Iran supports COMSTECH activities for the development of OIC states, Ali Hosseini

COMSTECH in collaboration with Inter-Islamic Network of Science and Technology in Pakistan has inaugurated a two-day international advanced training course on "Intellectual property at COMSTECH." The inaugural session of the training was presided over by Ehsan Manouchehr Mohammadi Al-Armani, the Ambassador of Islamic Republic of Iran to Malaysia. COMSTECH is working on promoting bilateral and multilateral relations of Islamic countries to foster the development of science, technology and scientific capacity building. The important steps have been taken and there is a long way to go, Mr. Hosseini said. Mr. Hosseini said that Islamic world is full of talent and human capital which needs to be tapped for the development of Islamic world. He said that Islamic Republic of Iran always supports COMSTECH activities and hosts COMSTIC Networks in the fields of intellectual property and virtual universities of Islamic world. Mr. Hosseini said that intellectual property right preservance and protection are very important for the development of the country.

Translate Science in Urdu, Iqbal Advised the Father of Urdu Molvi Abdul Haq, Waliid Iqbal

COMSTECH organized a webinar on "Allama Iqbal's Perspective on Science and Technology" which was delivered by Professor mesh, the grandson of Allama Dr. Muhammad Iqbal. Waliid wrote that a few are aware that Iqbal had a complete understanding of all contemporary disciplines and had deep understanding of the scientific developments and philosophical debates of the 20th century. He said that Iqbal was well versed with the science and technology and the latest inventions in the fields of engineering and technology.

CG COMSTECH CALLS ON THE HEAD OF OIC-CERT

Coordinator General COMSTECH, Prof. Dr. M. Iqbal Chaudhary, proposed to the OIC Ministerial Commission for Information and Communication Technology (IMC) to develop the Cybersecurity Network on Islamic Children (Cнтер) and the Cybersecurity Centre for Islamic Countries (OIC-CERT). The proposal was taken up by the delegation of the Islamic Republic of Iran and Dr. Muslim M. Abdul Haq, the Secretary General of the Islamic Republic of Pakistan, and the Head of the OIC-CERT, Mr. Habib. It was decided that the OIC-CERT would collaborate with the OIC-STI Agenda for the development of cybersecurity infrastructure.

CG COMSTECH Calls on MSFIR and Director IMR, in Kuala Lumpur

Coordinator General COMSTECH, Prof. Dr. M. Iqbal Chaudhary, had a meeting with the High Commissioner of Pakistan in Malaysia, Mme. Amna Bano. The meeting was held at the Pakistan High Commission in Malaysia. During the meeting, the High Commissioner emphasized the government of Pakistan's commitment to the development of cybersecurity infrastructure in the country. The High Commissioner also highlighted the importance of the OIC-CERT and its role in promoting cybersecurity in the Islamic world. The meeting was attended by the Coordinator General COMSTECH, who expressed his gratitude to the High Commissioner for the important discussions. Both sides discussed the need for further collaboration in the field of cybersecurity and the importance of the OIC-CERT in promoting cybersecurity in the Islamic world.
Pakistan’s Food Security Challenge Needs a Systematic Approach, Experts Urge

Pakistan’s Food Security Challenge Needs a Systematic Approach, Experts Urge

The International Symposium on “Climate Change, Rice, and Wheat Production System” was held at the Faculty of Agriculture, University of Peshawar, with cooperation of COMSTECH, UPSG, SIWEN, SARCAN & Darwood Agro.

The keynote talks of eminent scientists emphasized design policies, indigenous farming solutions, and better management of the most important resources of soil and water to address the climate change crisis.

Chairman, PHEC, Prof. Shahid Mirza inaugurated the symposium saying that food security is strategically important for Pakistan to guarantee its food security, and the research and industry linkages could play a vital role in developing new technologies that would help farmers to enhance their yield under the changing climatic conditions.

Prof. Mirza said that the per capita annual water availability in Pakistan has dropped to 1,017 cubic meters from 5,390 in 1947 and may lead to absolute water scarcity by 2025. He said this will result in severe water shortages for the next generation of farmers. Future water requirements and challenges impose a serious threat to Pakistan due to its agrarian economy where white rice and wheat crops occupies the largest share. There is an urgent need to develop innovative solutions for efficient and sustainable use of water, improving nutrient use efficiency, reducing the crop losses from pests and diseases while conserving water, and other requirements are utmost priority in our national planning. We have started to see events happening this year, Post-COVID-19, the extreme heat in June, and the recent massive flooding in Pakistan which are unprecedented. Prof. Mirza mentioned that Pakistan will be importing 4 million tons of white rice per year due to its food demand, which is quite an alarming situation for our nation.

