



ECOSF NEWSLETTER



H.E. Amb. Khusrav NOZIRI Assumes the Charge as New Secretary General of ECO

H.E. Ambassador Mr. Khusrav NOZIRI assumed on August 16, 2021 his responsibilities as the new Secretary General of the Economic Cooperation Organization (ECO) in Tehran, Islamic Republic of Iran. He is 13th Secretary General of ECO. On his arrival, he was received by Senior Adviser of the Permanent Representative of the Islamic Republic of Iran to ECO Mr. Behzad Azarsa and ECO Secretariat officials, Deputies Secretary General, Ambassadors Huseyin Avni Bicakli and Jandos Asanov.

Upon joining his office, the new Secretary General emphasized on the importance of concerted efforts and teamwork to maintain efficiency and effectiveness of the organization. He expressed his receptivity and readiness towards any suggestions by relevant staff for supporting the working of the Secretariat while assuring his best to be delivered for securing maximum objectives of the organization.



Foreign Minister of Pakistan visited Tajikistan, Uzbekistan and Turkmenistan and Iran to develop regional consensus on Afghanistan



Pakistan's foreign minister H.E. Mr. Shah Mahmood Qureshi undertook a four-nation tour that included; Tajikistan, Uzbekistan, Turkmenistan and Iran on August 24-26, 2021. The tour was aimed at strengthening Pakistan's engagement with Central and West Asia as the Foreign Minister held meetings with the top leadership during the trip.

The Foreign Minister remarked that a coordinated approach was important for security, stability and inclusive political settlement in Afghanistan. The focus was on "enhanced stability, trade and improved connectivity," adding that a peaceful and stable Afghanistan is a prerequisite for economic cooperation. All parties endorsed the fact that return of peace in Afghanistan would provide impetus to greater economic integration, regional connectivity and facilitate people-to-people linkages.

Seminar on “Challenges and Strategies for Effective Plastic Waste Management to Improve Human Health” held on 4th August 2021 at PSF Islamabad



Federal Minister for Science and Technology Senator Shibli Faraz stressed the need for constituting a regulatory authority to deal with the overall environmental issues with a special focus on the monstrous threats being posed to the environment and human health.

He was addressing a seminar on “Challenges and Strategies for Effective Plastic Management to Improve Human Health” on 4 August 2021 at Pakistan Science Foundation (PSF) Islamabad. The seminar was organized by PSF in collaboration with UNESCO, UNDP, Global Water Challenge, Coca Cola Foundation, and New World.

The Federal Minister said that the government is tackling the environmental issues on priority and referred to his government’s initiatives of “billion tree tsunami” and the imposing ban on the use of plastic bags in the country. He said that the environmental degeneration has become a global issue and it is not specific to any country or region. He said that Prime Minister Imran Khan himself was taking keen interest in bringing improvements in this area be it plantation of trees or proper and efficient management of garbage especially plastic waste.



Appreciating the contribution of the Pakistan Science Foundation (PSF), Senator Shibli Faraz said that his ministry was prepared to extend financial support to scientists and university students to come up with problem-solving research projects to bring positive change in the overall socio-economic condition of the common people.

Country Director UNSECO Pakistan Ms. Patricia McPhillips said that plastic pollution is the most pressing issue and had acquired a global dimension. She said that concerted and multi-pronged efforts were required to minimize its devastating effects. She said, “Plastics have invaded our environment at an alarming rate. Not only are plastics a threat to local and global biodiversity, but micro plastics have entered our food chain system,” adding, “we are now eating plastic, which is not a substance meant for human or animal digestion or consumption”.



Hybrid Seminar on Innovative Technologies for Sustainable Agriculture followed by an exhibition “Technological Solution for Sustainable Agriculture” at Ministry of Foreign Affairs -Islamabad, Pakistan

The Ministry of Foreign Affairs, in collaboration with the Embassy of Switzerland in Islamabad, held a hybrid event on agricultural technologies-related to innovation for sustainable agriculture. The event brought together, physically and virtually, nearly 100 science and technology-related stakeholders from Pakistan and Switzerland. It also featured an exhibition of start-ups related to agri-bio and agri-tech in Pakistan, showcasing a diverse range of products and services. On behalf of ECOSF, President ECOSF participated in the event.



