



COMSATS Newsletter

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

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Group Photo of Participants of the 25th Meeting of COMSATS Coordinating Council was successfully held on 10-12 September 2024, in Tianjin, China (Page 2)

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From the Executive Director's Desk

Keeping pace with advancement in technologies is an imperative. COMSATS has set its course to achieve the overarching objective of facilitating sustainable socio-economic development in the South, as defined by the visionary scientist, Prof. Dr. Abdus Salam, by continuing to take initiatives to remain abreast with the changing global requirements.

Among the productive outcomes of the reporting months was the successful organizing of the 25th Meeting of COMSATS Coordinating Council in Tianjin, China, hosted by COMSATS' Centre of Excellence, the Tianjin Institute of Industrial Biotechnology (TIB). The Heads/ Representatives of COMSATS Centres of Excellence, COMSATS' Technical Advisory Committee members and international partner organizations attended the meeting. The Council reviewed the ongoing programmes and activities of the organization and set future direction. The participants had the opportunity to visit TIB's state-of-the-art research facilities, which afforded exploring new avenues for cooperation.

Furthering its engagement in cutting-edge

scientific fields, COMSATS co-organized an international workshop on "Metagenomics-based Approaches for Viral Disease Surveillance" during September 2024. The workshop was held in collaboration with the Centre of Excellence, the COMSATS University Islamabad, and co-organized by COMSATS Secretariat and the International Centre for Genetic Engineering and Biotechnology (ICGEB). The workshop focused on the role of metagenomics in pandemic preparedness and public health, emphasizing the potential of metagenomic sequencing for detecting novel pathogens, improving disease prediction models, and enhancing global health security. Through such initiatives, COMSATS continues to promote scientific cooperation, climate resilience, and technological advancements for sustainable development, ensuring that scientific progress benefits communities worldwide.

COMSATS has been proactively pursuing international collaborations in ST&I, culminating in Memorandum of Understanding (MoU) and agreements. During the period of this report, COMSATS formalized its partnership with the Institute

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HIGHLIGHTS FROM COMSATS SECRETARIAT

TIB-China hosts 25th Meeting of COMSATS Coordinating Council at Tianjin

The 25th Meeting of COMSATS Coordinating Council was successfully held on 10-12 September 2024, in Tianjin, China. The meeting was hosted by one of COMSATS' Centres of Excellence in China, the Tianjin Institute of Industrial Biotechnology (TIB).

This annual meeting had participation of the Council members or their representatives from 16 affiliated Centres of Excellence of COMSATS, i.e. ICCES-China, TIB-China, UTG-The Gambia, NRC-Egypt, IROST-Iran, ITS-Indonesia, RSS-Jordan, KazNU- Kazakhstan, NMC-Nigeria, ICCBS- Pakistan, CUI-Pakistan, ITI-Sri Lanka, IRCC-Sudan, HIAST-Syria, TIRDO- Tanzania, and TUBITAK-Turkiye. Moreover, representatives belonging to COMSATS' international partner organizations, namely ANSO, ECOSF, INSME, PIDF, South Centre and TWAS, as well as members of COMSATS Technical Advisory Committee (TAC) attended the meeting as observers. Officials of COMSATS Secretariat also attended the meeting.

Opening Ceremony

The inaugural ceremony was held on 10th September 2024. Speaking at the occasion, Director, Division of Multilateral Cooperation, Ministry of



Science and Technology, China, Mr. Dong Keqin, stated that South-South Cooperation is an indispensable part of international multilateral development cooperation and an important channel for developing countries to achieve self-reliance and progress. He expressed pleasure on collaborating with COMSATS for achievement of common objectives.

Prof. Dr. Liu Weidong, Director-General, Bureau of International Cooperation, Chinese Academy of Sciences (CAS), China, highlighted that the Global South is faced with various challenges. He informed that as a leading national institution, CAS attaches high importance to international cooperation. Prof. Weidong, being the incumbent Executive Director of ANSO, also highlighted the key activities of ANSO and its collaboration with COMSATS.

