



Ambassador Dr. Mohammad Nafees Zakaria sharing his remarks at the Inaugural ceremony of the 24th Meeting of COMSATS Coordinating Council, 25-26 January 2023, Karachi, Pakistan. (details on page 2)

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## From the Executive Director's Desk

The year 2023 is filled with hopes, expectations for good omens and new aspirations as we move from trouble ridden years. World is ambitiously looking forward to an end to the uncertainties created during the previous years. COVID-19 afforded reason to convert challenges into opportunities and in this context applications of technologies in various domains of human activities have been pronounced, leading the way to mend the business and economy as well as innovations in IT, Digital world, medical field and healthcare.

The innovations and digital transformation will continue the process of advancements in S&T and hence the need for the Global South, in particular, to keep abreast with the progress. The hope for the scientific world is to continue to make progress in advancing knowledge, addressing global challenges, promoting diversity and inclusivity, and cross disciplines collaboration, aimed at using science for the benefit of all.

On the economic front, there is a sense of optimism that the global economy may rebound from the setbacks of the past few years leading to the businesses resuming their normal operations and that job market also recovers quickly. The noticeable development is that the centre of economic gravity is also

gradually shifting from North to South with skilled human resource and our youth in the driving seat. This valuable resource and energy needs to be galvanised to not only our advantage but to benefit all

The increasing frequency and severity of natural catastrophes, such as wildfires, earthquakes and floods, are having devastating impacts. Amidst the natural disasters and the socio-economic challenges that persist, the technological development and progress in S&T give us hope to better prepare ourselves to face the catastrophes, mitigate and lesson their impact.

COMSATS with aim to remain in pace with development in ST&I, its Centres of Excellence and Technical Advisory Committee is a unique platform to lead from the front for its member states as well as partners in addressing the issues confronting them. I am pleased to share about the new initiatives during the past two months. The 24th Meeting of its Coordinating Council (comprising the Heads of 24 Centres of Excellence) was hosted by the International Center for Chemical and Biological Sciences (ICCBS), Karachi, Pakistan. I am grateful to the Council members for their active participation

**continues on page 05**

## HIGHLIGHTS FROM COMSATS SECRETARIAT

### The 24th Meeting of COMSATS Coordinating Council

The 24th Meeting of COMSATS Coordinating Council was successfully held on 25-26 January 2023 in Karachi, Pakistan. The meeting took place both in person and online, which was hosted by COMSATS' Centre of Excellence in Pakistan, the International Center for Chemical and Biological Sciences (ICCBS).

The meeting was attended by the Council members or their representatives from 17 Centres of Excellence of COMSATS, including BCSIR (Bangladesh), ICCES (China), TIB (China), CIF (Colombia), NRC (Egypt), UTG (The Gambia), ITS (Indonesia), ICENS (Jamaica), RSS (Jordan), NMC (Nigeria), ICCBS (Pakistan), CUI (Pakistan), ITI (Sri Lanka), HIAST (Syria), TIRDO (Tanzania), CERTE (Tunisia), and TUBITAK (Turkiye). The officials belonging to COMSATS' international partner organizations i.e. COMSTECH, IOFS, SESRIC, The South Centre, TWAS, ESCAP-SSWA UNESCAP, UNESCO, UNIDO, as well as members of COMSATS Technical Advisory Committee (TAC), and a COMSATS' Focal Point in Yemen, attended the meeting as observers.

#### Inaugural Ceremony

The event was inaugurated on 25th

January 2023 by Prof. Dr. Atta-ur-Rahman, ICCBS Patron-in-Chief, and former Federal Minister for Science and Technology, Government of Pakistan. In his address, he urged COMSATS Member States to focus on education, science, technology, innovation & commercialization while their policy formulation. He emphasized the importance of strengthening linkages among state institutions, academic/research institutions and industry to create knowledge economy.

In his inaugural remarks, Ambassador Dr. Mohammad Nafees Zakaria, Executive Director COMSATS, briefed the participants on COMSATS' functioning, and highlighted its aim of benefiting the member states and other countries in the developing world in terms of Science, Technology and Innovation-led development. He elaborated that the main objective of the Commission was to bridge the knowledge and technology gap between the global North and South. He underlined that R&D would be inevitable to attain that objective of the forum. He also expressed his confidence in the capabilities and expertise of COMSATS Members' scientists and Centres of Excellence in realizing the needed quantum leap.

Speaking on the occasion, Prof. Iqbal Choudhary, Director ICCBS, welcomed the participants of the meeting and

pointed out that the pandemic has exposed the gross failure of global cooperation, as countries were left on their own to struggle with a health crisis of unprecedented magnitude.

Highlighting the mission of COMSATS, Prof. Ashraf Shaalan, Chairperson COMSATS Coordinating Council, considered it important to enhance cooperation in the fields of S&T, particularly for the preservation of climate and environment. He commended the work being done by COMSATS Secretariat for facilitating socio-economic development of member countries.

Prof. Khalid Iraqi, Vice Chancellor, University of Karachi, welcomed the delegates and participants of the meeting and considered it an honour for the University to host this important meeting at Karachi University campus.

#### Technical Sessions

During the technical sessions of the meeting, the Minutes of the previous (23rd) Meeting of COMSATS Coordinating Council were approved by the Council. Subsequently, Mr. Farhan Ansari, Deputy Director (Programmes) COMSATS briefed the Council on the implementation status of the decisions taken by the Council in its previous meeting. Ambassador Dr. Mohammad Nafees Zakaria, Executive Director





COMSATS presented COMSATS' Activity Report (2020-2022). The Coordinating Council expressed satisfaction on the implementation status of the decisions of last Council meeting, as well as activity report (2020-2022).

The Heads/representatives of the Centres of Excellence presented the progress made by their respective Centres during the intervening period of August 2020 to December 2022, including collaborations with other Centres of Excellence, activities related to South-South cooperation, and efforts for achieving UN SDGs. Representatives of the international partner organizations also made presentations, in which they highlighted the ongoing programmes and activities of their respective organizations as well as possibilities of support and collaboration with COMSATS.

