Science Diplomacy at graduate level as well as with academia and policy level.

The meeting agreed to continue cooperation in the areas discussed for good of the society in Pakistan and beyond in ECO Members Countries.

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

#### International Conference on Intelligent Technologies and Applications, OCTOBER 16–18, 2019

The International Conference on Intelligent Technologies and Applications (INTAP'19) will be held on 16-18 October, 2019. INTAP 2019 will be organized by Artificial Intelligence Research Group, supported by Sir Sadiq Association of Computing and hosted by the Islamia University of Bahawalpur. The aim of this conference is to provide an internationally respected forum for scientific research in the computer-based methods and technologies of collective intelligence and their applications in (but not limited to) such fields as green computing, ambient computing, ubiquitous computing, power computing, global computing, pervasive computing, etc.

#### Important Dates

Submission of Papers Deadline:	May 24, 2019
Notification of Acceptance/Rejection:	August 01, 2019
Camera Ready Deadline:	August 13, 2019
Registration Deadline:	August 16, 2019
Conference Dates:	October 16-18, 2019

For more details visit: <http://idconline.net/intap/>

### 3rd Belt and Road Teenager Maker Camp & Teacher Workshop

“3rd Belt and Road Teenager Maker Camp & Teacher Workshop” will be held from 24-30 September 2019 at Nanning of Guangxi Zhuang Autonomous Region, China. The Camp will be hosted by the Ministry of Science and Technology, People’s Republic of China (MOST), China Association for Science & Technology (CAST) and the People’s Government of Guangxi Zhuang Autonomous Region, organized by Children & Youth Science Center (CYSC) of CAST, Guangxi Association for Science and Technology (GAST) while supported by InterAcademy Partnership Science Education Program (IAP SEP), ECOSF and Network of African Science Academies (NASAC). It is aimed to strengthen cross-cultural exchange, promote international understanding and inspire innovation in young generation.

Each participating team comprises upto five junior high-school science students (aged 13-15) and upto two teachers from each Member State. The event will be an excellent opportunity for participating teams to expose them to various scientific activities, such as science shows, thematic discussions, orientations and project executions. The nomination of school teams have been finalized.

Brief Introduction of the event can be downloaded below.

<http://eco4science.org/uploads/files/Introduction%20of%20Belt%20and%20Road%20Teenager%20Science%20Camps.pdf>

### Distinguished Visitors to ECOSF

**April 11, 2019:** Prof. Dr. Kauser A. Malik, Dean of FC College University Lahore, formerly Member (Food and Agriculture) of Planning Commission of Pakistan/former Chairman PARC and Dr. M. Azeem Khan, Member Planning Commission for Food and Agriculture Government of Pakistan visited ECOSF and held a consultative meeting with President ECOSF on Social Entrepreneurship and the role of modern biotechnological/genomic techniques for food security in Pakistan.



**April 04, 2019:** The Officials of Embassy of France in Islamabad Mr. Sebastien CARTIER, Higher Education Attache and Ms. Arifa Sultana called upon the President ECOSF to discuss the upcoming seminar of LAMAP in Paris and to enhance the Scientific collaboration in Pakistan



**April 04, 2019:** Ms. Maham Ali of The Dawood Foundation along with the representative of UNESCO Pakistan Mr. Raza Shah called upon the President ECOSF at his office. Ms. Maham discussed the potential collaboration with ECOSF specially in the field of teachers training and development of science centers and museums in Pakistan.



### Important Notice – Change of ECOSF Website and Contact Information

ECOSF announces that the website address of the Foundation has been changed to <http://www.ecosf.org> as of May 1<sup>st</sup>, 2019. Accordingly, the new contact email of the Foundation is [registry@ecosf.org](mailto:registry@ecosf.org).

For visitors who have saved our website as a Favourite or Bookmark, please update your settings.

We will continue striving to make our website easier for visitors to follow, wider dissemination and user friendly.

For more information, please visit <http://ecosf.org/contact.aspx>