Prof. Dr. Ashraf Shaalan, Chairperson, COMSATS Coordinating Council affiliated with the National Research Centre (NRC), Egypt, stated that COMSATS Member States have the capacity to develop scientifically which is a noble cause. He was of the view that financial resource constraint should not be an impediment. He highlighted that COMSATS Centres of Excellence are actively collaborating with each other in various fields, and much more can be achieved by capitalizing on collective efforts. He urged greater and focused cooperation activities among the COMSATS Centres of Excellence. He identified low-emission transportation, climate change and renewable energy as NRC's areas of interest to benefit from South-South and Triangular Cooperation in the long term.

Ambassador Dr. M. Nafees Zakaria, Executive Director COMSATS, stated





that inventions and knowledge have brought a windfall of wealth to the technologically advanced nations in the Global North. He said that universalization of technologies and knowledge was the only way to disallow those with upper hand in technology from exploiting it to their advantage. He appreciated the Chinese Leadership, President Xi Jinping, who, at a BRI event, undertook that China will share its technologies and knowledge with everyone'. Ambassador Zakaria highlighted that during the past two years, COMSATS cultivated strategic partnerships, supported important R&D projects and innovative initiatives in emerging S&T areas. He underscored that the pooling of resources and sharing of expertise among COMSATS nations as key to the collective success. He called for more investment in R&D, which created a defining line between the developed and developing worlds.

Prof. Dr. Xiang Hua, Legal

representative, Deputy Director-General, TIB, highlighted that TIB specializes in synthetic biology and biomanufacturing, and has built a strong reputation for biotechnology development and transfer. He informed that many green bioprocess technologies developed have been successfully industrialized, significantly advancing the bioeconomy in China across various fields. He expressed pleasure on hosting the Council meeting, hoping to further enhance TIB's collaboration with other Network members.

Technical Sessions

This major platform for South-South scientific cooperation is deliberating upon a 13-point agenda, inter alia, focusing on fostering collaborative research and development projects, capacity building programmes, and developing tech-based solutions for addressing various global challenges. A



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of Strategic Studies Islamabad (ISSI) through signing of MoU aimed at science advocacy and promoting regional development through joint research initiatives, capacity-building programs and policy dialogues.

In alignment with COMSATS' objective of fostering global partnerships, I held a meeting with Ms. Aban Marker Kabraji of the Living Indus Initiative, during which the joint representation of COMSATS at the 29th Conference of Parties (COP29) in Baku, Azerbaijan, was inter alia agreed.

Recent ST&I advancements taking place globally are offering innovative solutions to various socio-economic challenges. One of the founding Members of COMSATS, China's recent progress in nuclear fusion technology has brought the world a step closer to sustainable clean energy. The researchers at the Massachusetts Institute of Technology (MIT) achieved breakthrough in quantum computing, making strides toward developing new applications. The European Space Agency (ESA) successfully deployed the EarthCARE satellite to enhance climate monitoring and atmospheric research. The global advancements in metagenomics have strengthened viral disease surveillance, while progress in water security technologies has introduced sustainable solutions for resource management. Such innovations taking place around the world exhibit promise to help address various socio-economic challenges at national and regional levels.

Further details on the afore-mentioned activities of COMSATS Secretariat as well as the key activities and achievements of some of COMSATS' Centres of Excellence are available in this edition of the newsletter. The Secretariat welcomes valuable feedback from the esteemed readers.



panel discussion on Biomanufacturing Cooperation for a Better Tomorrow in the Global South is being held in conjunction with the Council meeting on 12th September, which is UN Day for South-South Cooperation, giving the events a befitting conclusion.

During the technical sessions of the meeting, the Executive Director COMSATS, Ambassador Dr. M. Nafees Zakaria, presented COMSATS' Annual Activity Report (February 2023 – September 2024) and future plans, which were endorsed and appreciated by the Council. The Coordinating Council also expressed satisfaction on the implementation status of the decisions of last (23rd) Council meeting, which was presented by Mr. Farhan Ansari, Deputy Director (Programmes), COMSATS Secretariat. The Council also approved the Minutes of the 23rd Meeting of COMSATS Coordinating Council.

The Heads/representatives of the Centres of Excellence made presentations on their activities related to South-South and Triangular Cooperation during 2023-24, including the ongoing interaction and collaboration with other Centres of Excellence, as well as future plans for COMSATS' Network.

Moreover, a number of representatives of COMSATS' partner international organizations made presentations, highlighting their ongoing programmes and activities as well as possibilities of collaboration with COMSATS.