A significant decision made at the meeting was re-election of Prof. Dr. Ashraf Shaalan as Chairperson Coordination Council for three years term (2023 - 2026). A Memorandum of Understanding (MoU) for cooperation in areas of interest was also signed between the National Research Centre (NRC-Egypt) and ICCBS-Pakistan.

The Council endorsed the new initiatives proposed at the meeting,

including establishment of COMSATS International Centre of Excellence (CICE); Video Documentary of COMSATS & Virtual Tours of Centres of Excellence; Dashboard/Portal for COMSATS' programmes; Catalog of products, technologies and services offered by the Centres of Excellence

to Member Countries; Renewable Energy Solutions; establishment of a Model COMSATS Solarized Precision Agriculture Green House; initiation of collaborative programmes for digital skills development of youth; digital transformation, R&D activities to support projects of commercial value,

### Some Key Exchanges of the Technical Deliberations

- **BCSIR-Bangladesh** showed interest in collaborating with other Network Members in the areas of nanotechnology, renewable energy, biotechnology, biochemical and bio fuel (bio refinery) materials, and metallurgical science and engineering among others.
- **TIB-China** pledged to strengthening collaboration in the field of industrial biotechnology
- **ICCES-China** pledged to facilitate joint research activities climate change and environmental protection.
- **NRC-Egypt** expressed willingness to initiate capacity building initiatives in various areas, including healthcare, water, climate change, renewable energy, agriculture, and food security.
- **UTG-The Gambia** sought support for research collaboration; staff development and technical support for labs upgradation
- **ITS-Indonesia** pledged to offer post-graduate scholarships granted by Kemitraan Negara Berkembang (KNB) at ITS
- **ICENS-Jamaica** showed interest in collaborating in the areas of environmental geochemistry, biogeochemical cycles, forensics, food irradiation, and sterile insect technique, etc.
- **RSS-Jamaica** showed interest in collaborating with other Network members in various areas including climate change, renewable energy, flood mapping, healthcare, among others.
- **CUI-Pakistan** expressed interest in initiating capacity-building activities including exchange of students, faculty and staff; as well as training for repair of scientific equipment.
- **ITI-Sri Lanka** showed interest in undertaking joint research activities as well as initiating exchange programs for scientists for postdoctoral studies and post-graduate training.
- **HIAST-Syria** showed interest in collaborating with Network members in the areas of nanotechnology, solar and fuel cell technologies, hybrid photovoltaic systems, and cyber security.
- **TIRDO-Tanzania** desired to establish collaborations with other Network members for Expert Exchange; technology transfer for drug development and value addition on agro-industrial waste; capacity building activities; and joint R&D projects in natural products and industrial biotechnology
- **TUBITAK-Turkiye** offered collaborations in research areas including Climate Change and Sustainability, Energy Technologies, Life sciences, Materials technologies, chemical process technologies, sensor and system technologies, among others.



venture into space sciences, satellite development, medicines, industrial applications of chemical and bio-sciences.

The Council advised the Secretariat to revive its activities related to Repair and Maintenance of Scientific Engineering Equipments, as well as Internet Security in Member Countries. Demand driven Extension of COMSATS' Tele-health Programme to other member countries was also recommended. The Council members also underlined that COMSATS' Centres of Excellence were ready to help Member States' governments with solutions to meet challenges posed by food security, climate change, pandemics, lethal diseases, economy, and lack of access to emerging technologies.

Under various agenda items, the Council members deliberated upon the ongoing programmes of COMSATS, including Post-graduate Scholarships, Collaborative R&D projects; Post-doctoral Fellowships, Tele-health Programme, capacity building activities, ICT Services, publications, etc.

The Council was pleased to learn about the establishment of COMSATS Joint Centre on Industrial Biotechnology (CCIB), at the Tianjin Institute of

Industrial Biotechnology (TIB), in order to promote meaningful cooperation among the COMSATS' Member Countries and Centres of Excellence in the field of industrial biotechnology. The Council appreciated the progress made by CCIB under the leadership of Prof. Jibin Sun, Director CCIB, since its establishment in April 2021. The Council also appreciated the progress made by COMSATS Centre for Climate and Sustainability (CCCS) regarding capacity-building of COMSATS member countries as well as other developing countries in addressing challenges related to climate change that directly impact the areas of agriculture, water,

health, etc. Furthermore, the Council noted with appreciation regarding re-composition of COMSATS Technical Advisory Committee (TAC), which consist of 10 internationally renowned experts. It welcomed the new members of the TAC and looked forward to their valuable advice and guidance regarding various programmes and activities of the organization. The council also discussed the role of TAC. The Council was pleased to learn that the 4th meeting of COMSATS Consultative Committee was held online during November 2020, in which delegates from 19 member countries participated. A review of Administrative and Financial



