



COMSATS Newsletter

Commission on Science and Technology for Sustainable Development in the South (COMSATS)

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Executive Director COMSATS, Amb. Dr. M. Nafees Zakaria, represented the organization at COP28, UAE, presented Policy Intervention on 'Climate Justice Diplomacy'. This and more on page 03.

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From the Executive Director's Desk

21st century experiencing emergence of new technologies, which has resulted in the rapid development in science and technology, with excessive ingress into common men's daily lives. In this rapidly changing world marked by transformative shifts in technology, demographics, environment, and geopolitics, we find ourselves presented with a complex tapestry of challenges and opportunities. Those lacking basic infrastructure with knowledge gap should be struggling to keep pace with the developments and benefit. I am specifically referring to the developing countries.

Economic strength of countries are directly linked to the technologies. Besides the economic benefits that come with the ownership of the technology, knowledge and innovations, the daunting challenges that we are faced with in the contemporary times can also be addressed. Application of the challenges such as food security, national healthcare, poverty, environmental degradation, climate change adversities, digitalization and digital divide, and so on, when addressed, it would have direct bearing on the socio-economic uplift of the people and the economy. **R&D** is the key to continuous progress in technology. In the developing world there is dire need to support higher education institutions, which are the crucibles that will shape the next generations of scientists, innovators, and scholars.

Ownership of inventions and knowledge have brought a windfall of wealth to the countries, mostly belonging to the Global North, and drew a defining line with the Global South. In every phase of tech development, R&D remained the prime mover of

technological development in the global north. In this context, the official support of the governments, alignment of technology and academia with the industry and mutually beneficial cooperation among them were pivotal in the phenomenal collective rise of the Global North.

But it is also a fact that the developed countries have indeed capitalized on the talent from the South. Global South has its own strengths, the immense human resource that has been instrumental in the gradual shifting of the global economy's centre of gravity from North to South. It is important to galvanize this strength by the Governments in the South. Investment in education, aligning it with the production sector, and intra-South reliance are the areas to be focused and supported through policy instruments. By pooling resources and expertise, nations can better navigate through unforeseen challenges.

COMSATS has been facilitating S&T exchange, knowledge networking, capacity-building, and facilitating collaborative research among its 27 member countries. Utilizing the expertise and technological resources available at its 25 Centres of Excellence, COMSATS has been executing innovative programmes for the benefit of Member States. The induction of the University of Granada, Spain, as a Centre of Excellence of COMSATS is a landmark, as it is the first European entity to be inducted. Thus, opening a new chapter under South-North cooperation.

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HIGHLIGHTS FROM COMSATS SECRETARIAT

COMSATS Elected as Member of ANSO Governing Board

COMSATS has been elected as a Member of the Governing Board of Alliance of International Science Organizations (ANSO). The decision was made during the 3rd ANSO General Assembly, held in Chongqing, China, on 4-5 November 2023. The six elected members of ANSO Governing Board also include two Centres of Excellence of COMSATS, the Scientific and Technological Research Council of Türkiye (TUBITAK), Türkiye, and the National Research Centre (NRC), Egypt.

ANSO is an international scientific organization in China, aligned with China's 'Belt and Road Initiative' of shared development and achievement of the UN SDGs. ANSO members include research institutes and international organizations besides the academic institutions. COMSATS has been a member of ANSO since 2019.

The Executive Director COMSATS, Ambassador Dr. Mohammad Nafees Zakaria, participated in the 3rd ANSO General Assembly, and gave advices on ANSO's future development strategy and priorities. He expressed pleasure on COMSATS becoming a part of ANSO Governing Board, and undertook to play an active role. The ANSO Governing Board, inter alia, formulates the annual plan of the organization; implements the decisions made by the General Assembly; approves programs, activities and their budgets; and carry out fund-raising activities.

During his weeklong visit to China, the Executive Director also had an interaction with the Minister and Secretary CPC Leading Group for Ministry of Science & Technology of China, Mr. Yin Hejun, Minister of Higher Education, Research & Innovations of Oman, Prof. Rahma Ibrahim,



Cambodia's Minister for Industry, Science, Technology & Innovation, Mr. Hem Vanddy, and Minister of Science and Innovations of South Africa, Mr. Bonginkosi Emmanuel Nzimande.

Amb. Zakaria also held meetings with Heads/High Officials of ANSO and other International Partner Organizations. He also participated in other high-level forums of S&T exchange and hold meetings with senior officials of key scientific institutions of China.

Collaborative Events

Training Workshop on Intellectual Property and Bilateral Agreements

COMSATS, in collaboration with the Intellectual Property Organization (IPO) Pakistan, organized a two-day training

workshop on Intellectual Property Rights and Bilateral Agreements on 19-20 December 2023. The event brought together a diverse group of participants from around the world, featuring insightful sessions by national and international experts.

The Executive Director COMSATS, Ambassador Dr. Mohammad Nafees Zakaria, emphasized the role of robust Intellectual Property Rights (IPR) protection in fostering the growth of knowledge-intensive industries. Diversification of the economy beyond traditional sectors, he noted, contributes to greater resilience and sustainability. Clear and enforceable intellectual property laws were highlighted as catalysts for collaboration between academia, research institutions, and the private sector.





Ambassador Farukh Amil, Chairperson of IPO Pakistan, delivered an insightful talk on the role of intellectual property in the modern era and the significance of IPR and agreements in addressing global challenges. Ms. Shazia Adnan, Director General of IPO Pakistan, underlined the challenges and highlighted the opportunities in the evolving landscape of intellectual property.

The two-day workshop featured a series of technical sessions, interactive Q&A sessions, and presentations by experts from around the globe. The keynote speakers, including the Secretary-General of the International Network for Small and Medium-Sized Enterprises (INSME) and the Executive Director of the South Center, provided profound intellectual discourse on the interconnectedness of Intellectual Property Rights and SMEs, and the relationship between IP, innovation, and economic growth. The diverse pool of trainees included participants from Syria, Kazakhstan, Gambia, Ghana, Nigeria, Bangladesh, Sri Lanka, Iran, Palestine, Yemen, and Pakistan.

The workshop helped exchange of views and knowledge to help bridge the gap between theory and practice, equipping participants with practical insights into intellectual property management.

Seminar on World Science Day for Peace and Development 2023

COMSATS, in collaboration with the United Nations Educational, Scientific and Cultural Organization (UNESCO) Pakistan, Pakistan Science Foundation (PSF), and the ECO Science Foundation (ECOSF), held a "Convention of Scientists" to commemorate the World Science Day for Peace and Development, on November 15, 2023, at the premises of PSF, Islamabad. The event's theme "Strengthening High-Quality STEM Education for Sustainable Development", was aligned with the theme of this year's Day – "Building Trust in Science".

The event was opened by Prof. Dr. Shahid Mahmood Baig, S.I., Chairman of Pakistan Science Foundation (PSF). In his welcome remarks, Dr. Baig noted that the observance of World Science Day prompts us to reflect on the profound impact that science has had on each of us, permeating various aspects of our lives.

Dr. Seyed Komail Tayebi, President ECO Science Foundation (ECOSF), underscored the pivotal role of STEM education as the driving force behind economic development in the 21st century. Recognizing its transformative impact, he further opined that STEM education is the key facilitator in

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COMSATS has recently ventured into a series of new initiatives in the fields such as Artificial Intelligence based Data Analytics, Genome Sequencing, IT Trainings, Precision Agriculture, Renewable Energy, Electric Vehicles, Tech-enabled Health Units, Drone Technology.

I am glad to share that COMSATS has been elected as a Member of the Governing Board of the Alliance of National and International Science Organizations in the Belt and Road Region (ANSO) during the 3rd ANSO General Assembly held in Chongqing, during November 2023. The board Member discussed and charted ANSO's future development strategy and priorities. The International Forum on Innovative Development of Biomanufacturing held in Tianjin, during November 2023, Collective approach and sharing of knowledge and expertise was agreed as key to keeping pace with developments in Biomanufacturing sector and to address the multifaceted developmental challenges facing the developing countries.

I was invited to speak at the 6th Biennial Research Symposium / International Research Symposium – 2023, held in Colombo, whereby I highlighted the fundamental role of research, development and innovation in shaping the future. In order to excel during this Fourth Industrial Revolution, developing nations must devise strategies, embrace digitalization, invest in knowledge and skills. The role of robust Intellectual Property Rights (IPR) protection in fostering the growth of knowledge-intensive industries is pivotal.

Recognizing the importance of the Climate Change, COMSATS actively participated at the United Nations Climate Change Conference (COP28) at Dubai in December 2023. Honoured to make policy intervention on '**Climate Justice Diplomacy**' at the High-Level Segment. The Global South with least share in global environmental pollution is the biggest sufferer, is a point to ponder. While industrial activities have degraded environment over decades, undoubtedly, the wars have destroyed environment instantly on much larger scale. The Militaries contribute 5.5% of GHGs emissions but remained exempt from accountability in Kyoto Protocol and Paris Agreements. A critical review to ascertain how effectively COP process has helped in compensating and enabling the countries least responsible for the environmental damage is needed. It is important that the technologically advanced and economically powerful nations share greater responsibility.



equipping individuals with the essential skills required to navigate and excel in an increasingly technological and interconnected global landscape.