The Council members deliberated upon the ongoing programmes of COMSATS, including COMSATS Joint Centre on Industrial Biotechnology (CCIB), COMSATS Centre for Climate and Sustainability (CCCS), capacity building activities, MS / PhD Scholarships and Post-doctoral Fellowships, collaborative R&D projects, COMSATS' Digital and Global Health Program, ICT Services, etc. The Additional Director/Incharge Programmes, COMSATS Secretariat, Mr.

Irfan Hayee, shed light on the ongoing programmes of COMSATS in order to aid the discussions of Council members.

The Council appreciated the holding of 29 physical or online capacity building events by COMSATS Secretariat in collaboration with Centres of Excellence and international partner organizations, which mainly benefited the scientists, researchers, academicians, engineers and technicians belonging to the Member States. The Council was pleased to learn about the progress made by the COMSATS Joint Centre on Industrial Biotechnology (CCIB), at the Tianjin Institute of Industrial Biotechnology (TIB) that aims to promote meaningful cooperation



Participants of the Meeting

- Prof. Dr. Ashraf H. Shaalan, Chairperson of COMSATS Coordinating Council, Former President National Research Centre (NRC), Egypt.
- Prof. Dr. Lin Zhaohui, Director, International Center for Climate and Environment Sciences (ICCES), China.
- Prof. Dr. Hua Xiang, Legal representative, Deputy Director-General, Tianjin Institute of Industrial Biotechnology (TIB), Chinese Academy of Sciences (CAS), China.
- Prof. Dr. Jibin Sun, Professor, Tianjin Institute of Industrial Biotechnology (TIB), Chinese Academy of Sciences, China.
- Prof. Zhang Dawei, Committee Member, Tianjin Institute of Industrial Biotechnology, Chinese Academy of Sciences, China.
- Prof. Hosam El-Sayed, Assistant Vice President, National Research Centre (NRC), Egypt.
- Mr. Ousainou Corr, Director of Finance, University of The Gambia (UTG), The Gambia.
- Prof. Hassan Zamanian, Deputy Minister and President, Iranian Research Organization for Science and Technology (IROST), Iran.
- Prof. Nurul Widiastuti, Vice Rector for Academic and Student Affairs, Sepuluh Nopember Institute of Technology (ITS), Indonesia.
- Eng. Abeer Arafat, Senior Assistant to the President for Science, Technology & Innovation Liaison, Royal Scientific Society (RSS), Jordan.
- Dr. Gaukhar Datkhabayeva, Department of Biophysics Biomedicine and Neuroscience, Al-Farabi Kazakh National University (KazNU), Kazakhstan
- Prof. Mebine Promise, Director/Chief Executive, National Mathematical Centre (NMC), Nigeria.
- Prof. Dr. Farzana Shaheen, Director, International Center for Chemical and Biological Sciences (ICCBS), Pakistan.
- Prof. Zaheer Ul-Haq, Professor, PMDC, International Center for Chemical and Biological Sciences (ICCBS), Pakistan.
- Dr. Hammad Omar, Incharge International Office, COMSATS University Islamabad (CUI), Pakistan.
- Prof. (Ms.) Ilmi G. N. Hewajulige, Director General, Industrial Technology Institute (ITI), Sri Lanka.
- Dr. Itmad Awad Al-Hassan, Director General, Industrial Research and Consultancy Centre (IRCC), Sudan.
- Dr. Chadi Albitar, Head of Scientific Cooperation, Higher Institute for Applied Sciences and Technology (HIAST), Syria.
- Engr. Humphrey Peter NDOSSI, Director of Industrial Research, Tanzania Industrial Research and Development Organization (TIRDO), Tanzania.
- Dr. Orkun Hasekioglu, The Scientific and Technological Research Council of Türkiye (TUBITAK), Türkiye.

among COMSATS' Member Countries and Centres of Excellence in the field of industrial biotechnology. The progress report on CCIB was presented by its Director, Prof. Dr. Jibin Sun. The Council also noted with appreciation the activities undertaken by the COMSATS Centre for Climate and Sustainability (CCCS) with regard to building capacity of the Member States and facilitate collaboration among them in the areas relevant to climate change and sustainable development.