The event was held under the Ministry of Foreign Affairs’ Science Diplomacy Initiative, one key objective of which is to provide local S&T stakeholders a platform to showcase their innovations for pursuing international partnerships. In his address, the Federal Minister for National Food Security and Research, Syed Fakhar Imam, welcomed the interface between local innovation stakeholders and potential international partners. He also emphasized the need to incorporate recent innovations such as precision agriculture to increase the productivity of the agricultural value chain. In this context, he also lauded the efforts of the local start-ups that are transforming the agricultural sector and affiliated industries in the country with the full support of the Government of Pakistan.



In his remarks, Director General of the Ministry of Foreign Affairs for United Nations/Science Diplomacy highlighted the role of technology in attaining the Sustainable Development Goals, including those related to food security and climate change. He added that Pakistan and Switzerland’s friendly relations will be further strengthened through science diplomacy related engagements that can create scientific linkages and technological collaboration between the two countries.

The Swiss Chargé d’Affaires echoed similar sentiments and underscored the necessity of scientific cooperation to help tackle the multifaceted issues of climate change and food security. He also highlighted that sustainability is an important element for Swiss companies and one of their prioritized agenda for international partnerships.

The event included technical talks, institutional offerings, and a panel discussion focused on the agriculture and green technological-related landscape in both countries, as well as potential areas of collaboration. Participants from Pakistan included representatives from the special Technology Zones Authority, Higher Education Commission, National Science and Technology Park, National University of Science and Technology, and SUPARCO. Representation from the Swiss side included experts from the Swiss Federal Office for Agriculture, Geneva Science Diplomacy Anticipator, Swiss Research Institute of Organic Agriculture, along with some major Swiss start-ups working in the clean technology sector.

Kuala Lumpur Engineering Science Fair (KLESF) and STEMSELS Foundation jointly organized the webinar on Ignite STEM INTEREST to combat AI GAME ADDICTION

STEMSEL Foundation in collaboration with Kuala Lumpur Engineering Science Fair (KLESF) organized a webinar on Ignite STEM INTEREST to combat AI GAME ADDICTION on 28 August 2021. The objective of holding this webinar was to enhance school students’ interest in science, technology, engineering and mathematics (STEM) subjects and to enhance the awareness of the public on the roles and importance of STEM to combat AI game addiction.

The event was moderated by Mr. Miroslav Kosteckí, the Chief Technical Officer at the STEMSEL Foundation. While Dr. Peng Choo, Director STEMSEL Foundation and Deputy Vice Chancellor (International Collaboration) was the keynote speaker. Dr. Choo underlined that with emergence of COVID-19 pandemic, a lot of students are exposed and attracted to addictive and harmful tools with wider exposure to internet. Dr. Choo in his talk presented the strategies to combat AI game addiction with effective use STEM education. President ECOSF Prof. Soomro was invited to join the webinar; wherein he participated and contributed in the discussions with particular reference to the STEM education programmes of ECOSF as well ISTIC Malaysia and the Belt and Road International Science Education Coordinating Committee (BRISECC); of which he is a member of Management Boards.

Ignite STEM INTEREST TO COMBAT AI GAME ADDICTION

ADA is also known as AI DRUG ADDICTION to describe AI GAMES ADDICTION, ASA is also known as AI STEM ADDICTION ADA ASA SUDA

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Date ▶ 28 August 2021 (Saturday)
Time ▶ 4.00pm - 5.00pm (MYT)
Registration Link ▼
<https://forms.gle/qR2145WB2v66vi1H7>
Platform ▼

zoom f LIVE

STEMSEL Foundation

Mr Miroslav Kosteckí (Miro)
Chief Technical Officer
STEMSEL Foundation Inc.
Pro-Vice Chancellor (Technology Transfer)
Central University Institute (CUIBa) of Bamenda, Cameroon

Dr Peng Choo
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Faculty of Engineering and Green Technology | UTAR Kampar Campus | klesf.net | study.utar.edu.my

President ECOSF participated as Panelist in the UNESCO Regional Consultation on Open Science Policy Strategy and Implementation

UNESCO Jakarta Office held a consultative meeting on Open Science on August 26, 2021 - as part of part of a series of regional consultations aimed at building a global consensus on open science. UNESCO has been developing a recommendation on Open Science, wherein Dr. Manzoor Soomro has been contributing as an expert; it will be considered at the next Session of the UNESCO General Assembly in Paris in November 2021.