Program Manager COMSTECH, Mr. Khazir Mirza gave an overview of COMSTECH’s support for promoting science and innovation in the Muslim world to tackle the food security challenge.

Dean Faculty of Agriculture, Prof. Saleem Hayat welcomed the delegates who joined in-person and online audiences from Canada, the USA, India, Pakistan, and other countries.

Co-founder UPSG, Dr. Khalid Mahmood said that we are delighted to work with Punjab University to discuss the important subject of the Rice and Wheat system to address the challenges that we are facing due to the changing climate crisis. He said we need to better build collaboration, coordination, and communication among all the stakeholders.

Dr. Mahmood Fauqoo from Sultan Qaboos University in Oman said that the context of Pakistan as a rice and wheat producer in the world for developing scientific communication. The University had a dire need for a second green revolution to boost productivity. He mentioned the importance of strengthening communication links between farmers, academics, planners, and policymakers.

Mr. Abdul Hanif explained the features of SAWIET App that are available for farmers to freely disseminate the agricultural and developmental materials. SAWIET outreach program is supporting more than 0.6 million households.

SPCAI and COMSTECH Organize International Workshop on Artificial Intelligence

SPCAI and COMSTECH Organize International Workshop on Artificial Intelligence

Sino-Pak Center for Artificial Intelligence (SPCAI) located at Pak-Austria Fachhochschule-International Studies (PAFAST), and COMSTECH organized a two-day workshop on the role of Artificial Intelligence (AI) in healthcare, agriculture and energy in Southeast Asia. A total of 28 experts participated in the workshop.

The workshop started with the keynote address by Prof. Dr. Atta-ur-Rehman, Former Chairman, Prime Minister’s National Task Force on Science and Technology, Pakistan. Prof. Dr. Atta-ur-Rehman shared his views about the impact of AI on various walks of everyday life. He appreciated the remarkable increase of per capita internet usage and the publication of scientific papers in country.

The final session of the event was also addressed by the chief guest, Prof. Mohsin Mushtaq, Chair Professor of Computer Telecommunication, Dr. Atif, Professor of computer science, SPU, President SPCAI, Dr. Mohammad Mujahid, Rector PAFAST and Prof. Dr. Sohail Khoolia Husain, Advisor COMSTECH.

The workshop comprised of three technical sessions on healthcare, agriculture, and energy respectively. Each session was addressed by three field experts and followed by panel discussion. The workshop was attended by more than 300 participants in-person and online.

SPCAI is a center of excellence for delivering high-quality education, training and research in artificial intelligence. It has recently invested 65 million Rupees to support the creation and development of its Lab2Markat project that aims to develop artificial intelligence-based solutions in the emerging field of artificial intelligence.

COMSTECH is an OIC Ministerial Standing Committee on Scientific and Technological Cooperation headquartered in Islamabad and works for the socio-economic development of OIC member states.

COMSTECH and PNAC Ceremonial Accreditation Day

COMSTECH and PNAC Ceremonial Accreditation Day

COMSTECH and Pakistan National Accreditation Council (PNAC) jointly celebrated the accreditation day by organizing a seminar on “Accreditation for Quality and Competitiveness: Economic Development in OIC Member States.”

Maryam Tariq, Chairperson of COMSTECH Standing Committee for Ministry of Science and Technology, Mr. Ghulam Mohammad Memon participated as the chief guest in the event. He said that this is an honor to be able to reach such an august gathering of scientists, policy makers and diplomats.

He said today’s event emphasizes the importance of certification and its role for socio-economic development. Mr. Memon said that sustainable economic growth and poverty reduction can be achieved by augmenting the international trade, which can be only possible through robust accreditation, certification, quality and testing infrastructure recognized by the international standard.

Director General Punjab Agriculture Research, Mr. Muhammad Nawaz Khan, shared his views about the different developments of the Punjab Agriculture Department to develop available climate-smart varieties to address the water scarcity and heat challenge. He said that Rice and Wheat crop yields in Pakistan are low compared to the world due to an army of factors such as water scarcity, crop pests & diseases, infertility and improper use of fertilizers like nitrogen.