### Participants of the Meeting

- Prof. Dr. Ashraf Shaalan, Chairperson of COMSATS Coordinating Council, Former President of the National Research Centre (NRC), Egypt
- Dr. Md. Murshed Hasan Sarkar, Senior Scientific Officer, Bangladesh Council of Scientific and Industrial Research (BCSIR), Bangladesh
- Prof. Lin Zhaohui, Director, International Center for Climate and Environment Sciences (ICCES), China
- Prof. Jibin Sun, Deputy Director-General, Tianjin Institute of Industrial Biotechnology (TIB), China
- Ms. Qianqian Chai, Officer of Foreign Affairs and Academic Exchange, Tianjin Institute of Industrial Biotechnology (TIB), China
- Ms. Zhihong Xiao, Secretary, COMSATS Centre for Industrial Biotechnology, Tianjin Institute of Industrial Biotechnology (TIB), China
- Prof. Eduardo Posada F., Director, International Centre for Physics, Colombia
- Mr. Ousainou Corr, Director of Finance, University of The Gambia (UTG), The Gambia
- Dr. Sri Fatmawati, Assistant Professor, Sepuluh Nopember Institute of Technology (ITS), Indonesia
- Prof. Charles N. Grant, Director General, International Centre for Environmental and Nuclear Sciences (ICENS), Jamaica
- Eng. Abeer Arafat, Senior Assistant to the President for Science Technology & Innovation, Liaison, Royal Scientific Society (RSS) Amman, Jordan
- Prof. Mebine Promise, Director/Chief Executive, National Mathematical Centre (NMC), Nigeria
- Prof. Dr. M. Iqbal Choudhary, Director, International Center for Chemical and Biological Sciences (ICCBS), Pakistan & Coordinator-General COMSTECH
- Prof. Dr. Farzana Shaheen, International Center for Chemical and Biological Sciences (ICCBS), Pakistan
- Dr. Humera Jahan, International Center for Chemical and Biological Sciences (ICCBS), Pakistan
- Prof. Dr. Muhammad Tabassam Afzal, Rector, COMSATS University Islamabad (CUI), Pakistan
- Mr. Ali Tawab, In-charge International Office, COMSATS University Islamabad (CUI), Pakistan
- Prof. Sirimal Premakumara, Chairman Industrial Technology Institute (ITI), Sri Lanka
- Dr. Radhika Samarasekera, Director General Industrial Technology Institute (ITI), Sri Lanka
- Dr. Maher Suleiman, Director, Higher Institute for Applied Science and Technology (HIAST), Syria
- Ms. Jacqueline Mwendwa, Director of Engineering Development and Head, Energy Technologies Division, Tanzania Industrial Research and Development Organization (TIRDO), Tanzania
- Prof. Ahmed Ghrabi, Director General, Water Researches and Technologies Centre of Borj-Cedria (CERTE), Tunisia
- Dr. Osman Okur, Vice President, TÜBİTAK Marmara Research Center (MAM), The Scientific and Technological Research Council of Türkiye (TUBITAK), Türkiye

Matters of COMSATS was made by Ambassador Zakaria, which was endorsed by the Coordinating Council. The Council appreciated the payment of the Annual Membership Contribution by China, Jamaica, Kazakhstan, Nigeria and Pakistan since the last Council meeting held in 2020. Moreover, the Centres pledged to play due role in sensitizing their respective governments regarding the importance of making sustained financial contribution to COMSATS' programmes.

Other matters discussed by the Council include: Joint programmes in collaboration with international/inter-governmental organizations; Programmes for achieving UN SDGs; Agenda of 5th Consultative Committee Meeting; allocation of funds for programmes and activities of COMSATS; etc.

### Concluding Ceremony

Speaking at the concluding ceremony, Prof. Dr. M. Iqbal Choudhary, Director,

ICCBS, expressed pleasure on hosting the meeting, and thanked the participants for their active interventions. He looked forward to ICCBS' cooperation with other Centres in various areas of mutual interest. Prof. Ashraf Shaalan, Chairperson Coordinating Council, thanked ICCBS for hosting the meeting, as well as praised the COMSATS team for their tireless efforts to ensure the meeting's success. He also expressed gratitude to the Council for placing trust in his leadership, and re-electing him as Chairperson. He pledged to closely work with COMSATS Headquarters for achieving the objectives of COMSATS Network. Speaking on the occasion, Dr. Zakaria, Executive Director COMSATS, thanked ICCBS for excellent arrangements of the meeting. He

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and contribution to the meeting deliberations. I congratulate Prof. Dr. Ashraf Shaalan, lifetime member of the Council and former President of National Research Centre (NRC), Egypt on his re-election as the Chairperson of the Council for another term of three years.

During the period under reporting, COMSATS in collaboration with other members of ANSO-BIDI Institute Network, continued to hold the ANSO-BIDI School on 'Innovation, Sustainable Development and Leadership Enhancement'. My participation at the 10th World Government Summit at Dubai on 12-15 February 2023 titled "Shaping Future Governments", as their guest afforded opportunity to discuss COMSATS activities with the world leaders. Concurrently, COMSATS Centres of Excellence continued research & development work and capacity-building activities in their respective fields of specialization. The news of scientific activities of the Centres of Excellence are given in relevant section of this Newsletter.



congratulated Prof. Shaalan on his re-election as Chairperson Coordinating Council, and for befittingly steering the deliberations during the meeting. Dr. Zakaria praised COMSATS' team for doing excellent job. He stated that COMSATS Headquarters would make all efforts to facilitate mutually beneficial collaboration among the Network members. At the end of the meeting, a communiqué was also issued (page 10).

### Special Session: China's Leadership Role for Developing Countries

On the sidelines of the 24th Meeting of the Coordinating Council of COMSATS, a special session, entitled 'China's Leadership Role for Developing Countries' was held on 27th January 2023, during which the representatives of Chinese government and corporate sectors made presentations highlighting the strategy adopted and initiatives taken by the Government of China to provide congenial environment to private sector, and helping the country leapfrog in ST&I. The session had in-person participation of Council members from Egypt, the Gambia, Indonesia, Jordan, Pakistan, Sri Lanka, Sudan, Syria, and Tanzania, besides online participants.

Mr. Cao Zhouhua, Science

Commissioner, Embassy of China in Pakistan, shed light on policies adopted by Chinese government to encourage private sector investments in ST&I, as well as shared the opportunities of collaboration under China's Belt & Road Initiative (BRI). Moreover, Mr. Mao Zhixia, Chief (South Asia) of BGI Group – a genomics research institute, which is among top ten life sciences corporations globally. He shared the corporation's products and services, inter alia, related to agriculture & food security, and healthcare (particularly detection and treatment of neonatal diseases). Mr. Zhao Liru, Director of ZTE Pakistan – a leading telecom company shed light on the company's products and services related to 5G technologies, communication network products, databases, operating systems, and architecture, etc, which have applications in various sectors, including smart cities, big data, transportation, oil & gas, mining, etc.

Moderated by the Executive Director of COMSATS, Ambassador Dr. Mohammad Nafees Zakaria, the session generated a high level of interest and enthusiastic discussions among the participating scientists, and opened new avenues for collaboration from the platform of COMSATS. China's rapid advancement in Science, Technology and Innovation (ST&I) was lauded by

heads and representatives of COMSATS Centres of Excellence.

At the end of hectic Coordinating Council meeting, scientists were given exposure to Pakistan's scenic beauty, entertainment world and cultural diversity during their stay at the Dreamworld Resort. The participants enjoyed musical evening with cultural performances, and praised the high-class entertainment and conference facilities at the Resort.