The Council appreciated COMSATS Secretariat's efforts for implementing new initiatives, which were approved in

the last Coordinating Council meeting, including establishment of COMSATS R&D Fund; development of COMSATS Web-portal; development of COMSATS Catalog of Products, Technologies and Services; development of COMSATS Resource Persons Directory; initiation of collaborative programmes for IT and digital skills development of youth; and provision of ICT Services to Member States. The Council appreciated the academic, research and capacity-building activities undertaken by Centres of Excellence during the period since the last Council meeting, as highlighted in their respective presentations.

Having observed the proceedings of the Council meeting and witnessed meaningful discussions, the participating members of COMSATS Technical Advisory Committee (TAC) shared their insights on how to enhance the scope and impact of COMSATS' programmes and activities.

COMSATS Administrative and Financial Matters of COMSATS, came under review by the Council. The Additional Director (Accounts), COMSATS Secretariat, Mr. Tanveer Aslam, made a comprehensive presentation recapitulating the administrative decisions taken for efficient functioning of the Secretariat as well as related financial matters.

The Council also discussed matters related to the next meetings of COMSATS Consultative Committee and the General Meeting of the Commission. It was decided that the 26th meeting of the Coordinating Council will be hosted by the Tanzania Industrial Research and Development Organization (TIRDO), Tanzania, during 2025. The Council issued a Communiqué that inter alia, encouraged the Member Countries and Centres of Excellence to foster bilateral and multilateral partnerships in the areas relevant to sustainable development.

Concluding Ceremony

At the Concluding Ceremony on the second day of the meeting, Prof. Dr. Jibin Sun, expressed pleasure on successfully hosting the meeting, and thanked the attendees for their active participation. He hoped for developing impactful collaboration with other Centres of COMSATS. The Chairperson Coordinating Council thanked TIB for hosting the meeting. He pledged to work closely with COMSATS Secretariat for achieving the objectives of COMSATS Network. On the occasion, the Executive Director



COMSATS thanked TIB for making excellent arrangements for hosting the meeting. He appreciated Prof. Shaalan for steering the meeting effectively. He stated that COMSATS Secretariat would make all efforts to facilitate mutually beneficial collaboration among the Network members.

Visit to TIB Laboratories

The participants of the Council meeting visited the laboratories of TIB and its research facilities on 12th September 2024. Prof. Sun conducted the visit and gave briefing about the facilities at the various laboratories of TIB. The participants were shown technical facilities at the National Engineering Laboratory for Industrial Enzymes; Laboratory of Systems Microbial Biotechnology; Laboratory for Industrial Biological Systems and Bioprocessing Engineering; and Tianjin Engineering Center for Biocatalytic Technology. During visit to the laboratories, the respective researchers and scientists at the laboratories highlighted salient achievements of their labs that has created impact in the progress and development of China. The visitors took great interest in the technologies and products developed by TIB, and held in-depth exchanges with TIB scientists. The participants expressed the intent to further strengthen scientific

engagement with TIB and promote bilateral and multilateral cooperation among COMSATS Member States.

Workshop on Metagenomics-based Approaches for Viral Disease Surveillance held in Islamabad

COMSATS, in collaboration with its Centre of Excellence, COMSATS University Islamabad (CUI), organized an international workshop titled "Metagenomics-based Approaches for Viral Disease Surveillance," under the ICGEB framework for Meetings and Courses in 2024. This four-day event took place from September 16-19, 2024, and was primarily funded by ICGEB.

The workshop aimed to stimulate discussions and collaborations around

the opportunities and challenges in using metagenomics for viral disease surveillance, particularly in modeling predictive pandemics and outbreaks. It sought to identify key scientific areas that could benefit from metagenomic analysis and emphasized the role of this approach at the intersection of metagenomics and public health research. The training enhanced the scientific competence of over 25 international participants from COMSATS member countries and 27 local researchers by providing both theoretical knowledge and hands-on laboratory experience in metagenomic techniques. The training also focused on translating metagenomics-based microbiome research into significant applications in genomic surveillance, equipping both early-career researchers and future students with lifelong learning skills.





The inaugural session of the workshop was held on 16th September 2024. Dr. Khalid Maqbool Siddiqui, Minister for Science and Technology of Pakistan, the Chief Guest, in his message read out on the occasion by Dr. Mehwish Durani, Head COMSATS Centre for Climate and Sustainability (CCCS) emphasized the urgent need to respond to the rapid pace of emerging technologies. Honourable Minister highlighted biotechnology and bioinformatics as essential components in addressing challenges such as food security and healthcare. He further called for robust viral disease surveillance to prevent future pandemics, particularly in developing countries.