As part of the mapping process, UNESCO invited President ECOSF Prof. Dr. Manzoor Hussain Soomro to participate in the Focus Group Discussion on Open Science Implementation in Pakistan. Other experts from Pakistan were Prof. Zabta Khan Shinwari of Pakistan Academy of Sciences and Dr. Tariq Bashir of Pakistan Council for S&T. The discussion centered around the ways and means to strategize the Open Science Policy framework.



To support the development of an implementation strategy and mechanisms to promote Open Science for accelerating SDGs in Asia and the Pacific, UNESCO Jakarta, the International Science, Technology and Innovation Centre for South-South Cooperation under the Auspices of UNESCO (ISTIC) and the International Science Council Regional Office for Asia and the Pacific (ISC-ROAP) have partnered together to seek consultative views on national implementation strategies and mechanisms to promote Open Science for Accelerating SDGs in Asia and the Pacific.

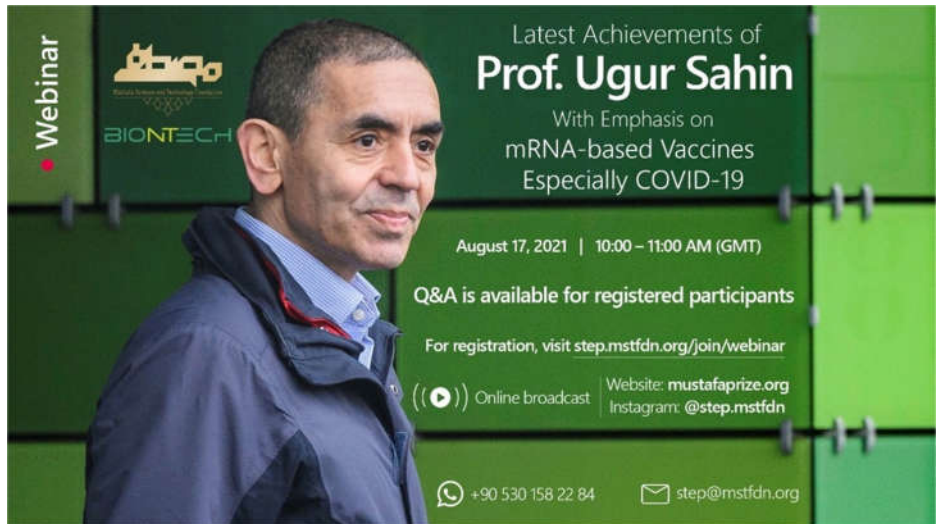
Mustafa Science and Technology Foundation (MSTF) and BioNTech jointly hold a webinar on Prof. Ugur Sahin's latest achievements; focusing on mRNA -based vaccines, especially COVID-19

Mustafa Science and Technology Foundation and BioNTech jointly held a webinar on Prof. Ugur Sahin's latest achievements; focusing on mRNA -based vaccines, especially COVID-19 on 17th August 2021. Prof. Shahin is the main scientist who developed the “Pfizer-BioNTech” vaccine for COVID-19. From ECOSF, President Prof. Manzoor Hussain Soomro participated in the event. Prof. Ugur Sahin, a 2019 Mustafa Prize laureate and the developer of the first mRNA-based Covid-19 vaccine, made a presentation and answered to questions from the audience.

Prof. Sahin first gave a general account of mRNA vaccines and principles of developing mRNA vaccines. Since years ago, Prof. Sahin has been working on developing mRNA-based vaccines for cancer patients, along with his team. They have reached “promising, encouraging results in disease control” regarding the actual use of this approach in cancer patients, starting from 2014. He said “For years, we have tried to optimize our mRNA approach.”

Prof. Sahin stated that his company, BioNTech, is primarily focused on cancer vaccine development, “but when we were hit by Covid-19 outbreak in China, we decided to use our platform to develop a vaccine for it.”

Just as in cancer vaccine development we were trying to identify tumor mutations, we went through the identification of the virus genetic sequence in developing Covid-19 vaccine. The only chief difference between their cancer vaccine and their Covid-19 vaccine, Prof. Sahin remarked, is that “in case of infectious disease vaccine, we use nucleoside-modified mRNA which improves the tolerability of the vaccine.” What is important to be regarded for virus variants, according to Prof. Sahin, is that there are 2 layers of protection against the virus.



The first layer is neutralizing antibody which inhibit the uptake of the virus—the entry of virus into the cells, but some viruses will escape it. The second layer of protection is T cells. “The first layer is prone to the escape of the virus, but for the virus it is much more difficult to escape from T cells,” Prof. Sahin noted, adding that “This type of T cell response is believed to protect us against variants, because variants might manage to escape antibody responses, but they have to deal with T cell responses.” “This is a protective layer not against infection, but against severe disease,” he continued.