In his remarks on the occasion, Ambassador Dr. Mohammad Nafees Zakaria, Executive Director COMSATS, highlighted the pivotal role of science, technology, engineering, and mathematics (STEM) in addressing the contemporary challenges faced by the international community, including health crises, climate change, and poverty challenges, emphasizing a growing trend of prioritizing STEM education as an investment in the future. He stressed the importance of global efforts to invest in their education and nurture their talent for a

brighter tomorrow. Amb. Zakaria also highlighted COMSATS' instrumental role in propelling innovation and advancement, inter alia, through capacity-building, and collaborative research and development.

During her keynote lecture on high-quality and equitable STEM education, Prof. Dr. Abida Raza Rao, the Technical Director of the National Center of Industrial Biotechnology (NCIB) at PMAS-Arid Agriculture University Rawalpindi, highlighted challenges associated with STEM education and its integration into mainstream educational practices. She also offered practical solutions to overcome the hurdles in the endorsement and adoption of science in the daily lives of the general

populace.

The Chief Guest of the event, Dr. Youssef Filali Meknassi, UNESCO Representative and Director in Pakistan, considered building trust in science crucial for strengthening the foundation of research-based policy decisions and their acceptance by society. Remarking on stark gender disparity in STEM education and careers, Dr. Meknassi considered it crucial to address relevant obstacles to ensure equal participation of women and girls in STEM, preserving talent, and encouraging diverse perspectives. He further apprised that UNESCO is actively supporting member states in addressing these challenges through initiatives, such as the UNESCO Laurel Award for Women in Science, UNESCO Kalinga Prize for the Popularization of Science, and others, aiming to promote gender equality and encourage the active engagement of women and girls in STEM fields.

Cooperation Agreements

Food Security and Agriculture Center of Excellence (FACE)

On November 17, 2023, COMSATS and the Food Security and Agriculture Center of Excellence (FACE) – Fauji Fertilizer Company (FCC) signed a Memorandum of Understanding (MoU),



aimed at addressing the challenges in Agriculture productivity posed by climate change and ensuring food security.

Ambassador Zakaria and Mr. Hasan Akram, the Chief Operating Officer of FACE, signed the MoU on behalf of their respective organizations. Senior representatives from both organizations were present to witness the ceremony. COMSATS established its Centre for Climate and Sustainability (CCCS) for an exclusive focus on climate change and environment related issues by forging cooperation with partner organizations.

Within the framework of this MoU, COMSATS and FACE are committed to fostering the adoption of innovative technologies and implementing sustainable farming practices. The collaboration includes joint research initiatives, capacity-building activities and knowledge sharing in various areas, including integrated pest management, quality seed production, CRISPR-Cas9 technology, and scientific solutions for land reclamation and water resource management, particularly in climate-vulnerable areas. Their joint endeavors aim to confront the dynamic challenges presented by climate change in the agricultural sector, promoting smarter, adaptive, and resilient agriculture to bolster food security. This strategic partnership aligns with the shared commitment of COMSATS and FACE to address critical challenges in agriculture, leveraging technology and sustainable practices to ensure a more resilient and food-secure future.

Directorate General of Science and Technology, Government of Khyber Pakhtunkhwa (DGST-KP)

COMSATS signed a cooperative agreement with the Directorate General of Science and Technology, Government of Khyber Pakhtunkhwa (DGST-KP) on November 22, 2023.



The agreement between COMSATS and DGST-KP was signed by Ambassador Dr. M. Nafees Zakaria, Executive Director of COMSATS, and Dr. Sajid Hussain Shah, Director General of DGST-KP on behalf of their respective institutions. The areas of cooperation envisioned, inter-alia, include: IT and Digitalization, Climate Change and Environment, Human Resource Development, Skills Development, Electric Vehicles, Renewable Energy, Natural Resource Exploitation (Gemstones and Mines), Micro Hydro Plants, and Biomedicine.

The signing ceremony was witnessed by the Provincial Minister for Science and Technology and Information Technology, Khyber Pakhtunkhwa, H.E. Dr. Najeebullah Marwat and Ambassadors and diplomats of Azerbaijan, Ethiopia, Jordan, Kazakhstan, Morocco, Nigeria, Syria, Yemen, as well as Heads and senior officials of government departments.

Rawal Institute of Health Sciences (RIHS)

Another agreement was signed on November 22, 2023, with Rawal Institute of Health Sciences (RIHS). This MoU was signed by Co-Chairperson Board of Directors, Mrs. Saleha Khaqan, on behalf of the Institute that formalized relations for cooperation in the field of health and education.

COMSATS and RIHS plan to cooperate in the areas related to health sector, inter-alia, including AI-based solutions, people's health and environment, internationalization of medical education and facilities, human resource development, electric vehicles for persons with physical disabilities.

The Minister for ST&IT, Khyber Pakhtunkhwa, province of Pakistan, informed that a research agenda for academia in the province is being launched soon that will allow for standardizing and establishing centralized and regional labs on the model of Innovate UK.

Addressing the gathering, Ambassador Zakaria informed that COMSATS has recently signed agreements with a number of departments of Government of KP and private companies facilitating R&D and technology transfer.

COMSATS' Activity with Centres of Excellence

ED COMSATS as Special Guest at International Research Symposium, Sri Lanka

The Centre of Excellence of COMSATS in Sri Lanka, Industrial Technology Institute (ITI), organized its 6th Biennial Research Symposium/International

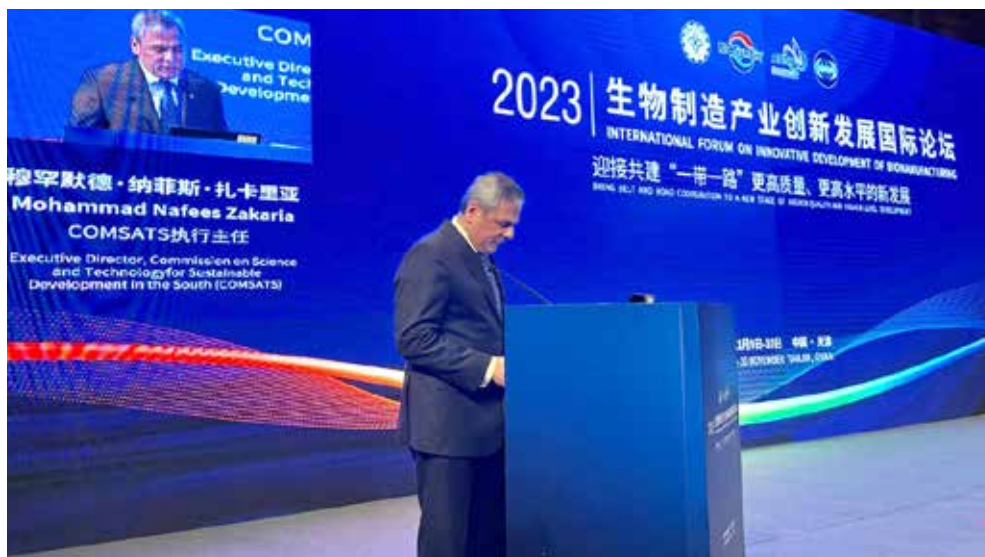
Research Symposium – 2023, on 7-9 November 2023, in Colombo. The event is organized as a biennial event to promote scientific and technological research for the advancement of industries in the country.

Held on 7th November 2023, the inaugural ceremony of the event was presided over by the Hon. Dr. Ramesh Pathirana, Minister of Industries and Health, Govt. of Sri Lanka, attended the ceremony as the Chief Guest, while the Executive Director COMSATS, Ambassador Dr. Muhammad Nafees Zakaria, made online participation as a Special Guest. Scientists and scholars from various countries of the world, representatives of international organizations, and officials from Sri Lankan government/institutions participated in the event.

Speaking on the occasion, Dr. Zakaria highlighted the pivotal role of collaboration among governments, academia, industry, and society in harnessing the advantages brought forth by Industry 4.0. He introduced COMSATS' initiatives for Member Countries in areas such as AI-based data analytics, digitalization and IT training, precision agriculture, renewable energy, industrial biotechnology, tech-enabled health sciences, climate and environment, and electric vehicles. Amb. Zakaria conveyed COMSATS' readiness to collaborate with institutions with similar mandates for aiding Member Countries' technological pursuits in line with United Nations Sustainable Development Goals. He also highlighted the mutually beneficial cooperation taking place between COMSATS and ITI.

TIB-China – COMSATS Organize International Forum on Biomanufacturing

Tianjin Institute of Industrial Biotechnology (TIB), COMSATS, and



Alliance of International Science Organization (ANSO) organized a 2-day International Forum on Innovative Development of Biomanufacturing in Tianjin, China, on 9-10 November 2023, from the platform of COMSATS Joint Centre for Industrial Biotechnology (CCIB).