### Executive Director COMSATS calls on the Federal Secretary MoST, Pakistan

The Executive Director of COMSATS, Ambassador Dr. Mohammad Nafees Zakaria, called on the Federal Secretary, Ministry of Science and Technology (MoST), Government of Pakistan, Dr. Ghulam Muhammad Memon, at his office in Islamabad on January 3, 2023.

Dr. Memon, who is also the ex-officio Chairperson of COMSATS Consultative Committee, congratulated Ambassador Zakaria on his appointment as Executive Director of COMSATS. The Executive Director apprised the Federal Secretary about the then upcoming 24th meeting of the Coordinating Council to be planned in Karachi on January 25-26, 2023, hosted by COMSATS Centre of



Excellence in Karachi, the International Center for Chemical and Biological Sciences (ICCBS).

Ambassador Zakaria appreciated Pakistan's Ministry of Science & Technology for steadfast support and cooperation to COMSATS being the focal ministry in the host country. Both officials agreed on promoting Science, Technology and Innovation in line with the fundamental objective of the organization by adopting practical approaches with tangible outcomes.

### The Ambassador of Palestine calls on the Executive Director COMSATS

The Ambassador of the State of Palestine, H.E. Mr. Ahmed Amin, called on the Executive Director COMSATS, Ambassador Dr. Mohammed Nafees Zakaria, on January 4, 2023. The two officials discussed collaborations between COMSATS and Palestinian institutions and other matters of mutual interest.

Dr. Zakaria briefed the Ambassador on the COMSATS' activities, which were aimed at benefiting its member states in the field of Science, Technology and Innovation in a variety of ways.

The Ambassador expressed keen interest in COMSATS' activities and hoped for Palestine to benefit

from them through due cooperative measures. He said that Palestine attaches high importance to the country's membership to COMSATS and expressed desire for promoting mutually beneficial cooperation programmes among various Centres of Excellence in the ambit of COMSATS. Future course of COMSATS' activities for the benefit of its members was also discussed. Matters discussed during the meeting also included briefing on undertakings of COMSATS' statutory bodies, including 24th Meeting of COMSATS Coordinating Council that was held on January 25-26, 2023.

Earlier, on December 22, 2022, Dr. Zakaria had also paid a courtesy call to the Ambassador at the esteemed Embassy of Palestine in Islamabad. The Ambassador had congratulated Dr. Zakaria on his appointment as Executive Director COMSATS and pledged his office's support to COMSATS' mission.

### British House of Lords' Member visits COMSATS

Honorable Member of the House of Lords of the United Kingdom, Lord Qurban Hussain visited COMSATS Secretariat on 6th January 2023, to meet Ambassador Dr. Mohammad Nafees Zakaria, Executive Director COMSATS. Lord Hussain congratulated Dr. Zakaria on his appointment as Executive Director COMSATS.

Dr. Zakaria briefed the honorable guest on COMSATS' functioning, which was aimed at benefiting its member states and other countries in the developing world in terms of Science, Technology and Innovation-led development. Briefing the honourable member of the House of Lords, the Executive Director underlined the importance of COMSATS' pursuit of its mission of S&T-led development as it will not just benefit the Global South but also the International efforts towards addressing common challenges facing the world community. Lord Hussain expressed keen interest in COMSATS' activities. Lord Hussain is a Pakistan heritage British Liberal Democrat politician. He is a recipient of the Sitara-e-Quaid-e-Azam by Government of Pakistan.

### 5th Term of ANSO-BIDI School on 'Innovation, Sustainable Development and Leadership Enhancement' Concludes

From the platform of ANSO-BIDI Institute Network, the Center for Environmental Economics of the University of Chinese Academy of Sciences (CEE-UCAS), in collaboration with COMSATS, the Alliance of International Science Organizations (ANSO) and other collaborating institutions, organized the fifth term of online ANSO-BIDI School on 'Innovation, Sustainable Development and Leadership Enhancement'. The

training was held from 9th November 2022 to 11th January 2023, which included 8 weekly modules, covering a wide breadth of topics to polish leadership skills of the trainees in-line with the aspirations of collaborating institutions. It afforded an opportunity to the participants for learning and sharpening skills, exchanging information, ideas and experiences, as well as promoting international cooperation.

The training benefited over 80 participants, including 47 trainees recommended by COMSATS belonging to its Member Countries (Iran, Kazakhstan, Nigeria, Pakistan, Palestine and Syria). The topics covered during the training, inter alia, included: communicating spatial data (carto) graphically; disruptive technologies: the case of autonomous vehicles; basic science for facing global challenges; sustainable ecological economy; carbon sink projects; business development strategies; development of organizational leadership; management decisions under public emergency; and impact and response of epidemic on economy and society. Each training module was followed by active discussions and Q&A sessions, which facilitated exchange of ideas and knowledge-sharing.

The closing ceremony of the two-month long training course was held on 11th January 2023, which included speeches of the heads/representatives of the collaborating institutions. While making remarks on the occasion, Ambassador Dr. Mohammad Nafees Zakaria, Executive Director COMSATS, paid gratitude to the distinguished subject experts belonging to various prestigious organizations and universities for sharing knowledge, experiences, and best practices on the related topics with the participants. He congratulated all the participants who attended the training modules



and benefited from the intellectual deliberations. Ambassador Zakaria stated that COMSATS is proud of being a strong pillar of ANSO-BIDI Institute Network, having collaborated to organize all five terms of the online training course since 2020. He recalled that this initiative overall benefited more than 700 scientists/leaders from various developing countries, over 300 of which were nominated by COMSATS belonging to its various Member Countries and Centres of Excellence. He stated that the demand and participation of large number of trainees indicate success of these training courses, and COMSATS looks forward to enhancing collaboration with ANSO, UCAS and other partner organizations for capacity building of the common member countries. He appreciated the untiring efforts of Prof. Desheng Wu and his team at CEE-UCAS for necessary arrangements, as well as the team at COMSATS Headquarters for facilitating the participation of relevant trainees from the Member Countries. The ceremony concluded with the distribution of certificates among the resource persons and participants.