Asked whether they are working on the issue of temperature in which this vaccine can be kept, Sahin replied: “When we first developed our vaccine, we had only data for storing mRNA vaccine at minus 80. We have now the data which allows us to keep the vaccine at 2-8°C for 4 weeks.” Sahin stated that even though high antibody loss was observed in the response of vaccinated subjects to some variants of the virus, “we still observed a high real-world efficacy of our vaccine against B.1.1.7 (Alpha) and B.1.351 (Beta) variants, based on a study in Qatar.”

Studies show that after about 6 months of getting two shots of the vaccine, the protection against disease declines, but still there is a protection against severe disease “for more than 90%,” Sahin highlighted. We have investigated that boosting the subjects who have already received two vaccine shots, increases the antibody level enormously. “So we believe that messenger RNA approach is suitable for boosting antibody,” he said.

Asked about those who can receive mRNA vaccine booster shot, Sahin highlighted that based on the studies conducted so far, “mRNA vaccine is a suitable booster” whether the recipient has previously been infected with Covid-19, and whether they have received other types of vaccine. Sahin continued: “Delta variant is prevented by our vaccine for about 85% to 90% based on a study from the UK, but we need to be aware that when antibody response declines, the protection declines too. So it is important to keep the antibody level high for prevention of infection.” Asked if he is now pursuing developing variant-specific vaccines for Covid-19, Sahin answered: “Yes, we have already started the clinical trial for Beta variant. We are now going to start a trial against the Delta variant in a few weeks.”

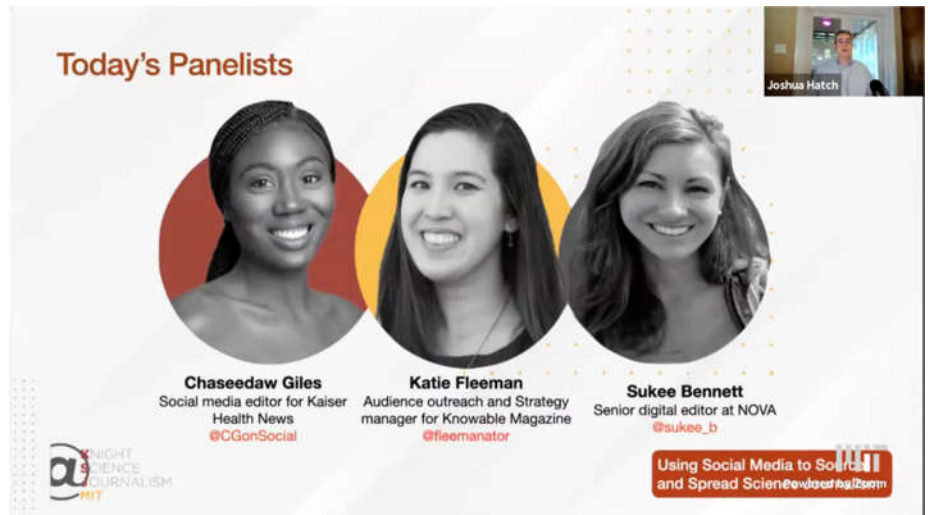
Noting that their vaccine is “the fastest vaccine developed in the history of medicine,” Sahin acknowledged the efforts of his team and his partners consisting of hundreds of people. Ugur Sahin was awarded the 2019 Mustafa Prize in Life & Medical Science and Technology for his achievements in “Development and Clinical Testing of mRNA-based Cancer Vaccines that are Tailored to the Mutation Profile of a Cancer Patient.”

ECOSF participated in the Webinar on using Social Media to Source and Spread Science Journalism organized by KSJ - MIT

The Knight Science Journalism Program at MIT hosted a webinar on “Using social media to source and spread Science Journalism” on August 26, 2021. This event was part of six-part webinar series from the Knight Science Journalism Program that aimed to empower science communicators, journalists and practitioners with insights, knowledge, tips, and resources needed to meet the highest standards of science journalism. On behalf of ECOSF, President ECOSF Prof. Dr. Manzoor Hussain Soomro participated in the webinar.