Director of Wheat Research Institute, Dr. Javed Ahmad said that the institute is trying to develop new germplasm to tolerate drought and heat and also improving the yields. The Director said that the institute has been working on developing new germplasm to tolerate drought and heat and also improving yields.

The Assistant Secretary General of Organization of Islamic Cooperation (OIC), Dr. Asma Drissi-Lalami, welcomed the participants and said that artificial intelligence is an extremely important tool for standardization of the processes and products, analytical and diagnostic tools that can help the OIC member states.

COIN Standing Committee Chairperson, Prof. Dr. Mubarak Chaudhary, welcomed the participants and shared some interesting thoughts on artificial intelligence with the participants.

The Director General COMSTECH, Prof. Dr. Ali Raza Chaudhry welcomed the participants and shared some interesting thoughts on artificial intelligence with the participants.

The event organized in collaboration with the Pakistan National Accreditation Council (PNAC). The PNAC is recognized by the Accreditation Board of Pakistan (ABP) and the OIC member states.

The event was attended by participants both in-person and online from different OIC member states.

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FROM PAGE 1

From Coordinator General’s Desk

A major shift in consumption pattern, global alliance for mitigation, remediation, building climate resilient communities, and nature-based solutions.

We need to understand and comprehend the last generation of human race which can save the planet from the brink of destruction.

COMSTECH – OIC ministerial standing committee on scientific and technological cooperation, in collaboration of several interna- tional organizations, is organizing a series of events as part of its “UNEP, ICARDA, IOF5, Sahel Coalition, Royal Scientific Society, Centre for Water Alternatives, Rural Water Studies, and POSTDAM Institute for Climate Impact Research, Germany and others are working to build cross-boundary alliances for climate actions and ecosystem restoration.

COMSTECH Forum on Environment and Ecosystem Restoration (CFEER) is a collaborative effort and joint initiative. We wish to invite member states, relevant OIC institutions, and interested organizations to participate in this joint initiative.

The meeting is expected to provide a comprehensive framework for the development of action plans and strategies to tackle the monumental challenges of climate change (www.comstech.org).
COMSTEC Contributes $5000 to Khwazmili International Award

Webinar on Machine Learning for Sustainable Urban Development

COMSTEC organized a webinar on Machine Learning and Data-Driven Policy Making for Sustainable Urban Development. Dr. Zhurah Khud, Associate Professor of Electrical Engineering, at the Lahore University of Management Sciences delivered this webinar.

COMSTEC is organizing an event to celebrate the 35th anniversary of the Khwazmili International Award, a prestigious award in the field of science and technology. The award, established by the Iran Science and Technology Research Institute (NSTRI), is awarded annually to outstanding individuals in various sectors of science and technology.

COMSTEC encourages the exchange of knowledge, ideas, and resources among scientists and researchers to promote scientific collaboration and innovation. The webinar focused on the application of machine learning and data-driven approaches to address challenges in sustainable urban development.

The webinar aimed to highlight the importance of integrating data and machine learning techniques to inform policy decisions and optimize urban planning. Speakers discussed the potential of these tools in areas such as renewable energy, urban mobility, and environmental sustainability.

Dr. Zhurah Khud emphasized the need for interdisciplinary approaches and highlighted the role of partnerships in advancing sustainable urban development. She also encouraged the audience to explore further opportunities for collaboration and innovation in the field of data-driven urban planning.

In conclusion, the webinar provided a valuable platform for discussing the latest developments in machine learning and data-driven policy making. It underscored the potential of these tools in addressing the pressing challenges of sustainable urban development and emphasized the importance of fostering partnerships and knowledge exchange among stakeholders in the field.

CG COMSTEC Calls on ED INTRAM and director IMR

Translate Science in Urdu, Iqbal Advised the Father of Urdovolv Abdul Ahad

The main aim was to encourage the translation of scientific books into Urdu so that Muslim students can understand scientific concepts.

Iqbal also mentioned that in 1932, Iqbal founded the Journal of the Punjab University, which opened the doors for modernist thinkers to help Muslims extricate themselves from the Western tradition and step into the field of modern knowledge.

Pakistan’s Food Security Challenge Needs a Systematic Approach

In his keynote address, Dr. Zahirul Islam, Director General of the National Agriculture Research Center, outlined the severe challenges faced by Pakistan’s agriculture sector. He highlighted the importance of adopting a systematic approach to address the food security challenge.

Dr. Islam emphasized the need for integrated approaches that encompass agricultural research, extension services, and policy interventions. He underscored the role of research institutions and policymakers in fostering innovation and adopting modern agricultural practices.