### **Executive Director COMSATS Participates in 10th World Government Summit in UAE**

The Executive Director COMSATS, Ambassador Dr. Mohammed Nafees

Zakaria, was invited by the UAE Government to the 10th World Government Summit held in Dubai on 12-15 February 2023. The theme of the summit this year was "Shaping Future Governments".

Ambassador Zakaria was accompanied by COMSATS' experts on Artificial Intelligence, Technology, Science, and Innovation, Mr. Kamil Mehmood and Mr. Parvez Abassi. During the Summit, he had the opportunity to meet UAE Ministers, including H.H. Sheikh Nahyan bin Mubarak Al Nahyan, Minister for Culture, Youth and Social Development, H.H. Omar bin Sultan Al Olama, Minister of State for Artificial Intelligence, Digital Economy and Remote Work Application, H.E. Sarah Amiri, Minister of State for Advanced Technology and Chairwoman of UAE Space Agency.

Speaking with His Highness Omar Sultan Al Olama, Dr. Zakaria thanked UAE government for the invitation to attend the Summit and praised UAE Leadership's vision and successfully organization of the Summit. The Minister welcomed Amb. Zakaria and appreciated his active participation. In his meeting with Ms. Amiri, Amb. Zakaria apprised Her Excellency about COMSATS and highlighted potential for cooperation. The UAE's commitment to ensure the peaceful use of space for humanity was lauded.

Dr. Zakaria admired the visionary





leadership of the UAE and the strides the country had made in diverse fields in recent years, most prominently in education, and Science & Technology. He extended sincere thanks to the UAE Government and its Ambassador to Pakistan, H.E. Mr. Obaid Alzabbi, for his facilitation and courtesies.

He also met H.E. Jessica Alupo, Vice President of Uganda, and apprised her of COMSATS' activities and Uganda's active participation as a member country. The Vice President appreciated the briefing and expressed interest in learning more about COMSATS. On the sidelines of the Event, Dr. Zakaria also exchanged views with Sir Nick Clegg, Former Deputy Prime Minister UK. During his career as a diplomat, Amb. Zakaria had represented Pakistan as High Commissioner to the U.K. in 2019-20.

Ambassador Zakaria also met the Nobel Laureate Prof Roger Konrad, who accepted the Executive Director's invitation to visit Pakistan. In his meetings, Ambassador Zakaria discussed various aspects pertaining to the theme of the summit, growing relevance of AI in every sphere of life, the role of science, technology and innovation in shaping the future of governments. He underlined the importance of collaboration and cooperation among countries to address common challenges and achieve shared goals. He expressed

COMSATS' keenness towards collaborating on such endeavors.

Ambassador. Zakaria also had fruitful interaction with the Ministerial delegation from Pakistan, including Minister for Ministry of Planning, Development & Special Initiatives, Mr. Ahsan Iqbal, Minister for Petroleum; Senator Musadik Malik, Minister for Overseas Pakistanis and Human Resource Development, Mr. Sajid Hussain Turi, and other senior officials. The Executive Director actively participated in various sessions. He also met experts on Space technologies, AI, and Science and apprised them about COMSATS and its programmes. Other important figures met included Prof. Dr. Ashraf Sobhy, Egyptian Minister for Youth and Sports; Prof. Jaffery Sachs an American Economist, and a number of other dignitaries.

The event was also attended by prominent international figures including Presidents of Turkey, Egypt, UN Secretary-General and CEO of Twitter, Mr. Elon Musk. Sharing his thoughts with the lead media in the UAE, Dr. Zakaria appreciated the UAE Leadership's vision that was evident, inter alia, from successfully holding the Summit fostering necessary international cooperation. He also underlined relevance of science and technology in every sphere of life and hence the necessity of policy intervention by the

governments to regulate, encourage and benefit.

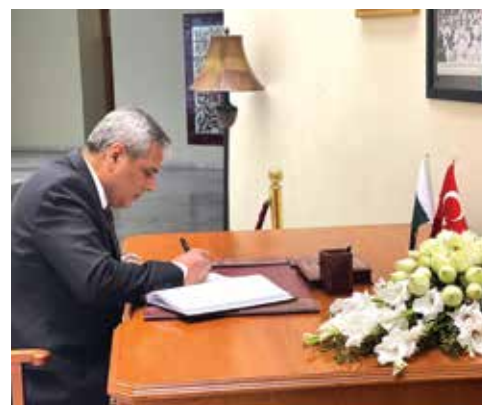
## COMSATS Stands in Solidarity with Member States hit by Catastrophic Earthquake

The Executive Director of COMSATS, Ambassador Dr. Nafees Zakaria, visited the Embassy of Republic of Türkiye in Islamabad to sign the condolence book in the wake of massive earthquake that hit the country on 6th February 2023.

Dr. Zakaria expressed deep sorrow with the Ambassador of Türkiye, H.E. Mr. Mehmet Pacaci, on the devastating natural calamity that befell Türkiye. He assured that the COMSATS Community firmly stood with the brotherly people of Türkiye in this hour of trial.

Ambassador Pacaci thanked Dr. Zakaria and apprised him on the situation in the aftermath of the earthquake that took a huge toll on the precious lives of tens of thousands across 10 provinces and colossal damage to the infrastructure. He said that the Government had declared national emergency.

Dr. Zakaria assured the Ambassador that necessary efforts will be made by the COMSATS to provide relief to the affected people and assist the government in coping with the challenge. Turkish Ambassador appreciated Dr. Zakaria's sentiments.