Dr. Emanuele Buratti, Scientific Coordinator at ICGEB, acknowledged ICGEB's commitment to advancing biological sciences and innovation in low- and middle-income countries, commending COMSATS for organizing this impactful workshop.

Ambassador Dr. Nafees Zakaria, Executive Director of COMSATS, addressed the global concerns surrounding emerging viruses and antimicrobial resistance, exacerbated by climate change and health inequities. He highlighted the pandemic's role in accelerating innovations in science

and public health governance and emphasized COMSATS' efforts in fostering research and cooperation among its member states.

Prof. Dr. Sajid Qamar, Rector of CUI Islamabad, noted that with appropriate policy support, Pakistan could leverage bioinformatics to become a regional leader in life sciences and public health research.

This capacity-building workshop attracted experts from prestigious institutions such as ICGEB Italy, the Royal Scientific Society in Jordan, King's College London, and the International Center for Chemical and Biological Sciences in Karachi. Designed as a hybrid event, it offered both in-person and virtual participation, making advanced training accessible to a wider audience. Trainees included early-career scientists and postgraduate researchers from Pakistan as well as international participants from Bangladesh, Ethiopia, Jordan, Kazakhstan, and Sudan.

The workshop featured both theoretical and hands-on sessions aimed at enhancing knowledge and skills in advanced methods for real-time sequencing, data analysis, and bioinformatics, with a focus on integrating statistical, algorithmic, and

multi-omics approaches for genomic surveillance and early pathogen detection. Seventy-five scholars from various countries in the Global South benefited from the workshop.

The closing session, held on September 19, 2024, was presided over by Prof. Dr. Shahzad Ali Khan, Vice Chancellor of the Health Services Academy. He remarked on the societal tendency to prioritize treatment over prevention and emphasized the need for preventive measures targeting entire populations or high-risk groups. He praised the workshop as a crucial platform for ongoing discussions and collaborations aimed at fostering a sustainable and resilient public health system.

The event was attended by ambassadors, high commissioners, academics, scientific experts, representatives from UN agencies and international organizations, government officials, and prominent figures from various scientific fields.

COMSATS and Living Indus Set for Joint Representation at COP29 in Baku, Azerbaijan

Building on the ongoing collaboration between COMSATS and Living Indus, Ms. Aban Marker Kabraji visited the COMSATS Secretariat on 26th September 2024, for a meeting with Executive Director COMSATS, Ambassador Dr. Mohammad Nafees Zakaria. This partnership seeks to promote sustainability, climate action, and environmental stewardship in COMSATS host country, Pakistan.

The meeting was attended by senior officials from the COMSATS Centre for Climate and Sustainability (CCCS) and Living Indus, where discussions focused on potential synergies for joint representation at the 29th Conference of Parties (COP29) to the UNFCCC, to be held in Baku, Azerbaijan. A key topic



of discussion was Ms. Kabraji's role as a resource person in COMSATS' sideline event at the UNFCCC pavilion during COP29.

COMSATS, in collaboration with the Islamic World Educational, Scientific, and Cultural Organization (ICESCO) and the International Organization for Food Security (IOFS), has secured a panel discussion slot at COP29 titled "Fostering Water Security & Peace: Innovation, Clean Tech, & Earth Observations in the Islamic World." During this event, Ms. Kabraji will share her insights on environmental protection and restoration efforts, focusing on water security initiatives led by Living Indus across Pakistan. She will also address the key challenges related to water security in the country. Ambassador Dr. Zakaria will contribute to the discussion by highlighting shared challenges of water security faced by COMSATS member states and the critical role of inter-governmental organizations in addressing these issues.

The meeting further explored other pressing areas of climate action and environmental protection, including permaculture, precision agriculture, integrated solid waste management, and electric vehicles (EVs). A particular focus was given to the issue of integrated solid waste management, with Dr. Zakaria emphasizing

the importance of addressing implementation gaps. While effective solutions exist, the primary challenge lies in their execution in developing countries. Representatives from Living Indus briefed attendees on their recent initiative on plastic waste management, which involved small and medium enterprises and included a feasibility study.