Executive Director COMSATS, Ambassador Dr. Mohammad Nafees Zakaria, in his remarks at the opening ceremony, underlined cross border ties for strengthening biomanufacturing sector to addressing the multifaceted developmental challenges being faced by the humanity, like climate change, population growth, environmental degradation, emergence of diseases and pandemics. He said the collaboration will yield tangible outcomes in areas of healthcare, agriculture, and environmental sustainability.

Earlier in his welcome remarks, Prof. Yanhe Ma, Director General, TIB, expressed delight in collaborating with COMSATS. He recalled that this collaboration led to the establishment of CCIB in 2021. The 10th anniversary of BRI that preceded the event, marked the prosperous industrial development of biomanufacturing sector in China.

In order to facilitate R&D activities in the Member Countries, COMSATS and TIB signed the milestone agreement to launch 'China-COMSATS Belt and Road Joint Laboratory on Industrial Biotechnology' on the occasion. These cooperative arrangements are in line with the goals set out by President Xi, Prof. Yanhe Ma noted.

Prof. Jinghua Cao, Executive Director, ANSO, expressed appreciation for Chinese Academy of Sciences, COMSATS and various other agencies and stakeholders for enabling ANSO to play its role in promoting practical ways in building scientific capacity.

Mr. Zhengyu Wang, Deputy Director of the International Cooperation Bureau, Chinese Academy of Sciences, thanked TIB and COMSATS for their work towards helping China achieve BRI objectives in line with national agenda of net zero carbon emission.

Ms. Rongfang Wang, Director General for International Cooperation, Ministry of Science and Technology of China, expressed satisfaction that TIB has been working closely with ANSO and COMSATS. She reassured her Ministry's strong support to the efforts and initiatives towards such a cooperation.



Important Meetings of Executive Director COMSATS

Vice Minister for S&T of China

On November 7, 2023, the Executive Director COMSATS, Ambassador Dr. M. Nafees Zakaria called on the Chinese Vice Minister for Science and Technology, H.E. Zhang Guangjun, in Chongqing, China. The two exchanged views on areas of mutual interest with the view to diversify cooperation under the existing MoU between COMSATS and MoST-China.

The meeting was organized on the sidelines of the launch of 1st Belt and Road Conference on Science and Technology Exchange (BRST), hosted by MOST, Chinese Academy of Sciences (CAS), and other governmental and provincial departments.

China is one of the founding members of COMSATS with two Chinese institutions as part of COMSATS' Network of Centres of Excellence (CoE); Tianjin Institute of Industrial Biotechnology (TIB) and International Centre for Climate & Environmental Sciences (ICCES). Association with

Chinese Academy of Sciences (CAS) and Alliance of International Science Organizations (ANSO) further strengthens the cooperative bond with Chinese institutions. This Vice Minister was of the view that institutional linkages may be increased to broaden the scope of cooperation.

His Excellency appreciated the COMSATS' participation at BRST event and its efforts towards promoting South-South Cooperation.

Amb. Zakaria congratulated the successful launch of BRST with significant international participation and thanked MoST-China for their hospitality. The Executive Director also expressed gratitude to the leadership of Ministry of Science and Technology, and the Government of People's Republic of China for the support extended to COMSATS. He appreciated the spirit of BRI – shared progress and prosperity which he found in line with COMSATS' mandate.

Both sides identified areas pertaining to the emerging technologies and scientific fields for exploring the potential for cooperation. Amb. Zakaria also proposed cooperation between

academia and educational institutions. He termed such a cooperation key to bringing people of different origins and cultures closer.

The Vice Minister Zhang welcomed the proposals and desired a close follow-up.

Minister of Railways, Government of Pakistan

Ambassador Zakaria called on the Federal Minister for Railways, Communication and Maritime Affairs, Government of Pakistan, Mr. Asif Ashraf Tarar, on November 28, 2023. The meeting was held at Mr. Tarar's office at Ministry of Railway, Islamabad.

Dr. Zakaria introduced to the honourable Minister COMSATS as an intergovernmental organization of 27 member states and discussed matters of common interest between COMSATS and esteemed Ministry of Railways, Communication & Maritime.

The Minister appreciated COMSATS' mandate being pursued under Dr. Zakaria's leadership and reciprocated the intent of working towards possible cooperation.

SPECIAL SECTION: COMSATS@COP28: PARTICIPATION IN UNFCCC HIGH-LEVEL SEGMENT, EXPERT PANEL, AND SIDELINE EVENTS & MEETINGS

A major highlight of COMSATS' activities at the tail-end of 2023 was the organization's participation in the 28th Conference of Parties (COP) of the United Nations Climate Change Conference (UNFCCC), held in Dubai, UAE, from 30th November to 13th December 2023. Executive Director COMSATS, Ambassador Dr. M. Nafees Zakaria, participated in the event, inter alia, with policy intervention presented at the high-level segment of UNFCCC. Here is a glance at COMSATS' interventions and activities at and on the sidelines of COP28, UAE.

High-Level Segment of United Nations Climate Change Conference

The Leaders/Representatives of the UN member states and Executive Heads of IGOs made their respective policy interventions on 'Climate Justice Diplomacy' at the High-Level Segment of UNFCCC at Dubai, on December 9, 2023.

The Executive Director COMSATS, Ambassador Dr. M. Nafees Zakaria, was also invited. Ambassador Zakaria stated that the countries in the Global South, particularly the Indus Basin States

having population of about 300 million, are grappling with the consequences of climate change. He noted that the changing climate is causing security risks intrinsically linked to the stress on resources, which warrants urgent action. While acknowledging the fact that industrial activities have degraded environment over decades, he noted that wars destroy environment instantly on much larger scale. He underlined that Militaries contribute 5.5% of GHGs emissions but remained exempted from accountability in Kyoto Protocol and Paris Agreements. He stressed the need of an impact assessment of wars and military exercises to make the countries concerned responsible for the damage caused.

The Executive Director COMSATS stated that a critical review is needed to ascertain how effectively COP process has helped in compensating and enabling the countries least responsible for the environmental damage. He considered it important that the technologically advanced and economically powerful nations share greater responsibility, but also highlighted the need for greater efforts by developing states. He applauded the establishment of 'Loss and Damage Fund' and hoped for its early

operationalization. Ambassador Zakaria called for leveraging the collective strength of world leaders, national policy makers, and scientists, under this new era of climate diplomacy to ensure a shared promising future. He stated that Intergovernmental Organizations like COMSATS can play an important role in this regard. Ambassador Zakaria informed that COMSATS, having dedicated Centre for Climate & Sustainability (CCCS) with Membership of 20 countries and 24 Institutes, organizes Programs for awareness, capacity building, policy initiatives, and research & development.

Expert Panel Discussion on Leveraging South-South Cooperation: De-Risking Climate Security

COMSATS organized an expert panel discussion on Leveraging South-South Cooperation: De-Risking Climate Security on December 5, 2023, at the UNFCCC Conference of the Parties (COP28), held in Dubai.

The high profile panelists included Mr. Naguib Sawairis, Chairman, Orascom Telecomm giant and Orascom





Investment Holding, a significant investor and friend of Pakistan; Prof. Dr. Ashraf Shaalan, Director, Center of Excellence for Climate Change Applied Research, NRC, Egypt; Prof. He Zhang, Deputy Director ICCES, IAP-CAS, China; Mr. Filip Novakovic, Sustainable Finance Specialist, United Nations Climate Advisor; and Dr. Saad Uakkas, Coordinator of the Children, and Youth Pavilion COP28.

Welcoming the guests, Dr. Zakaria briefed the audience on COMSATS' objectives and activities, particularly Climate Change related. He highlighted the risks of conflict over resources under stress due to climate change, such as water. He emphasised quantification of and compensation for damage to environment by the militaries and wars.

Emphasising the importance of Climate Change and responsibilities of corporate sector to address challenges, Naguib Sawairis assured Ora Development's commitment to catalysing the UAE's progression towards their net-zero targets, through various sustainable and smart investments in the real-estate industry & finance technology sector.

Ms. Nuzhat Amir Sadiq, Member of the Senate of Pakistan, was a distinguished participant at the event who shared, host country, Pakistan's perspective on climate change.

He pledged that 5 billion dollars' worth potential projects will play a pivotal role in ensuring the sustainability and energy efficiency of this massive development, which aligns with UAE's 2050 Strategy to reach net Zero and to reduce its carbon footprint.

Prof. Zhang shared China's successful initiatives pertaining to tech-based solutions. He remarked that ICCES has developed a seasonal prediction system based on the Chinese Academy of Sciences Earth system model CAS-ESM. The system can predict sub-seasonal to seasonal climate anomaly, including extreme events, such as heat waves, droughts, flooding and dust storm. Accurately predicting extreme climate events will help us to take necessary measures to reduce the risk due to climate change. We are willing to share the climate prediction system to other COMSATS' members to improve the skill of climate prediction in their countries.