The webinar discussed the role of social media, and its effective use to promote science journalism and how people get their news and in what news people talk about. The event further sought to advance science journalism in the public interest by nurturing and enhancing the ability of journalists to effectively use the social media tool to promote science journalism and its intersection with human culture.

Following Speakers participated and contributed to the event:



- Chaseedaw Giles, Social Media Editor, Kaiser Health News
- Katie Fleeman , Audience Engagement Editor, Knowable Magazine
- Sukee Bennett, Senior Digital Editor, NOVA

ECOSF participated in the Virtual Dialogue on Pakistan E-Mobility Forum “A business Opportunity in Motion”

United Nations Industrial Development Organization (UNIDO) in collaboration with USAID and Private Finance Advisory Network organized the virtual dialogue on “Pakistan E-Mobility Forum” on August 26, 2021. The virtual event shed light on business opportunities in the electric mobility sector of Pakistan. The dialogues deliberated on PFAN’s value proposition to entrepreneurs in Pakistan and provided the way forward on how enterprises can from PFAN services in terms of access to finance. The event hosted a multi-stakeholder panel discussion around challenges and opportunities on raising capital for entrepreneurs in the electric mobility space. A number of policy, finance and industry experts representing the state institutions, academia, development agencies, and private, and industry sector participated in the event. On behalf of ECOSF, Engr. Khalil Raza Scientific Officer and an expert in the field participated in the event. It is pertinent to mention that ECOSF with the support of UNDP has recently contributed towards E-mobility policy and charging infrastructure for Pakistan.



President ECOSF attended PIDE Webinar "How Railways are being financed in the 21st century"

Pakistan Institute of Development Economics (PIDE) organized the series of webinar on Pakistan Railways. The first two webinars of the series on Pakistan Railways (PR) historically reviewed Pakistan Railways from pre-partition times till today. The third webinar discussed the current and international practices in Track Access Regime and the fourth webinar discussed China's railway sector in comparison with other large countries' railway sector: similarities and differences. President ECOSF attended the fifth webinar on August 04, 2021 on how Railways are being financed in the 21st Century and how the railway gets funds, Ways of financing, Policies for financing, and who are regulators of financing mechanisms.

The webinar was moderated by Dr. Naadeem ul Haque – the Vice-Chancellor of PIDE and the Co-Host of the webinar was Dr. Amer Zafar Durrani, President, Reenergia. On behalf of ECOSF, President Manzoor Soomro attended the webinar.

Distinguished Panelists included:

- Martha Lawrence: Leader of the Railways Community of Practice at the World Bank
- George Kaulbeck: Global Director and Partner Transport at CPCS - Solutions for Growing Economies, Consultancy
- Johan Bouwer: Chief Operating Officer at MavLOG
- Mr. Mazhar Shah: AGM Traffic, Pakistan Railways
- Mr. Farooq Hyder Shaikh: Advisor/Executive Director Business Planning, Pakistan Railways



Martha Lawrence from World Bank underscored that the best railway funding sources are passenger tickets, freight services, Government, and other services. She further said that Financing is easy, it's not magic. All one needs to do is "Risk Management", Business Environment, Sector Governance & Corporate governance.

George Kaulbeck, Global Director and Partner Transport at CPCS - Solutions for Growing Economies, Consultancy said that financing rail projects are generally straightforward when it is cash positive & profitable. Mr. Johan Bouwer, Chief Operating Officer at MavLOG discussed Commercial Railway Reality - funding & financing.

Farooq Shaikh, Advisor/Executive Director Business Planning, Pakistan Railways said that Pakistan Railways is currently at a loss, getting subsidies from govt, but aiming to go high in revenue & funding, discussed some key issues of Pakistan Railways with Future Strategy. He said that Cultural Change in Pakistan Railways is the biggest challenge. We are aiming to outsource our additional projects i.e schools, hospitals, buildings & housing projects, he said.

President ECOSF Participated in Teach a Kid Make Individual Life with Collaboration of Akhuwat Foundation Virtually Organized Annual conference titled “Reconstructing 22.8 million Broken Futures with Education”

Teach a Kid Make Individual Life with collaboration of Akhuwat Foundation Pakistan virtually organized the annual conference titled “Reconstructing 22.8 million Broken Futures with Education” on 15 August 2021. A number of leading experts representing philanthropy, academia and private sector and development agencies participated in the event. On behalf of ECOSF, President Prof. Manzoor Hussain Soomro participated in the event.