Both COMSATS and Living Indus reaffirmed their commitment to organizing impactful high-level forums and dialogues, engaging the international community and experts in these areas to foster partnerships for effective solutions. The meeting concluded with a strong commitment to joint representation at COP29 in Baku, where both organizations pledged to

share expertise and collaborate on future initiatives in areas of mutual interest for a sustainable future.

COMSATS and ISSI agree to collaborate for Science Advocacy and Regional Development

COMSATS and the Institute of Strategic Studies Islamabad (ISSI) signed a MoU for complementing each other for Science Advocacy and Regional Development. It was signed by Executive Director COMSATS, Ambassador Dr. M. Nafees Zakaria, and Director General ISSI, Ambassador Sohail Mahmood, on October 25, 2024 at COMSATS Secretariat.

The MoU will pave the way for collaboration for activities such as scientific research, studies and publications, professional exchange and capacity building, sharing of knowledge and experiences, science diplomacy, and regional & international cooperation.

The signing ceremony was witnessed by Ambassadors and diplomats, Heads/representatives of COMSATS' partner organizations, as well as senior officers of COMSATS and ISSI.

Amb. Sohail Mahmood deliberated



on ISSI's commitment to expanding partnerships and outreach to niche specialized institutions. He considered COMSATS as one such organization focused at S&T for development. Amb. Mahmood highlighted ISSI's vision of next generation programs that concentrate on youth-inclusive dialogue and research. He noted that we need to pay critical attention to topics such as "Global South" and Middle Powers — the key players in both geopolitical and

geo-economic landscapes.

In his remarks, Amb. Zakaria expressed unflinching commitment of COMSATS to pass on the benefits of contemporary technologies to its Member States, and noted that COMSATS aspires to benefit from the strengths of ISSI with an aim to promoting intra-South reliance and cooperation. He highlighted some of the recent initiatives of COMSATS in the emerging fields of science and

technology. He considered the MoU signing as beginning of mutually beneficial collaboration between COMSATS and ISSI.

The collaboration reflects the shared commitment of COMSATS and ISSI to harness latest technologies and innovation for sustainable development on a global scale.

Communiqué of the 25th Meeting of COMSATS Coordinating Council (10-12 September 2024, Tianjin, China)

The 25th meeting of COMSATS Coordinating Council was held on 10-12 September 2024, at the Tianjin Institute of Industrial Biotechnology (TIB), Tianjin, China.

The meeting was attended by Heads/representatives of 16 Centres of Excellence, namely TIB-China, ICCES-China, NRC-Egypt, UTG-The Gambia, ITS-Indonesia, IROST-Iran, RSS-Jordan, KazNU-Kazakhstan, NMC-Nigeria, ICCBS-Pakistan, CUI-Pakistan, ITI-Sri Lanka, IRCC-Sudan, HIAST-Syria, TIRDO-Tanzania, and TUBITAK-Turkiye.

Under the Chairpersonship of Prof. Dr. Ashraf Shaalan, the participants deliberated upon the thirteen-point agenda and are pleased to unanimously adopt the following:

1. The Coordinating Council appreciates the Annual Activity Report presented by the Executive Director COMSATS, and is pleased to note the progress made since the last Council meeting.
2. The implementation of decisions taken during the Council's 24th meeting (held in January 2023 at ICCBS, Karachi, Pakistan) by COMSATS Secretariat is noted with appreciation. The Council is particularly satisfied with the following initiatives approved by the Council during its last meeting, and urges the esteemed Centres of Excellence to support as well as adequately utilize the same:
 - i. Establishment of R&D fund (utilized to support projects in areas of EV and Renewable Energy)
 - ii. Development of COMSATS Web-portal
 - iii. Development of COMSATS Catalog of Products, Technologies and Services
 - iv. Development of a COMSATS Resource Persons Directory
 - v. Initiation of collaborative programmes for IT and digital skills development of youth
 - vi. Provision of ICT Services to Member States
3. The Council endorses the following new initiatives proposed by the Executive Director:
 - i. Establishment of International Division with deputation of scientific and technological experts for promoting Intra-COMSATS Member States dependence as well as revenue generation to support international programmes (white paper to be prepared by COMSATS to be discussed during the next Council meeting)
 - ii. Grant of status of an IGO to COMSATS by each Member State with special visa facilitation