Dr. Filip threw light on the financial impact of climate change and shared his views on how the challenge could be converted to financial opportunities.

Prof. Shaalan, a paediatrician, shared his experience of how climate change impacted the children. He called for political commitment and policy initiatives for tangible outcomes.

The Panel Discussion was moderated by the Coordinator Youth & Children Pavilion of COP28, Dr. Saad Uakaas. COMSATS had joined hands with Ministry of Climate Change of Pakistan to hold the event at Pakistan Pavilion.

Focused Group Discussion on 'Why Youth Voices Matter for a Greener World'

On the sidelines of COP28, UAE, COMSATS organized a focused group discussion under the theme, 'Why Youth Voices Matter for a Greener World'. Organized on 8th December 2023, the event saw participation from Global Climate Youth Leaders, from over 30 countries, predominantly from the Global South.

In his welcome remarks, Ambassador Dr. Mohammad Nafees Zakaria, underlined the power of the youth and need for galvanising their energy to play due role in addressing the formidable global challenges, including the Climate Change.

He invited the young participants to share their respective initiatives on climate change, their assessment and ideas. He emphasised that the youngsters were leaders in their own right and a force to reckon with.

During the discussion, youth leaders



showcased their projects, initiatives and brilliant ideas pertaining to the approaches aimed at combating climate crises in their countries, illustrating the impact of their endeavors.

Ambassador Zakaria assured the youth leaders of COMSATS' unwavering support in promoting their work towards the common goal of 'curing the climate pandemic.'

Ambassador Zakaria's proposal for the establishment of a Social Group comprising the participating youth leaders was welcomed. He assigned the young COMSATS' representative, Mr. Qaiser Nawab, to act as a coordinator of "Young Climate Partner Group for COMSATS – YCPGC."

The discussion at the Pakistan Pavilion focused on empowering youth voices for environmental sustainability, acknowledging the pivotal role the younger generation plays in shaping a greener and more sustainable world.

A symbolic group photo marked the conclusion of the event, capturing the collective commitment of young leaders to preserve and enhance the health of our planet.

Participation in Event on "Digital Technology and AI for Carbon Neutrality" at China Pavilion

Amb. Dr. M. Nafees Zakaria participated as Special Guest Speaker in COP28 Dubai event on "Digital Technology and AI for Carbon Neutrality" at China Pavilion.

Speaking to the august gathering, Amb. Zakaria introduced COMSATS as an organization created as realization of the vision of the renowned Pakistani scientist, Prof. Abdus Salam. He underscored the overarching objective of COMSATS being the S&T-led sustainable development of countries through sharing and exchange of scientific resources and knowledge. The organization, he informed, derives its scientific and technological strength from its international network comprising of centres of excellence in a number of scientific fields important for development of member states, and developing countries, in general.

Of special interest to the Pavilion was the information about China being one of the founding members of COMSATS, resulting in a long haul association

of 29 years with the organization. He appreciated China's valuable contribution to COMSATS' growth over the years, in both financial (through Annual Membership Contribution) and technical terms. Apart from the cooperative work and exchanges with other member states and institutions through a number of means, two Chinese institutions are active members of COMSATS Network: International Center for Climate and Environment Sciences (ICCBS), Beijing, and Tianjin Institute of Industrial Biotechnology (TIB), Tianjin.

Dr. Zakaria laid special emphasis on the role of IT in development as a remover of geographical barriers. He noted that IT and its applications have made ingress into every aspect of human life, especially evident from the exponential growth in IT applications and digitalization during COVID-19. The former High Commissioner of Pakistan to UK, Dr. Zakaria especially cited a practical example of the Kingdom where 70% businesses have gone digital with widespread remote work. He also delineated the rapidly growing AI trends that have become relevant in almost every field. In the field of medicine, he remarked, AI applications are helping in diagnostics of diseases, forecasts,

Climate Justice Diplomacy¹

Escalating climate crisis has been adversely affecting our planet. Different regions are experiencing different manifestations of climate change.

From frequent floods of biblical proportions to droughts, forest fires to smog, and from unpredictable weather patterns to mindboggling temperature swings. The Global South countries, particularly the Indus Basin states, are grappling with the consequences of climate change. The heat impact has been exacerbating the challenges for those 300 million people.

The glaciers are fast melting. In the long run, the security risks intrinsically linked to the stress on resources may lead to conflicts between states. It warrants urgent action.

The situation should provide food for thought to the world leaders, national policy makers, and scientists. COMSATS with dedicated Centre for Climate Change & Sustainability with Membership of 20 countries and 24 Institutes, organizes Programs, for awareness, capacity building, policy initiatives and R&D under its International Thematic Research Group on Climate Change.

We need to sincerely identify those activities that constantly cause damage to the environment but remain evasive. Militaries contribute 5.5% to GHGs emissions. Unfortunately, they were exempted for accountability from Kyoto and Paris Agreements.

While industrial activities have degraded environment over decades, wars destroy environment instantly on much larger scale. An impact assessment of the wars and military exercises need to be carried out to make the countries concerned responsible for the damage caused.

How effectively COP process has helped in last 28 years in compensating and enabling the countries least responsible for the environmental damage, needs a critical view. However, a measure of efforts by developing states is also important.

COP 28 commitment has to be steadfast, inclusive and tangible in action. Intergovernmental Organizations like COMSATS could assist. The establishment of **'Loss and Damage Fund'** on Day1 is commendable. However, the proof is in the pudding.

Technologically advanced and economically powerful nations need to share greater responsibility on the basis of morality.

Half-hearted measures are not tenable. Leveraging our collective strength under a new era of climate diplomacy is a must to ensure a shared promising future, especially for those in the Global South.

¹ Policy Intervention presented by Ambassador Dr. Mohammad Nafees Zakaria, Executive Director COMSATS at UNFCCC High Level Segment (9 Dec 2023), COP28, UAE

precision medicines, R&D, and so on. Guest speakers from China, the United States, Caribbean States, and IGOs shared also their expert views and analyses with the learned audience at the Pavilion.

Sideline Meetings

Rt Hon Patricia Janet Scotland – Baroness of Scotland, Secretary General of Commonwealth

On sidelines of COP28, Executive Director COMSATS, Amb. Dr. M. Nafees Zakaria, had a meeting with Secretary General of the Commonwealth, Rt Hon Patricia Janet Scotland – Baroness of Scotland.

During the meeting held on December 10, 2023, the two IGO Heads exchanged

views on cooperation in areas of common interest.

Inger Andersen, Under-Secretary-General of the United Nations and Executive Director of the United Nations Environment Programme

The Executive Director COMSATS had a brief meeting with the Executive Director of United Nations Environment Programme (UNEP), Ms. Inger Andersen, at Pakistan Pavilion of COP28. Dr. Zakaria briefed Ms. Anderson on COMSATS' activities and COP28 sideline events.

Faisal Tirmizi, Ambassador for Pakistan to the United Arab Emirates

Amb. Zakaria, who himself is also a former Diplomat of Pakistan, called on

H.E. Mr. Faisal Tirmizi, the Ambassador for Pakistan to the UAE. They discussed Pakistan's and COMSATS' participation in COP28, and exchanged views on opportunities in UAE in Science and Emerging Technologies. The well-maintained Embassy of Pakistan in Dubai, adorned with Multani tiles and cultural artefacts, stands as a symbol of cultural richness of the country it represents. Amb. Tirmizi, a highly professional and committed diplomat, was forthcoming in offering his cooperation for facilitating COMSATS' linkages.

Both well-known personalities, Amb. Zakaria and Amb. Tirmizi, in high spirit undertook to promote and strengthen relations between COMSATS, COMSATS' host country, Pakistan, and the UAE.

SOME ACTIVITIES OF COMSATS' CENTRES OF EXCELLENCE

ICCBS-Pakistan Organizes International Symposium on Molecular Medicine and Drug Research

The 8th International Symposium-Cum-Training Course on Molecular Medicine and Drug Research was organized by Dr. Panjwani Center for Molecular Medicine and Drug Research (PCMD), of ICCBS from 27th to 30th November 2023. The four-day event was inaugurated by Caretaker Minister for Health, Social Welfare, and Public Health Engineering, Government of Sindh Province of Pakistan, Dr. Saad Khalid Niaz.

Over 600 scientists, including 70 scientists from 26 countries, including Australia, Bangladesh, Burkina Faso, Cameroon, Canada, China, Greece, Hungary, Indonesia, Iran, Italy, Japan, Jordan, Kazakhstan, Malaysia, Nepal, Nigeria, Oman, Spain, Sweden, Switzerland, UAE, Uganda, UK, USA, Yemen, attended the international symposium held with an aim to bring together the leading experts in the field of molecular medicine.