The keynote speech was followed by a panel discussion featuring experts from various sectors, including agriculture, economics, and policy. Participants emphasized the need for interdisciplinary collaboration to develop sustainable solutions.

The event was organized by the Pakistan Agricultural Research Council (PARC) in collaboration with the International Institute for Sustainable Development (IISD). The organizers expressed their gratitude to the sponsors and acknowledged the efforts of all those involved in making the event a success.

The participants were encouraged to continue their efforts in addressing the food security challenge and to work towards a more resilient and sustainable agricultural system.

Dr. Zahirul Islam concluded by reiterating the importance of maintaining a strong focus on agricultural research and development, particularly in the context of global food security challenges.

The event was well-received, with attendees expressing appreciation for the insightful presentations and the valuable discussions. The organizers looked forward to organizing similar events in the future to continue the dialogue on this critical issue.
Webinar on Genomic Characterization of Neuromuscular Disorders in Pakistan

COMSTECH, Dr. Paraj杭州 Center for Molecular Medicine and Drug Research (PCMDM), Responsible for the event (phub) Science and Technology Foundation and Siddh Innovation, Research, and Education Networks jointly organized an international webinar on “Genomic Characterization of Neuromuscular Disorders in Pakistan.” This was the third webinar of the PCMDM-Royan Institute webinar series. This webinar series is a joint venture of PCMD and Royan Institute, Iran. It is held physically in Pakistan and Iran and people around the world join through a Zoom virtual platform.

Dr. Ishiqi Ahmad Khan, Associate Professor at the Dr. Paraj杭州 Center, conducted the webinar. He highlighted the genomic characterization of neuromuscular disorders in Pakistan. He said neuromuscular disorders are heterogeneous group of disorders, they affect the peripheral and central nervous system. Dr. Ishiqi talked about neuromuscular disorder and its impact on the prevalence of this disorder in Pakistan. He said Pakistan lies in the region which is under high burden of neuromuscular disorder and the basic reason is consanguineous marriages. Dr. Ishiqi mentioned that neuro-muscular conditions pose a great diagnostic challenge due to complex clinical presentation, phenotypic overlap, and rare disorders. He said that next-generation sequencing and bioinformatics are very helpful in diagnosing neuromuscular disorders. Dr. Ishiqi said that Jamilur Rahman center for genomics research center at the ICBS is first genomics facility in Pakistan. He said this center is providing training to researchers from all over Pakistan.

Dr. Ishiqi Ahmad Khan is Associate Professor at the Dr. Paraj杭州 Center. He is Ph.D. from the H. E. J. Research Institute of Chemistry, ICCBS, University of Karachi, and post-doctoral fellow from the Shenzhen China, and the Sanger Wellcome Institute, Cambridge.

His research group is working on microbial, viral, and human disease genetics. During the webinar, his group carried out genome surveillance studies on SARS-CoV-2 and contributed to informed decision-making at the national level.

News from OIC Member States

SIERRA LEONE
Sierra Leonean Student Wins Inaugural $100,000 Global Student Prize

Jeremiah Thononko, a student from Sierra Leone who invented a device that uses kinetic energy from traffic and pedestrians to generate clean power, has been named the winner of the Chegg Global Student Prize 2022. Jeremiah is the first winner of this new $100,000 award, which is given to one exceptional student who has made a real impact on society.

Jeremiah, a 21-year-old student from Freetown, Sierra Leone, was selected from over 3,590 nominations from 94 countries around the world. As part of a virtual ceremony broadcast from UNESCO’s headquarters in Paris, the Vicky Foundation launched the Chegg Global Student Prize earlier this year, a sister award to the US$400,000 Global Teacher Prize, to create a powerful new platform that shines a light on the extraordinary achievements of students everywhere who, together, are reshaping our world for the better. Jeremiah has been studying electronics and computer science for almost 16 years, his older sister enrolled him in an academic institution to train and support him. Part of this work included learning coding in Python, and the pair have since published some scientific papers.

The $100,000 prize is intended to provide Jeremiah with the resources to further his studies and continue his work, which he says is a form of natural historical science.

BURKINA FASO
Burkina Faso Providing Urban and Rural Students Equal Opportunities to Study Science

OUAGADOUGOU, January 13, 2022. In 2017, Burkina Faso embarked upon a program to build schools for science education in all 12 regions of the country. The most deserving students can now attend these institutions, which prepare them to face the tertiary level and help them on track to fulfilling their dreams.