4. The academic, research and capacity-building activities undertaken by Centres of Excellence during the period since the last Council meeting, as mentioned in their respective presentations, are highly appreciated.
5. The Council appreciates the holding of 29 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. The Council is pleased to learn about the progress made by the 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 financial support of the Chinese Ministry of Science and Technology and Tianjin Government towards the establishment and activities of CCIB is highly appreciated. The efforts made and leadership provided by Prof. Jibin Sun (TIB), Director CCIB, towards the collaborative activities are highly appreciated.
7. The progress made by the COMSATS Centre for Climate and Sustainability (CCCS) with regard to building capacity of the Member States and facilitate collaboration among them in the areas relevant to climate change and sustainable development are noted with appreciation.
8. 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.
9. The Council appreciates the participation of members of the Technical Advisory Committee and representatives of international partner organizations, i.e. ANSO, PIDF, the South Centre, ECO-SF, TWAS and INSME, in the meeting as observers. The Secretariat may enhance collaboration with the partner organizations in the areas of mutual interest. The Council endorsed the TAC Members' advice of their regular meeting with COMSATS Coordinating Council.
10. The payment of AMC by China, Jamaica, 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.
11. The Council recognizes the significance of other statutory bodies of COMSATS, including the Consultative Committee. The Council requests the Chairperson Consultative Committee to convene the committee's next meeting at the earliest convenience, in order to support the activities and initiatives of COMSATS. The Secretariat may also coordinate with Office of Hon. Chairperson to hold the next General Meeting of the Commission.
12. The Coordinating Council appreciates the excellent arrangements made by the Tianjin Institute of Industrial Biotechnology (TIB), for the 25th Council meeting and for providing generous hospitality to its participants.
13. The Council appreciates TIRDO for graciously offering to host the next (26th) Meeting of Coordinating Council. While acknowledging with gratitude the offer of IROST to host the 26th meeting, the Council would be happy if IROST makes the offer to host the 27th Meeting at its venue. The Council also noted with thanks the offer of ITS-Indonesia to host the Council meeting thereafter.
14. The Side-event titled 'Biomanufacturing Cooperation for a Better Tomorrow in the Global South' organized by TIB on 12th September, on the occasion of UN Day for South-South Cooperation, is praiseworthy. The event facilitated the exchange of knowledge and cooperation among the Centres of Excellence in the field of industrial biotechnology.
15. The preparation of necessary documentation by COMSATS Secretariat and the administrative support provided to TIB for the successful organization of the meeting is praiseworthy.

SOME ACTIVITIES OF COMSATS' CENTRES OF EXCELLENCE

Prof. Dr. Orhan Aydın Appointed as TÜBİTAK President

On 14 September 2024, Prof. Dr. Orhan Aydın was appointed as the President of the Scientific and Technological Research Council of Türkiye (TÜBİTAK), Prof. Dr. Mesut Güner was appointed as Vice President, and Prof. Dr. Ahmet Yozgatlıgil was appointed as a Board Member.

A handover ceremony was held at TÜBİTAK's Gebze Campus. İsmail Doğan, who was acting as the President of TÜBİTAK, handed over the duty to Prof. Dr. Orhan Aydın.

İsmail Doğan made a short speech and welcomed Prof. Dr. Orhan Aydın to TÜBİTAK. Doğan conveyed his wishes for success with the wish that 'we would be blessed to do very good works together' and presented flowers to Prof. Dr. Orhan Aydın.

Prof. Dr. Orhan Aydın, President of TÜBİTAK, in his speech stated that TÜBİTAK is a very distinguished institution, pioneer in terms of the competence of our country's research ecosystem. Noting that good work has been done at TÜBİTAK in recent years, Aydın considered TÜBİTAK's scope is very wide. He eulogized the previous President of TÜBİTAK, Prof. Dr. Hasan



Mandalm for his remarkable work at TÜBİTAK during recent years.

Prof. Aydın stated that he was pleased to work with an experienced team and that he felt lucky to work with two of his deputies, including Prof. Dr. Mesut Güner and İsmail Doğan, who were appointed as Vice President of TÜBİTAK.

Türkiye Wins Medals at the 31st Balkan Olympiad in Informatics

At the 31st Balkan Olympiad in Informatics held in North Macedonia, Türkiye's students achieved remarkable results, earning 1 Silver, 2 Bronze Medals, and 1 Honourable Mention. Supported by TÜBİTAK's 2202 Science

Olympics Program, Mert Köksal won a Silver medal, while Mert Akarca and Noyan Cantürk won Bronze, and Ayhan Ünüvar received an Honourable Mention.