Scientists at the international symposium highlighted the role of natural compounds in the treatment of cancer and various other diseases, as well as how natural products offer a diverse source of bioactive lead compounds for drug development, especially in the area of cancer therapy. Many foreign scholars, including Italian Professor Luciana Dini, Prof. Dr. Rafat A. Siddiqui from the USA, and Distinguished Professor Ahmed Abdullah Azad from Australia, also delivered their lectures at the symposium. Foreign delegates, including Dr. Paul Denny from the UK, Dr. Xiao-Ping Wang from China, and Dr. Muriel Cuendet from Switzerland, also expressed their views on the occasion. Sowing concern over negligence of Leishmaniasis Dr. Paul W. Denny,



Durham University, U.K., considered hundreds of millions of the global poor, including Pakistan, are at risk. Prof. Dr. M. Iqbal Choudhary, the Coordinator General OIC-COMSTech, and UNESCO Chair on Medicinal and Bio-Organic Natural Product Chemistry ICCBS, Dr. Ikram A. Burney, Sultan Qaboos Comprehensive Cancer Care & Research Center, Muscat, Oman, Dr. Heng-Shan Wang, Guangxi Normal University, Guilin, China, also spoke on the occasion.

In her talk, Prof. Dr. Farzana Shaheen, Director ICCBS, focused on epilepsy as a chronic neurological disease, requiring life-long use of antiepileptic drugs to control the unprovoked seizures.

ICCBS-Pakistan Faculty's New High-Profile Appointments

The Pakistan Academy of Sciences (PAS) has elected Prof. Dr. M. Raza Shah, the senior professor at the International Center for Chemical and Biological Sciences (ICCBS), the University of Karachi, has been elected unopposed as Secretary of the Sindh Chapter of the Academy.



The American Chemical Society (ACS) has elected Dr. Muhammad Imran Malik, Associate Professor at the International Center for Chemical and Biological Sciences (ICCBS), University of Karachi, as the Chair of Pakistan Chapter of the Society for two years (2024-2025). ACS is the world's largest scientific organization with over 186,000 members across 144 countries. It has international chapters in numerous countries including China, India, Brazil, Australia, Hong Kong, South Africa, South Korea, Qatar, Switzerland.



The World Academy of Sciences (TWAS) has elected the prominent Pakistani scientist Prof. Dr. Khalid M. Khan as a new TWAS Fellow. Prof. Khan is mentoring a large number of young researchers in the field of drug design and discovery. He has received many civil awards, including the *Sitara-i-Imtiaz*, *Tamgha-i-Imtiaz*, and twice the Gold Medal from the Pakistan Academy of Sciences.



RSS-Jordan's Participation in COP28

The Royal Scientific Society, Jordan, is a regular participant of the Conference of the Parties (COP) of the United Nations Framework Convention on Climate Change (UNFCCC) as part of Jordan's delegation. This year RSS was presented by 7 officials and engineers, who presented RSS and Jordan views in COP28.

RSS had a special edition Gazette, titled "Green Innovation in a time of Crisis: Building Resilience for a Sustainable Future through a National Innovation Ecosystem in Jordan", for COP28.

In the first week Eng Rafat Assi, RSS Vice President, joined a high level event with Inger Andersen, Executive Director of the United Nations Environment Programme, Clare Dalton, Head of UAE Delegation at the International Committee of the Red Cross, David Harland, Executive Director of the Centre for Humanitarian Dialogue and HE Nickolay Mladenov, Director General of the Anwar Gargash Diplomatic Academy, in a special session at #COP28 titled: "Addressing Climate Risks: Cooperation on transboundary climate adaptation in the MENA region."

This event initiated a discussion for stakeholders in the region to highlight the scientific evidence of transboundary climate risks, identified promising practices and ways to enhance cooperation around transboundary adaptation, and enhance prospects for development, stability, and peace. This event is the first of a series which will include expert workshops and a working group focused on facilitating adaptation collaboration between countries. The 1st upcoming workshop will be held at RSS in January 2024.

Eng. Assi also participated in the "Cool Up" side event at the "Montreal



Protocol advancing climate action" pavilion during COP28. This event was part of the Ozone to Cool Zone: IIR Workshops, organized by The International Institute of Refrigeration (IIR).

Titled "A Cool Future for Jordan: Upscaling National Policies to Reach Climate Targets - Uniting on Action for Sustainable Development in Jordan", the panel discussion provided valuable insights into Jordan's dedication to modernization and its comprehensive approach to climate and sustainability actions. The focus of the discussion revolved around sustainable cooling initiatives and the increasing demand for clean energy in the country.

Prof. Iain Stewart, El Hassan Research Chair in Sustainability at RSS, moderated in collaboration with the University of Plymouth at the Renewable Energy Action Pavilion during COP28.

The event centered around the theme of achieving a just transition for energy and resource development, emphasizing the importance of employing systems thinking to address complex challenges spanning across different environments, from land to sea. Successful resolution of these challenges necessitates the harmonization of top-down and

bottom-up knowledge, learning from community-led approaches, and leveraging evidence-based solutions for sustainability that can be implemented rapidly and at scale.

The speakers were: Professor Paul Monks, Chief Scientific Officer, Department for Energy Security and Net Zero (DESNZ), UK; Dr Ibrahim Nashid, Chairman, Renewable Energy Maldives Pvt. Ltd, Maldives; Professor AbuBakr S Bahaj, Professor of Sustainable Energy, Lead of the Energy and Change Division, University of Southampton, UK; Dr Matt Frost FMBA, Head of International Office, Plymouth Marine Laboratory, UK.

Eng. Ruba Ajjour, Manager of Climate Change Studies at the RSS, joined in a session titled: Acceleration models for Energy-Efficiency in developing countries, at UNEP Pavilion. The event addressed two-fold energy efficiency topics related to available regulatory frameworks and the climate action models and the business models-with a special focus on Energy Service Companies.

The event also aimed also at creating much-needed awareness to reduce greenhouse gas emissions as well as trying to highlight how can countries prioritize their energy efficiency



initiatives based on the tools, data and technical expertise.

In the second week, Dr. Hussam Hussein, Executive Director of Partnerships for Development at RSS, joined a panel session with participants from the Interacademy Partnership (IAP), the Global Young Academy (GYA), and the Institute for European Environmental Policy (IEEP) to discuss how senior and young academics around the world can work together to address climate challenges. Dr. Hussam showcased the work of RSS in climate change research and policy advise in Jordan.

In a session co-organized by the Global Young Academy (GYA), the Royal Scientific Society of Jordan (RSS), and the Regional Center for Renewable Energy and Energy Efficiency (RCREEE) and hosted at the RCREEE Pavilion, Dr. Hussam Hussein, organized and moderated a session titled: Young scientists for interdisciplinary research and climate innovation, with Dr. Almoayied Assayed, Director of Water, Environment and Climate Change Centre at the RSS, presenting on the scope of learning more on how the institutions in the MENA region support young scientists in their pursuit for interdisciplinary research and climate innovations. The objective of this panel

were to discuss best practices of young associations and of research centres in promoting interdisciplinary research for climate innovation.

Dr. AlMoayied, also discussed the concept of food security at the COMSATS' organised panel.

Eng. Ayham Al Rabee, RSS Specialist at the National Energy Research Centre participated in a second session as a speaker in RCREEE pavilion under the framework of MEETMED project. The session entitled "Energy Performance Standards: Optimizing Energy Consumption of Appliances in the Arab Mediterranean Region". Eng. Ayham discussed the gaps in regulations, such as the absence of AC regulations for commercial sector large systems in Jordan, and ensuring effective implementation and enforcement of energy efficiency standards, especially considering the importance of market surveillance and testing laboratories for verification.

Eng. Ayham also participated as a panelist in Cool Up's side event at the MP Pavilion titled: Progress, Opportunities and Insights of Sustainable Cooling in MENA - launch of Cool Up's 2nd MENA region cooling status report.

This event provided an early glimpse into the report that revolves around the question, "Where do MENA and Türkiye stand in the transition to sustainable cooling?". The gathering will feature contributors to the report and regional experts, illustrating why the MENA region is becoming increasingly significant in global climate action and emphasizing the substantial role sustainable cooling can play in reaching international climate objectives.

KazNU-Kazakhstan Strengthens International Academic Cooperative Ties

France: From November 1 to 3, 2023, Al-Farabi Kazakh National University played host to a series of events as part of the VIII International Forum of Kazakh-French Higher Education Institutions. Dr. Prof. Zhansait Tuimebayev, Chairman of the Board and Rector of Al-Farabi KazNU, inaugurated the round table, highlighting a significant diplomatic development. In October 2023, President Kasym-Jomart Tokayev engaged in discussions with President of France Emmanuel Macron during the latter's official visit to Kazakhstan.

The leaders deliberated on strategies to fortify trade, economic, investment, and energy collaborations between the two nations. A pivotal agreement was reached to extend cooperation into the realms of education and science on an international scale. In acknowledging this, the head of Al-Farabi KazNU asserted that the ongoing forum served as a substantive extension of the collaborative efforts in education and science between Kazakhstan and France.