The Speakers Included:

- Dr. Muhammad Amjad Saqib, Founder & CEO ,Akhuwat Foundation
- Abid Gill- Deputy Chief Advisor, Advancing Quality Alternative Learning (AQAL) Project JICA
- Dr. Naweed Sayed - Professor & Research Director - University of Calgary
- Asim Hussain- CEO IGNITE (National Technology Fund)
- Zia -UI- Qayyaum ,V.C ,Allama Iqbal Open University
- Aisha Sarwari, Director Public Affairs and Sustainability at the COCO Cola Company

Upcoming Events posted on ECOSF website and Facebook page

5th Belt and Road Teenager Maker Camp & Teacher Workshop

“5th Belt and Road Teenager Maker Camp & Teacher Workshop” is being organized in September-November 2021 by Children & Youth Science Center (CYSC) of China Association for Science and Technology (CAST) co-sponsored by the Ministry of Science and Technology, People’s Republic of China (MOST) and CAST and supported by **ECOSF**, InterAcademy Partnership Science Education Program (IAP SEP), and Network of African Science Academies (NASAC). Due to COVID-19 pandemic, this year’s camp will also be held **virtually** as done last year.

Belt and Road Teenager Maker Camp & Teacher Workshop is an annual event aiming to strengthen cross-cultural exchange, promote international understanding, inspire innovation in young generation and also for all scientists and science teachers to promote mutual learning and fulfil their responsibilities in science education career. The event gives students the opportunity to cooperate with the best of their age at international level, to share ideas and study cutting-edge knowledge in science labs of top schools in China through hands-on experience and teamwork under guidance of experienced teachers.

In addition, Science education forum and teacher workshop would also be held for teachers and scientists to share educational practice of different countries and learn skills of STEM education. Belt and Road Teenager Maker Camp & Teacher Workshop also include diversified cultural and scientific programs including Chinese cultural experience and various visits. Last year, the mega event attracted over 2000 registered participants from more than 30 countries and regions.

As mentioned above, this year's camp will be online/virtual due to COVID-19 pandemic, hence, a dedicated website (<https://2021.brmakercamp.cyscc.org.cn>) is being created for the information and online registration which will open after **mid-September 2021** for the students and teachers. Till the time, 2021 year website becomes active, the interested participants can visit website of last year's camp (<https://2020.brmakercamp.cyscc.org.cn>) for the reference. **More information about the Camp can be obtained from the attached brochure.**

ECOSF invites nominations of teams from Schools and Colleges to attend the Camp and the Workshop. **Each participating team should comprise three junior high-school science students (aged 13-15) and one teacher. There is no restriction on number of teams this time so maximum teams are welcome.** 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.

For more information, please visit: <http://ecosf.org/5th-Belt-and-Road-Teenager-Maker-Camp>

2nd National Conference on Curriculum and Occupation

The University of Isfahan is organising the 2nd National Conference on Curriculum and Occupation in November 2021. The conference aims to highlight global approaches, and experiences of higher education curriculum and employability. The conference also seeks to answer the key questions as to "what is the role of curriculum in increasing the university students' employability?" By employability we do not mean the actual employment or job-placement, however, we mean the students' readiness to enter labor market after graduation.

The scholars are encouraged to participate and deliberate on the following areas:

- What kind of programs could help to increase the students' employability in your university or your country? How do these programs work?
- What are the role of academic subjects in this regard?
- What is the role of extra-curriculum programs? What is the role of other institutions that are adjunct to the universities?
- What are the resources and challenges of the student's employability in your university or your country?
- What is the role of the university and industry connection?

The delegates are invited to talk about these topics either with a focus on their university programs or on their country's experiences.

For more information, please visit: <http://www.ncco.1400.ui.ac.ir>

Conference dates: 9-10, & 16-17 November 2021

1st International and 3rd National Conference on Biomathematics at Damghan University, Iran

1st International and 3rd National Conference on Biomathematics will be held virtually on January 19-21, 2022 at Damghan University, Damghan-Iran. The conference is being organized by Damghan University of Iran and ECO Science Foundation (ECOSF) in collaboration of other Iranian Organizations. "The Conference on Biomathematics" intends to introduce the mathematical methods and models and their applications in medicine, biology, and environment. The current Conference provides a circumstance for scientists and researchers in various fields to come together to develop and apply mathematical and computational tools to study phenomenon in a wide range of life sciences and inter-disciplinary fields.

For more details about the conference, please visit: <http://biomath.du.ac.ir/en>