## **Communiqué of the 24th Meeting of COMSATS Coordinating Council (Hybrid) 25-26 January 2023**

The 24th meeting of COMSATS Coordinating Council was held on 25-26 January 2023, at the International Center for Chemical and Biological Sciences (ICCBS), Karachi. The participants deliberated upon the fourteen-point agenda and are pleased to unanimously adopt the following:

1. The Coordinating Council is pleased with the role played by the COMSATS Secretariat for following up the decisions made at the 23rd Council meeting, which was held online amid peak time of COVID19 pandemic. The Annual Activity Report presented by the Executive Director COMSATS is highly appreciated.
2. The academic, research and capacity-building activities undertaken by Centres of Excellence during the period since the last Council meeting are highly appreciated.
3. The Council is pleased to learn about the establishment of COMSATS Joint Centre on Industrial Biotechnology (CCIB), at the Tianjin Institute of Industrial Biotechnology (TIB), in April 2021, in order to promote meaningful cooperation among the COMSATS' Member Countries and Centres of Excellence in the field of industrial biotechnology. The Joint Centre was established by COMSATS and TIB with financial support of the Chinese Ministry of Science and Technology and Tianjin Government under the framework of the National Center of Technology Innovation for Synthetic Biology (NC SynBio) of China, which is highly appreciated. The Centre's activities pertaining to facilitating collaborative research and development activities, academic exchanges, personnel training, etc., in areas of Biomedicine, Bio-Agriculture, Future Food, Biomaterials, Biochemicals and Bioenergy, are noted with great admiration.
4. Recognizing the significance of the linkages between climate change and sustainable development, the Council is pleased to note with appreciation the progress made by the COMSATS Centre for Climate and Sustainability (CCCS). The Council is pleased that 19 Centres of Excellence have so far joined the CCCS network and are actively participating in the same.
5. The Council appreciates the holding of over 50 physical or online capacity building events in collaboration with Centres of Excellence and international partner organizations, which benefited the scientists, researchers, academicians, engineers and technicians belonging to the Member States.
6. Regular publication of COMSATS' Annual Report, Newsletter and other information material brought out by COMSATS during the reporting period deserves praise. The inputs and support of the Centres of Excellence in this regard is highly appreciated.
7. One of the positive externalities of COVID19 pandemic was the focus shift towards digitalization, which also calls for COMSATS to drastically change its modus operandi and make use of virtual means for its operations. The decisions made by the Council viz the initiatives of creating web-portal, dashboard, and video documentaries of Centres of Excellence is a welcome step in the right direction. Moreover, the Council agrees to hold virtual meetings more often to expeditiously follow up on its decisions and to maintain strong interconnectivity.

8. The Council welcomed the following new initiatives proposed by the Executive Director COMSATS:
  - a. Establishment of COMSATS International Centre of Excellence (CICE)
  - b. Dedicated effort towards Launching of COMSATS Satellite
  - c. Renewable Energy Solutions for COMSATS
  - d. Establishment of a Model COMSATS Solarized Precision Agriculture Green House
  - e. Initiation of collaborative programmes for digital skills development of youth;
  - f. Establishment of R&D fund to support projects of commercial value;
  - g. Developing a Comprehensive COMSATS Resource Persons Directory
9. The Secretariat is advised to revive its activities related to Repair and Maintenance of Scientific Engineering Equipments, as well as Internet Security in Member Countries. Demand driven Extension of COMSATS' Tele-health Programme to other member countries was recommended.
10. The Council is pleased to learn that the 4th meeting of COMSATS Consultative Committee was held (online) on 11th November 2020, in which delegates from 19 member countries participated. It is highly important that governments of Member States, through the forum of Consultative Committee, may support the projects, programmes and collaborative undertakings initiated at the level of COMSATS Network. The outcomes of COMSATS' programmes and activities shall be regularly shared with the governments of Member States (COMSATS Consultative Committee)
11. The Coordinating Council unanimously decided that Prof. Dr. Ashraf Shaalan continues as Chairperson for another term of three years (2023 - 2026), and hopes that he continues to provide new thrust to the Network with regard to achieving its overall objectives. The Council also appreciated the leadership he provided during the earlier two successive terms (2016 – 2022).
12. The Council welcomes the new members of the Technical Advisory Committee and looks forward to their valuable advice and guidance regarding various programmes and activities of the organization. The Technical Advisory Committee has been reconstituted since the three-year tenure of its previous members completed during August 2020.
13. The payment of AMC by China, Jamaica, Kazakhstan, Nigeria and Pakistan during the period since the last Council meeting is also noted with appreciation. The Council encourages all other Network members to sensitize their respective governments regarding the importance of regularly making AMC for the financial sustainability of COMSATS.
14. The Coordinating Council appreciates the excellent arrangements made by the International Center for Chemical and Biological Sciences (ICCBS), for the 24th Council meeting and for providing generous hospitality to its participants. The preparation of necessary documentation by COMSATS Secretariat and the administrative support provided to ICCBS for the successful organization of the meeting is praiseworthy.
15. The Council appreciated the Embassy of China in Pakistan for arranging a special session on China's Leadership Role for Developing Countries on 27th January 2023 for the benefit of Network members. The Centres of Excellence are urged to benefit from the opportunities of collaboration available in this regard.

## SOME ACTIVITIES OF COMSATS' CENTRES OF EXCELLENCE

### Al Farabi KazNU-Kazakhstan Explores Avenues of Academic Cooperation

#### Cooperation with SOAS, London

Al-Farabi Kazakh National University (KazNU) signed an MoU with School of Oriental and African Studies (SOAS), London, on January 31, 2023, aimed at mutually beneficial academic cooperation and exchange. The MoU was signed during the visit of Rector KazNU, Dr. Zhanseit Tuimebayev to SOAS. The Director of the SOAS assured full support in the implementation of the agreement.

#### Academic Cooperation with Iranian and Korean Universities

The Rector, Al-Farabi KazNU, held consultative meeting with the Consul General of the Islamic Republic of Iran in Almaty, Mr. Mohsen Fagani and Senior Experts of the Ministry of Foreign Affairs of Iran, on January 19, 2023. During the meeting, the prospects of cooperation in the field of science and education were discussed. He also held similar meeting with the Consul General of South Korea in Almaty, Mr. Park Nae Chon on January 26, 2023. Currently, Al-Farabi KazNU has concluded 9 agreements with Iranian foundations and universities.



While talking to Mr. Park Nae Chon, the Rector briefed about the achievements and plans of Al-Farabi KazNU, and desires to enhance cooperation ties with Korea for jointly holding scientific conferences; publishing books about South Korea in Kazakh language and vice versa; and making efforts to attract Korean investors to innovative projects. Dr. Tuimebayev hoped that such initiatives will provide basis for development of cooperation in the field of education and science.