Darussalam: On November 9, 2023, a distinguished delegation, led by Dr. Fahmi Hamid, the Rector of Darussalam Gontor University in Indonesia, visited Al-Farabi KazNU, marking a significant

milestone in the collaboration between these educational institutions. The delegation engaged in discussions with the leadership of Al-Farabi KazNU during this noteworthy visit. The discussions during the meeting resulted in a consensus to systematically advance the proposed initiatives. The negotiations concluded with the signing of a memorandum outlining the parameters of cooperation and the identified areas of collaboration, symbolizing a commitment to a strengthened partnership between Al-Farabi KazNU and Darussalam Gontor University.

China: On November 15, 2023, Dr. Prof. Zhanset Tuimebayev, Chairman of the Board and Rector of Al-Farabi KazNU, convened a meeting with a high-profile delegation led by Dr. Jilili Abduwaili, the Deputy Chairman of Xinjiang Institute of Ecology and Geography of the Academy of Sciences of the People's Republic of China. The meeting led to joint commitment to expedite and ensure successful launch of this collaborative initiative, the parties concluded the meeting. Subsequently, the distinguished guests toured the scientific laboratories at the faculties of Biology and Biotechnology, Chemistry and Chemical Technology, Geography,

and Nature Management, further solidifying the foundations of this promising collaboration.

Japan: On November 20, 2023, Al-Farabi KazNU hosted a visit of Professor Tomonobu Sakurai from Yokohama Toin University in Japan. The distinguished Japanese professor received a warm welcome from Dr. Zhamilya Aitzhanova, Member of the Board and Vice-Rector for Scientific and Innovative Activities at Al-Farabi KazNU. Both parties explored opportunities to strengthen cooperation in various scientific domains, including engineering, medicine, law, international studies, physical education, health, and sports science. Professor Tomonobu Sakurai, an expert in physical education and sports, engaged in dialogue about the Sustainable Development Goals (SDGs), an area of mutual interest for both KazNU and Japan. The meeting resulted in signing of a memorandum of understanding on advancing academic exchange and research initiatives between the two institutions.

Germany: As part of the "New Perspectives and New Ties: Georgia, Kazakhstan, and Uzbekistan" conference held in Bochum, Germany, on November 28, Dr. Prof. Zhanset

Tuimebayev, Chairman of the Board and Rector of Al-Farabi KazNU, engaged in a significant meeting with Professor Jorg Roshol, President of the European School of Management and Technology (ESMT). Discussions resulted in an agreement to implement student and teacher exchanges, introduce dual-diploma programs, and establish joint professional development programs for managers.

Rector Al Farabi KazNU Attends Trilateral Meeting

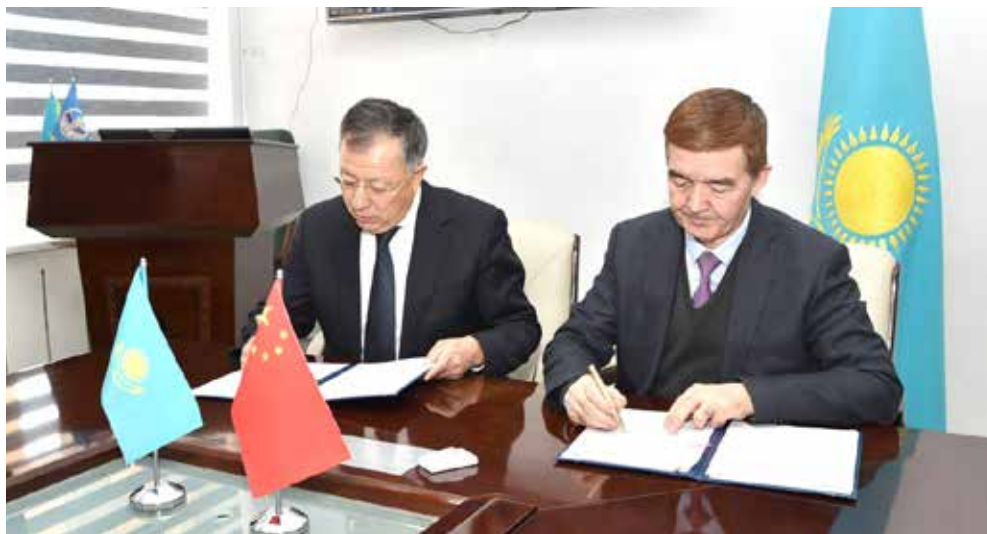
Beyond the bilateral meeting, Rector Tuimebayev actively participated in the broader conference, "East: New Perspectives and Ties - Georgia, Kazakhstan, and Uzbekistan". The conference brought together scientists, professors, and university leaders from Germany, Kazakhstan, Uzbekistan, and Georgia. The participants delved into the crucial topic of international cooperation between Eastern and Western regions in higher education and science.

Rector Tuimebayev took the opportunity to showcase the high-caliber research conducted by KazNU scientists, urging foreign colleagues to foster closer collaboration. A panel discussion, "Forward to the East and West: Connecting Regions and Education in the Changing Global Environment," provided a platform for scientists to exchange views on the prospects for further cooperation. The initiatives discussed during these engagements reflect the commitment of Al-Farabi KazNU to advancing international collaboration and academic excellence.

KazNU's Cooperative Agreements with Chinese Universities

On December 8, 2023, Al-Farabi KazNU hosted Exhibition of People's Republic





of China (PRC) Universities. This collaborative initiative was organized by KazNU, the Scholarship Council of the PRC, and the Consulate General of the PRC in Almaty. Around 45 top universities from China participated in the exhibition, showcasing their academic endeavors and sharing noteworthy scientific achievements. The focus extended beyond information dissemination, as these institutions also provided insights into opportunities for international programs, elucidating admission procedures for prospective students. On the sidelines of the Exhibition, Al-Farabi KazNU formalized collaborations by signing a memorandum of cooperation and understanding with two Chinese universities. The MoU encompasses provisions for the exchange of undergraduate and graduate students through academic mobility programs, academic internships for faculty members, collaborative research initiatives, and the joint publication of scientific and academic papers.

On December 14, 2023, an MoU was signed during a meeting with a delegation from Xinjiang Medical University (PRC), paving way for active academic and research initiatives. Another MoU was signed during a meeting with the President of Shandong

Huayu Technological University (PRC) on December 18, 2023. The MoU strengthened cooperation for strengthened bilateral relations, with a specific focus on joint scientific research and training initiatives.

Al-Farabi KazNU Holds International Scientific Conference

The inaugural edition of the International Scientific Conference, titled "New Way of Decarbonization of Economy (KZGT-2023)," commenced at Al-Farabi KazNU on November 8-10, 2023, underscoring a collaborative effort between the host institution and St. Petersburg Polytechnic University in alignment with the objectives of Sustainable Development Goal 13. The conference served as a platform for in-depth discussions on diverse topics, encompassing the enhancement of quality of life, advancements in healthcare, energy conservation, establishment of effective institutions, technological innovations, environmental preservation, inclusive growth, and energy consumption.

Additionally, critical subjects, such as waste-free coal technologies, hydrogen and nuclear energy development,

transportation mobility, and the intricacies of climate change took center stage, reflecting the conference's comprehensive exploration of pivotal issues at the intersection of economics and energy.

KazNU Ranked 29th by QS University Rankings 2024

According to the results of the international QS Asia University Rankings, published on November 8, 2023, Al-Farabi KazNU ranked 29th among 856 participating universities. In the capital of Malaysia, Kuala Lumpur, from November 7 to 9, 2023, during the QS Summit on Higher Education in the Asia-Pacific Region 2023, a solemn ceremony was held to present the certificate of the QS Asia University Rankings to the Al-Farabi KazNU. According to the results of the international rating "QS Sustainability Rankings", KazNU is among the 500 best universities in the world, and according to the indicator "Management Model" the university entered the top 200 best universities in the world, showing the highest result among Kazakhstani universities.

KazNU's Collaborative Project on SDGs with Hong Kong Polytechnic University

Researchers from Al-Farabi KazNU and Hong Kong Polytechnic University have joined forces in an international project aimed at advancing collaborative action research focused on children, youth, and families living in poverty in Kazakhstan and Central Asia. This initiative aligns with the Sustainable Development Goals (SDGs) and seeks to address the pressing issues associated with poverty.

Led by Dr. Gulmira Abdraimova, a distinguished Kazakhstani scientist and director of the Center for Sociological Research and Social Engineering at



KazNU, the joint project with Hong Kong Polytechnic University (PolyU) is dedicated to practical research to understand the specific needs of children, youth, and families facing poverty in Kazakhstan. The collaborative project holds significant potential for enhancing social policies, education, and practices related to children, youth, and impoverished families in Kazakhstan and Central Asia. The project is already underway, with three social service units in Almaty serving as practical sites.