The high schools for the teaching of science have become centers of excellence for students, both boys and girls, as well as between rural and urban settings.

One of these schools is the Science High School of Ouagadougou built in 2017 and financed by the World Bank through the International Development Association. Since its opening the school has consistently recorded 100% pass result in the Bachelor’s degree, says Jean Paul Bouboundji, headmaster of the school.

To deal with the drug shortage of science teachers, as well as the lack of some key materials of science, the Government of Burkina Faso is planning to build at least one science high school in each of the 13 regions of the country. Statistics from the Ministry of National Education, Literacy and the Promotion of National Languages state that by date, there are 14 affiliated science high schools, with two national schools (in Ouagadougou and Bobo-Dioulasso), and 12 regional science high schools. A total of 1,175 students are enrolled in these institutions, with 727 boys and 448 girls. Students come from all over the country, and are chosen on the basis of their performance in the Bryt des Etudier du Premier Cycle (BEP).

Morocco
Morocco Establishes Its First Green Hydrogen Production System

RABAT - Morocco's Research Foundation for Solar Energy and New Energies (IRESEN) announced that it "successfully completed" the installation of its first micro-pilot green hydrogen production system.

The pilot project consists of an electrolyzer with a capacity of 20 kW and a Photovoltaic (PV) solar panel. The electrolyzer used to produce carbon-free hydrogen from water will undergo tests in the upcoming days.

The green hydrogen that will be generated in this facility is used to generate green ammonia, green methanol, and green electricity. The system will train and upskill students, researchers, engineers, technicians, and managers.

IRESEN, Moham Med VI Polytechnic University (UM6P), the R&D Board of Directors, and the Higher Education Commission and the Green H2 Morocco Cluster. Inaugurated in the Green Energy Park of Benguerir, the project is part of the "Power-to-X" platform, which was launched by IRESEN and UMEP.

It is set to advance sustainable mobility and renewable electricity storage in Morocco, using hydrogen and fuel cells.

As Morocco continues to invest in upgrading its already largely advanced renewable energy infrastructure, numerous recent reports have confirmed the country's potential to produce green hydrogen at a low cost to meet domestic demands and even support energy security in Europe.

In June, the International Renewable Energy Agency (IRENA) reported that Morocco is one of the top producers of solar and wind power, and that the country's green hydrogen production cost in 2050, ranging between roughly $2.50 and $3.50 per kilogram.

The kingdom ranked third behind China and Chile, placing it ahead of the European Union and other global energy sector such as Australia, Mexico, India, and USA.

Kazakhstan
Kazakhstani Scientists Present Unique Technology to Solve “The Millennium Problem”

NUR-SULTAN, KAZINFORM: The researchers from Kazakhstan had found a possible solution to the second of the seven ‘millennium problems’ - the problem of equality of P and NP classes. Their essence is as follows: if a positive answer to a question can be quickly checked, then can the conclusion to this question be also quickly found?

The presentation of the algorithm took place at the site of the National Pavilion of the Republic of Kazakhstan as part of Expo 2020 Dubai.

This is a complex problem of modern computer science and its solution can fundamentally change the principles and speed of computer manipulation processes of any type of data.

On the second day, only the Poncelet conjecture was solved, being a part of the most important problems in mathematics formulated by the famous Clay Institute. The institute had appointed a reward of $1 million for solution of each of the seven problems. The new development can mean a gigantic step for the entire world community. The researchers have immediately proposed the practical application of their work results.

So, according to the results of a 4-year period of scientific research, the scientists have created a polynomial algorithm for solving the NP-complete problem. This is a computer code, and reliable data and quick results can be obtained faster than any existing exact methods with it.

The scientific discovery was made using the technique of the Kazakh scientist Bakhyrgyzy Sinchez - the Doctor of Technical Sciences, Professor, head of the Laboratory of the University of Information Technologies, one of the developers of the Kazakh expert system of "Bakerat" spacecraft.

According to developers, the algorithm is able to produce accurate results faster than any existing methods. Thus, all computer modeling tasks requiring large time and material resources can be accomplished much more quickly.

The scientists have tested the algorithm's effectiveness and its effectiveness on the example of competitive task posted on special report of Kaggle due to detect the coronavirus infection. The Kazakhstani team have managed to find solutions 10 times faster than the best algorithm presented on the resource.

The technology can change the future of all mankind having gained practical application in all fields of knowledge.