#### Cooperation with Université Le Havre Normandie, France

The Rector, Al-Farabi KazNU, held meeting with the First Vice-President of the Université Le Havre Normandie (ULHN), France, Mr. Jean-Noel Castorio, on January 23, 2023. During the meeting certain proposals on bilateral cooperation were discussed aimed at exploring avenues for academic mobility of students as well as of the faculty.

#### Cooperation with Akdeniz University, Türkiye

On January 17, 2023, the Rector, Al-Farabi KazNU, met the Head of Health Care Management, Department of Akdeniz University, Türkiye, Dr. Mustafa Coban, in Almaty. During the meeting, the two heads explored avenues

of building partnership and jointly implementing large-scale projects.

#### Agreements signed at the General Assembly of SUN in Dubai

Al-Farabi KazNU participated in the 8th Annual General Assembly and the Board of Directors' meeting of the Silk Road Universities Network (SUN), held at the Canadian University, Dubai, on February 12, 2023. With a view to discuss the prospects of scientific & educational cooperation with member states of the SUN, Dr. Tuimebayev held a consultative meeting with the Rector of Samarkand State Institute of Foreign Languages, Uzbekistan, Dr. Ilkhomjon Tukhtasinov, that subsequently helped reach a Memorandum of Understanding between the two Universities. Moreover, Al-Farabi KazNU signed agreement with the Institute of Language and Literature of the Academy of Sciences of Mongolia.

#### Honour for RSS-Jordan and its Scientific Activities

##### Finalist Certificate - UK Alumni Awards 2022-2023 in Jordan

Dr. Hussam Hussein, RSS' Executive Director of Partnerships for Development, receives the Finalist Certificate for the category 'Science and





Sustainability' at the UK Alumni Awards Ceremony of the British Council for his impactful work on Water Diplomacy. The nominees of the UK Alumni Awards 2022-2023 in Jordan have been chosen for their outstanding achievements as businessmen, community leaders and pioneers in science and sustainability.

### Seminar held on Reducing Disaster Risk Mitigation

RSS held seminar on "Reducing Disaster Risk for the Poor by Risk-Informed Planning & Evidence-Based Decision Support", at its premises on February 9, 2023, in connection with catastrophic and deadly series of earthquakes that took place on 6th February 2023 and onwards.

The seminar was conducted by Prof. John McCloskey, Chair in Natural Hazards Sciences, University of Edinburgh. RSS scientists discussed and explored ways of transition from crisis management to multi-hazard risk-informed planning and decision-making, for low and middle-income countries.

Prof. John also briefed about application of the integrated risk-informed methodology being undertaken by the Tomorrow's Cities Research Hub – an institution that he is also affiliated with.

### Safe Agro MENA Project

RSS is taking part in the Safe Agro MENA Project, led by the Institute for Water Education (IHE Delft), among other participating partners from Jordan, Egypt and Iraq. The project aims at exploring the effectiveness of agroecological interventions to improve safe and sustainable treated wastewater reuse for water and food security. The intervention is expected to ensure human health, social equity, and environmental sustainability.

### IRCC-Sudan Organizes Training Workshops

IRCC and the UNESCO Chair on Transfer of Technology organized a three-day training workshop, titled 'Investment Projects Preparation and Appraisal and Applications of COMFAR Software' from 30th January to 1st of February 2023.

The Leather Research & Technology Center of IRCC organized 'Foot-wear and leather goods manufacturing training workshop', on January 16-31, 2023, for selected group of local communities interested in manual manufacturing of leather products in Nile River State – a northern state in Sudan.

### CUI-Pakistan Strengthens its Academic Ties

#### Cooperation with Alliance Francaise and the French Embassy in Islamabad

In order to strengthen the existing educational cooperation among CUI, the French Embassy in Islamabad and, Alliance Francaise, an MOU was signed by Prof. Dr. Sajjad A. Madani, Registrar (CUI); Ms. Hannah Bieber (French Education Manager, French Embassy in Islamabad) and Ms. Gaelle Le Breton (Director, Alliance Francaise de Lahore). The purpose of the tri-partite MoU is to promote French language and French diplomacy in campuses of CUI benefiting both the faculty and students.

#### Seminar held to Promote Exchange Program with US Embassy in Islamabad

On February 24, 2023, COMSATS University Islamabad (CUI) in collaboration with the US Embassy in Islamabad, organized a seminar on 'Exchange Programs and Scholarships offered by the US Government for Pakistani Students and Faculty' at its Islamabad Campus. Mr. Sharif Sabir, Senior Adviser on Cultural Affairs of the US Embassy was the resource person for this seminar. The purpose of holding the seminar was to brief CUI's students, faculty and staff members about study and exchange programs in the United States.

#### Cooperation explored with Ningbo University, China

A four-member delegation of Ningbo University, China, headed by Prof. Dr. Liu Xinmin, Chief Scientist, Institute of Drug Discovery Technology, visited CUI on February 9, 2023. Other delegation members included, representatives of Institutes of Medicinal Plant



Development and Drug Discovery Technology of the University, and Dr. Yan Wang, Assistant Professor, H.E.J. Research Institute of Chemistry of the International Center for Chemical and Biological Sciences (ICCBS), Pakistan.

The delegation explored avenues of academic and research collaboration in a meeting with senior official of CUI, including Dean, Faculty of Sciences, In-charge Academics, representatives of Department of Chemistry, Biosciences, Head, International Office and In-charge, China Study Centre at CUI. The delegates also visited CUI's Biosciences Labs and a purpose-built China Study Center.

### Academic exchange with Queen Mary University of London

On January 16, 2023, a delegation from Queen Mary University of London (QMUL), England, headed by Mr. Mark Coddington, Global Projects and Policy Manager, Office of the Principal, called on the Rector CUI, Prof. Dr. Muhammad T. Afzal. Avenues of collaboration were explored during the meeting, which also had the participation of senior officials of CUI, including Deans of Faculty of Sciences and Business Administration, and heads of Biosciences and International Office.

Mr. Coddington informed that QMUL's history dates back to 1785, with the

founding of The London Hospital Medical College – England's first official medical school. QMUL's has established successful collaboration models including 1+1, 4+1 and faculty mobility programs. He offered similar prospects for CUI students and faculty, which include 1+1 (double degree program) and 4+1 through progression agreement program (offering tuition fee discount, simplified application route, application support and enhanced channels of communication).