Collaboration between CUI-Pakistan and CERN Strengthened

COMSATS University Islamabad (CUI) hosted a four-member delegation from the European Organization for Nuclear Research (CERN) on November 10, 2023. Headed by the Director of International Relations, Ms. Charlotte L. Warakaulle, the delegation comprised Prof. Emmanuel Tsesmelis, Head of Associate and Non-Member State Relations, Dr. Lucia Silvestris, Deputy Spokesperson CMS Experiment, and Dr. Marco Van Leeuwen, ALICE Spokesperson.

The discussions centred on the augmentation of research partnerships, introduction of a proposal for a

research exchange program within the department of Physics and enhancing scholarly engagements. The delegation also engaged in a tour of university's research laboratories and explored the prospects of initiating grid operations. Four members from CERN were present in the PAEC to review the involvement of CUI members in CERN activities.

CUI's Expertise in Technology Sought by Somalian Diplomat

The Charge d'Affairs of the Somalian Embassy, Islamabad, H.E. Shirwa Abdullahi Ibrahim, along with Somalian academicians Prof. Hassan Osman Ga'al, Rector, Somalia National University (SNU) and Prof. Dr. Mohamed Mohamud Hassan, Rector of Benadir University Somalia visited COMSATS University Islamabad (CUI) on December 4, 2023.

The focus of the meetings with the delegates was on fostering collaboration between CUI and Somalian universities in the areas of technology, and knowledge sharing, skills development, and skills-based training for Somalian universities' academic and administrative staff, particularly for Somalian National University and Benadir University Somalia. The Somalian delegation expressed sought

CUI's facilitation for enhancing their human resource capacity, improving the education system, and exploring opportunities for joint research initiatives.

CUI explores Cooperation with Institutions from Australia and Afghanistan, and China

A delegation from Edith Cowan University (ECU), Australia, comprising Dr. Muhammad Rizwan Azhar, Discipline Coordinator and Lecturer in the School of Engineering, also serving as the Focal Person and International Coordinator for Pakistan, along with Mr. Adam Bryers, International Account Manager (Middle East & North Africa (MENA), Central Asia, Pakistan, Europe, Nepal) and Mr. Waasay Ahman Khan, new In-Country Representative (Pakistan, MENA), met with officials of COMSATS University Islamabad (CUI) on November 28, 2023, to discuss possibilities of collaboration on a joint Ph.D. program between CUI and ECU. The meeting aimed to foster collaboration possibilities between CUI and ECU for a joint Ph.D. program. Discussions covered preparation of documentation, achievements, challenges, and an action plan, emphasizing documents sharing, academic endorsement, and engagement with regulatory bodies.



A delegation comprised of officials of Government and different universities of Afghanistan, representatives of HEC visited CUI on October 17, 2023, to explore opportunities for collaboration. The meeting resulted in discussions on potential areas of collaboration that resulted in resolve to cooperate in the fields of IT, Engineering, Economics, Banking & Finance and other identified fields, inter alia, through Master and PhD programs scholarships, students exchange program; access to its laboratories and labs.

On November 8, 2023, CUI received a delegation from the Chinese Academy of Agriculture Sciences (CAAS), led by Prof. Dr. Mu Tai-Hua, Chief Scientist and Director, Institute of Food Science and Technology (IFST) accompanied by Prof. Dr. Sun, Prof. Dr. Mei, Dr. Shujaat Ahmad, Dr. Rizwan and Dr. Farman visited CUI. After necessary exchanges, the two sides explored potential collaboration areas and shared innovative ideas based on the insights gained into ongoing and future research initiatives.

TUBITAK-Turkiye Joint Project Completes Türkiye's First Indigenous Communication Satellite TÜRSAT 6A

On November 1, 2023, the deployment

tests of the high-power generating solar panels of Türkiye's first indigenous communication satellite, Türksat 6A, were successfully conducted at the Turkish Space Systems, Integration and Test Centre located at TUSAŞ. The Türksat 6A project, financed by the Ministry of Transport and Infrastructure, Türksat A.Ş., and TÜBİTAK, involves the development of the national communication satellite by TÜBİTAK UZAY, in collaboration with project partners TUSAŞ, ASELSAN, and CTech firms.

Cooperative Agreements signed by TUBITAK-Turkiye

TÜBİTAK UME delegation participated in the meeting of the Council of Heads of State of the Organization of Turkic States (TDT), which was held on November 3, 2023, in Astana, the capital of Kazakhstan, with the theme of "TURKISH ERA". At the meeting, the "Protocol on Cooperation in the Field of Metrology Between the Relevant Institutions of the Member States of the Organization of Turkish States", which aims to contribute to the sustainable development of the metrological infrastructure in line with the global objectives of TDT, was signed. In addition, the "Joint Action Plan for the Implementation of the Organization of

Turkish States Transport Connection Program between 2023-2027" was signed and recorded between the ministers and heads of institutions of the member states during the summit.

A Memorandum of Understanding (MoU) has been signed between TÜBİTAK and RHC (The Royal Hashemite Court) on November 22, 2023. During the visit of a 4-member delegation from the Royal Hashemite Court in Jordan to TÜBİTAK, discussions were held regarding potential collaborations between the two organizations.

TUBITAK's Participation in International Fora

28th Conference of the Parties (COP28)

On December 5, 2023, President of TÜBİTAK, Prof. Dr. Hasan MANDAL, participated in COP28 and delivered a presentation focused on "Green Technologies" at the panel titled "Transforming Industries: The Dynamic Duo of Finance and Climate Technologies in the Green Revolution", organized by the Ministry of Industry and Technology. Additionally, a meeting was held with representatives from STEPI (Science and Technology Policy Institute) of Korea to enhance relations



between TÜBİTAK and STEPI.

Africa Science Forum 2023

On December 6, 2023, a side event was organized about Eureka and the Turkish Presidency of Eureka on the day of the official opening of the forum. Information was provided to the participants about TÜBİTAK's activities within the scope of the Eureka Presidency, bilateral and multilateral collaborations, and relations with the EU. The event proved to be useful for promoting TÜBİTAK's and Türkiye's collaboration and innovation support in the fields of R&D, increasing the visibility of TÜBİTAK, and fulfilling TÜBİTAK's obligation to politically represent Eureka within the framework of Eureka Presidency role. Additionally, a meeting was held with Ambassador Ayşegül KANDAŞ in Pretoria, where issues on TÜBİTAK's agenda regarding bilateral cooperation with South Africa were discussed.

ANSO Board of Directors Meeting and General Assembly Meeting

TÜBİTAK, as a founding member, participated in the Board of Directors and General Assembly Meetings of the Alliance of International Science Organizations (ANSO), an international

scientific organization with 78 members from 55 countries.

International Brokerage Event on European Green Deal

The International Brokerage Event on "Towards a Green Future: European Green Deal" took place in Brussels on November 16, 2023. The event was organized with the participation of Permanent Delegate of Türkiye to the EU, Ambassador Faruk KAYMAKCI, Minister of Industry and Technology Mehmet Fatih KACIR, and President of TÜBİTAK, Prof. Dr. Hasan MANDAL, along with participants from the European Commission. The event provided an opportunity for more than 350 Turkish and European participants to conduct over 1000 bilateral meetings.

The 92nd Board Meeting and 26th Regional Focal Point Meeting of WAITRO

The 92nd Board Meeting and 26th Regional Focal Point Meeting of the World Association of Industrial and Technological Research Organizations (WAITRO), positioning itself as the Global Innovation Family, were hosted by TÜBİTAK in Gebze. The Board Meeting of WAITRO, was presided

over by Prof. Dr. Hasan MANDAL, President of WAITRO and TÜBİTAK. Representatives from China, Colombia, Denmark, Germany, Indonesia, Jordan, South Africa, Spain, Thailand, and Trinidad and Tobago gathered at the TÜBİTAK Gebze Campus.

26th SMIIC Board of Directors and 18th Meeting of the SMIIC General Assembly

Assoc. Prof. Mustafa Çetintaş, the president of the SMIIC Metrology Council and Deputy Director of TÜBİTAK UME, attended the meetings held in Mecca, Saudi Arabia, on October 31 - November 1, 2023.

Assoc. Prof. Çetintaş provided information regarding the training sessions in the last six months, conducted in SMIIC member countries under the Metrology Council Work Plan, the 13th Metrology Council meeting, and other related activities.

Furthermore, updates on the progress of the SMIIC MC Research and Development Project Program prepared and coordinated by TÜBİTAK UME, as well as information about the activities of the SMIIC Medical Metrology Working Group, were shared.



100th Year TÜBA and TÜBİTAK Science Awards Announced

On December 27, 2023, the evaluation of the Science, Special, Service, and Incentive Awards took place during the 100th Year TÜBA and TÜBİTAK Science Awards Ceremony held at the Beştepe National Congress and Culture Center. The TÜBİTAK Board decided to award 7 Science Awards, 1 Special Award, 1 Service Award, and 18 Incentive Awards in the year 2023. President Recep Tayyip ERDOĞAN presented the TÜBİTAK Science Awards to each of the awarded academics. While the President himself was presented the 1/12 scale model of İMECE, the first indigenous and national high-resolution satellite designed and developed by TÜBİTAK Space Technologies Research Institute, and the TÜBİTAK Polar Sciences Encyclopedia.

The ceremony was attended by Minister of Justice Yılmaz TUNÇ, Minister of National Education Yusuf TEKİN, Minister of Commerce Ömer BOLAT, and the President of the Board of Higher Education (YÖK), Prof. Dr. Erol ÖZVAR, along with the families and guests of the honored scientists.

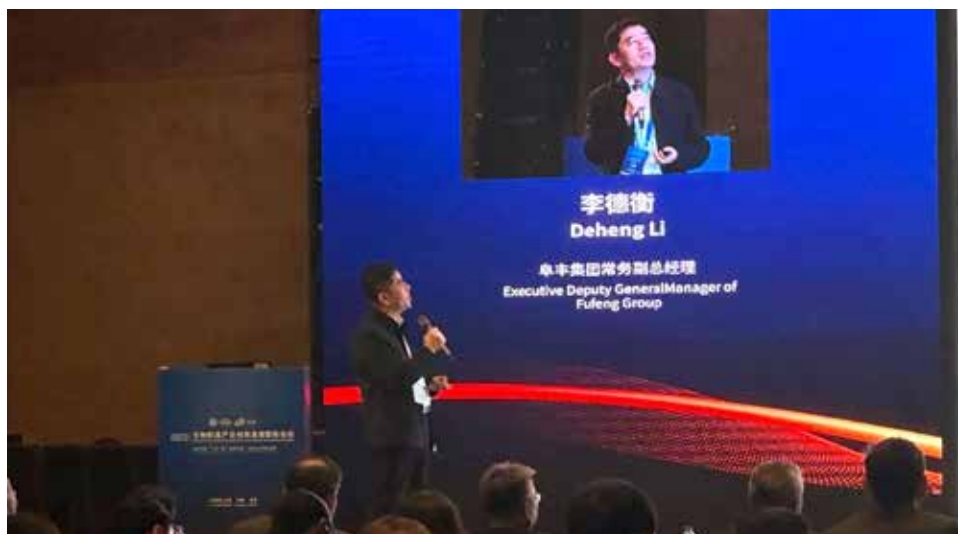
ITI-Sri Lanka holds its 6th Biennial Research Symposium

Industrial Technology Institute (ITI), Sri Lanka, organized its 6th Biennial Research Symposium / International Research Symposium – 2023, on 7-9 November 2023, in Colombo (in hybrid mode). The Institute regularly hosts Biennial Research Symposia with the aim of cultivating and promoting scientific and technological research for the advancement of industries in the country. These symposia serve as a platform for research scientists, engineers, and technologists to showcase their research findings. The theme of this year's Symposium was

“Advance Research, Development and Innovations towards the Fourth Generation Industrial Development”.

The Inaugural Ceremony of the event was held on 7th November 2023. Hon. Dr. Ramesh Pathirana, Minister of Industries and Health, Govt. of Sri Lanka, attended the ceremony as the Chief Guest, while the Executive Director COMSATS, Ambassador Dr. Muhammad Nafees Zakaria, made online participation as a Special Guest. Scientists and scholars from various countries of the world, representatives of international organizations, and officials from Sri Lankan government/ institutions participated in the event.





■ Main R&D direction of Fufeng is research processes to improve fermentation levels being among the international leading level and extraction methods to achieve green energy savings, emissions reductions, and R&D of waste treatment processes, Fufeng green high-value utilization of all waste ma



Other dignitaries attending the august gathering included Ms. J. M. Thilaka Jayasundara Secretary, Ministry of Industries, Government of Sri Lanka; Prof. G.A. S. Premakumara, Chairman ITI; and Prof. J.K.R.R. Samarasekara, Director General ITI.

The technical sessions of the 3-day Symposium comprised 50 talks focusing on the topics of food technology, herbal technology, environmental technology, chemical technology, material technology, electrotechnology and biotechnologies, converging technologies, Internet of Things, etc.

TIB-China & COMSATS organize International Forum on Biomanufacturing

Tianjin Institute of Industrial Biotechnology (TIB), COMSATS, and Alliance of International Science Organization (ANSO) organized a 2-day International Forum on Innovative Development of Biomanufacturing in Tianjin, China on 9-10 Nov. 2023 from the platform of COMSATS Joint Centre for Industrial Biotechnology (CCIB).

Prof. Yanhe Ma, Director General, TIB, opened the event and expressed delight in collaborating with COMSATS. He noted that this collaboration

led to the establishment of CCIB in 2021. The 10th anniversary of BRI that preceded the event, marked the prosperous industrial development of biomanufacturing sector in China.

In order to facilitate R&D activities in the Member Countries, COMSATS and TIB signed the milestone agreement to launch 'China-COMSATS Belt and Road Joint Laboratory on Industrial Biotechnology' on the occasion.

Prof. Jinghua Cao, Executive Director, ANSO, expressed appreciation for Chinese Academy of Sciences, COMSATS and various other agencies and stakeholders for enabling ANSO to play its role in promoting practical ways in building scientific capacity.

Mr. Zhengyu Wang, Deputy Director of the International Cooperation Bureau, Chinese Academy of Sciences, thanked TIB and COMSATS for their good work done that is helping China achieve BRI objectives in line with national agenda of net zero carbon emission. Ms. Rongfang Wang, Director General for International Cooperation, Ministry of Science and Technology of China, and Executive Director COMSATS, Ambassador Dr. Mohammad Nafees Zakaria also gave remarks on the occasion.

The Forum was attended by the policy makers, scientists particularly the young scientists, researchers, entrepreneurs, industry representatives, as well as representatives of local, national and international organizations, from COMSATS Member States.

During the plenary session, Amb. Zakaria made elaborate presentation on COMSATS' contributions to promoting international cooperation and shared his vision on policy guidelines.

The Chief Organizers informed the audience that the programs of COMSATS Joint Centre for Industrial Biotechnology (CCIB), that epitomized South-South cooperation, has also been duly recognized as 'Good Practice' by UNOSSC in its publications brought during Global South-South Development (GSSD) Expo 2022.

The experts' presentations focused on Biomanufacturing of Chemicals, Materials, Pharmaceuticals, enabling Technologies, Future Food, Natural Products and New Resources.

A report on innovative development of biomanufacturing in COMSATS Member States was also presented during the event.

GLIMPSES OF SOME EVENTS



Scholarships/Fellowships for Member States Offered by COMSATS' Centres of Excellence

To promote academic excellence, COMSATS offers scholarships and fellowships to the students and researchers from Member States at its International S&T Centres of Excellence.

Scholarships offered by COMSATS University Islamabad (CUI), Pakistan

COMSATS University Islamabad (CUI), Pakistan, offers MS & PhD Scholarships for students and researchers belonging to COMSATS' Member States and prospective members. The scholarships are offered in the following key programs: Computer Science, Management Science, Electrical Engineering, Biosciences, Mathematics, Physics, and Meteorology.

The relevant details, including terms and conditions, eligibility criteria, admission procedure and schedule, application form, etc., are available on CUI website: http://ww2.comsats.edu.pk/internationalstudents/COMSATS_HQ.aspx.

For further details on the scholarships and fellowships, please visit www.comsats.org or write to farhan@comsats.org.

Int'l Forum to Celebrate 90th Anniversary of KazNU-Kazakhstan & Golden Jubilee and 2023 Congress of BCSIR-Bangladesh

To mark its 90th Anniversary, Al Farabi Kazakhstan National University (KazNU), in collaboration with the Ministerial Standing Committee on Scientific and Technological Cooperation of the COMSTECH, and COMSATS, is organizing an International Forum titled "Modern Trends in Sustainable Development of Biological Science." The event will take place on March 27-28, 2024, at the University, in Almaty, Kazakhstan. For details and registration: <https://bioconference.kaznu.kz/en>.

COMSATS Centre of Excellence and apex research organization of Bangladesh, the Bangladesh Council of Scientific and Industrial Research (BCSIR) (1973-2023), is celebrating its Golden Jubilee in March 2024. The celebration is being marked with 'BCSIR Congress-2023' that has been given the theme of 'Smart Bangladesh and Science and Technology (S&T)' to commemorate the scientific organization's 50-year journey since its establishment in independent Bangladesh. For more details: <https://www.bcsircongress2023.org/>

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www.bcsir.gov.bd



Embrapa Agrobiologia-Brazil
embrapa.br/agrobiologia



ICCES-China
english.icces.ac.cn



TIB-China
english.tib.cas.cn



CIF-Colombia
www.cif.org.co



NRC-Egypt
www.nrc.sci.eg



UTG-The Gambia
www.utg.edu.gm



CSIR-Ghana
www.csir.org.gh



ITS-Indonesia
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IROST-Iran
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ICENS-Jamaica
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