### ICCBS-Pakistan Continues its Scientific Journey

#### Training organized on 'Stem Cells in Skin Regeneration'

International Center for Chemical and Biological Sciences (ICCBS), Pakistan, in partnership with Sindh Innovation Research and Education



Network (SIREN) organized a three-day workshop on 'Stem Cells in Skin Regeneration', in February 2023. The workshop was held at ICCBS' Dr. Panjwani Center for Molecular Medicine and Drug Research (PCMD), and had participation of more than 70 students, researchers and medical doctors from various universities of Pakistan. Highlighting the importance of the training at the inauguration ceremony, the Director ICCBS, Prof. Dr. M. Iqbal Choudhary, referring to WHO study, noted that around 265,000 deaths are reported annually from chronic burns worldwide, and that burn wounds are devastating tissue injuries having severe traumatic effects on the victims. He also informed that the Stem Cell Research Laboratory at PCMD is fully equipped with all necessary instruments and equipment, adding that various research projects related to the regeneration of skin wounds have been successfully completed at the Center.

### Pak-Sino Sci-Tech Cooperation on Medicinal Plants

Prof. Dr. Liu Xinmin, Member, Expert Advisory Panel on Traditional Medicine, World Health Organization (WHO), visited ICCBS, University of Karachi on, 14th February 2023. Role of ICCBS Dr. Xinmin highlighted the importance of the Chinese-Pakistan Cooperation on Medicinal Plants, especially in connection with the launch of Pakistani herbal seeds into outer space in June



2022 and returned them safely to the earth in December. He said that the hybrid seeds will help scientists to develop new varieties which can help feed the growing population and also treat incurable diseases as China and Pakistan have long history of using traditional medicines.

### Honour for the Center

A Ph.D. student of ICCBS' H.E.J. Research Institute of Chemistry, Ms. Humira Karim, won the 2nd prize at the 3rd Commonwealth Chemistry Posters event held online in September 2022. The event was organized by the Federation of Chemical Sciences Societies, UK. The organizers received 180 posters in all from 31 countries for the competition. Humira Karim was awarded a poster prize under the theme of Biodiversity and Natural Products. Her poster titled 'Design and Synthesis of Dendrimeric Analogs of Anticancer Peptides'.

### R&D at TÜBİTAK-Türkiye contributes to meeting National Targets

#### New Centre on Clean Energy, Climate Change and Sustainability

TÜBİTAK established the 'Clean Energy, Climate Change and

Sustainability Research' Institute at Konya, with patronage of Turkish Ministries of Industry & Technology, and Environment, Urbanization & Climate Change. The Institute will coordinate and carry out climate change-related research for Türkiye's green development process by focusing on areas, such as renewable and clean energy, future scenarios and social policy. Subsequently, the Institute will establish 'Competence Centers' that will focus on planning studies at the national level in each research area. Scholarships will also be awarded to young researchers working in the field of climate change.

#### Letter of Intent Signed with Bpifrance, France

TÜBİTAK signed a letter of intent with the French Public Investment Bank, Bpifrance, on January 25, 2023, to initiate a joint call under the EUREKA Program – a research program, providing students with the opportunity to conduct high-quality, individualized research projects.

#### Expert Talk made at TÜBİTAK TBAE

The TÜBİTAK Research Institute for Fundamental Sciences (TBAE) and TÜBİTAK Science High School jointly organized a series of expert talks by internationally renowned foreign

and Turkish scientists to promote scientific culture in the country. The highlight of the activity was a talk by Dr. Anton Kapustin, Professor of Theoretical Physics, California Institute of Technology, USA, on 'Heat and Electricity: Are They Alike?', made on January 3, 2023.

#### Holding of Seventh National Antarctic Science Expedition supported

TÜBİTAK MAM Polar Research Institute (KARE) coordinated the holding of the Seventh National Antarctic Science Expedition (TAE-VII). The event had patronage of the Presidency and financial support of the Ministry of Industry & Technology, Government of Türkiye. The expedition started off from Istanbul for Antarctica on January 30, 2023 having participation of 19 scientists. A group of scientists are expected to carry out studies on a total of 18 projects in various fields such as earth sciences, life sciences, social sciences and physical sciences. This group, representing the General Directorate of Meteorology, the General Directorate of Mapping, the Turkish Naval Forces Command Office of Navigation Hydrography and Oceanography, will also take part in the studies on site, and collect data from the equipment installed in Antarctica in previous years as well as complete their preparations for the next year.

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

The COMSATS University Islamabad (CUI), Pakistan, has offered Graduate (MS and PhD) scholarships for Fall 2023 session for students/researchers belonging to COMSATS Member States.

This scholarships are offered in the following key programmes: Computer Science; Management Science; Electrical Engineering; Biosciences; Mathematics; Physics; and Meteorology

The relevant details, including academic programs, eligibility criteria, admission procedure and schedule, application form, etc. are available on CUI website: ([http://ww2.comsats.edu.pk/internationalstudents/COMSATS\\_HQ.aspx](http://ww2.comsats.edu.pk/internationalstudents/COMSATS_HQ.aspx)).

Students from COMSATS' Member States and Centres of Excellence are encouraged to benefit from this opportunity. The last date for submission of applications is June 30, 2023.

For further details on the scholarships, please visit [www.comsats.org](http://www.comsats.org) or write to [farhan@comsats.org](mailto:farhan@comsats.org).

## Award for Young Scientists

### The TWAS-CAS Young Scientists Award for Frontier Science 2023

The World Academy of Sciences (TWAS) and the Chinese Academy of Sciences (CAS) sought nominations for the Young scientists Award for Frontier Science. The nominations for the 2023 Award are invited from the TWAS members as well as science academies, national research councils, universities and scientific institutions in developing and developed countries.

The 2023 edition of the Award will honor the outstanding contributions of young scientists in the fields of mathematics and/or artificial intelligence (AI).

**Deadline:** 15th May 2023

**Details at:** <https://twas.org/opportunity/twas-cas-young-scientists-award-frontier-science>

## COMSATS Network of Centres of Excellence



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