ITI to Provide Consultancy to Colombo Dockyard PLC

The Industrial Technology Institute (ITI) has been awarded a contract by Colombo Dockyard PLC for noise and vibration measurement and analysis on dry bulk cargo carriers built for a Norwegian owner. These vessels are designed with eco-friendly technologies, powered by a four-stroke diesel engine and an electric hybrid system, in line with IMO and ISO standards for seafarer comfort. ITI will conduct final surveys to ensure compliance, and their report has been accepted by DNV AS Ship Classification (Norway), marking the first time their report has been approved by a European country. ITI has a strong history of similar work, having provided services to multiple countries, including Japan and Singapore. The vessels were delivered in September 2024.

Trainings at ITI

ITI arranged the following trainings during the reporting period:





- "Awareness of ITI testing services, Good Manufacturing Practices, Packaging and Labelling of Products" 19th September 2024.
- A 3-day training programme for the Faculty of Technology at the University of Rajarata, organized by the Information Services Centre (ISC) of ITI. As a newly opened faculty, they need training on "Laboratory safety and waste disposal". The training included First aid and Firefighting activities as well.– 30,31 October and 1 November 2024.

ITI Day 2024

The Annual ITI Day was celebrated on October 4th, 2024, bringing all ITI staff together on one floor. The event featured lively performances, including dancing, singing, and drama, all performed by the staff.

German Scientists Seek Collaboration with ICCBS

A delegation of German scientists, led by Prof. Dr. Thomas Iftner, Director of the Institute of Medical Virology and Epidemiology of Viral Diseases at the University Hospital of Tübingen, Germany, visited the International

Center for Chemical and Biological Sciences (ICCBS).

The German delegation met with Prof. Dr. Farzana Shaheen, Director ICCBS, and other scientists at ICCBS. Attendees included several key officials and faculty members of the National Institute of Virology and Dr. Panjwani Center for Molecular Medicine and Drug Research.

During the meeting, Prof. Dr. Farzana Shaheen gave a detailed presentation on the center's extensive scientific and research activities. She highlighted potential areas for collaboration,

particularly in virology research.

The German scientists also visited various research facilities at the ICCBS and met with faculty members and research students. Prof. Dr. Daniel Sauter delivered key lectures on "Prion Diseases" and "The Origins and Evolution of Emerging Viruses," further enriching the academic environment.

ICCBS Scientists Recognized by Royal Society of Chemistry and Chemical Society of Pakistan

The Royal Society of Chemistry (RSC),





the United Kingdom, has selected Prof. Dr. Syed Ghulam Musharraf, a well-known Pakistani scientist in mass spectrometry, as a Fellow of the Royal Society of Chemistry (FRSC). Dr. Musharraf, a professor at the HEJ Research Institute of Chemistry, ICCBS. The RSC selected Prof. Musharraf in recognition of his extensive services in chemical sciences. Prof. Musharraf, inter alia, made significant and promising contributions to establishing a modern mass spectrometry research laboratory in Pakistan.

Prof. Dr. M. Raza Shah, Professor at the ICCBS has been elected unopposed President of the Chemical Society of Pakistan (CSP). Prof. Shah was also recently appointed as a member of the Expert Advisory Committee, WHO International Traditional Medicine Clinical Trial Registry. It is also worth mentioning that Prof. Raza Shah has recently received the Iranian Khwarizmi International Award from the Ministry of Science, and Research Technology of Iran and became the Khwarizmi International Laureate.

SFDL-ICCBS solves 8000 DNA and Serology Cases

Sindh Forensic DNA and Serology Laboratory (SFDL), of ICCBS furnished

high-quality reports of more than 8000 cases.

SFDL, established through the support of the Sindh Health Department, Government of Sindh, is the only ISO 17025 certified laboratory in the country, offering comprehensive DNA and Serology services in Sind Province.

Prof. Dr. Farzana Shaheen, the Director of the International Center for Chemical and Biological Sciences (ICCBS), University of Karachi, expressed these views while speaking at the inaugural ceremony of the one-day training on "Utility of Forensic DNA in Disaster Management and the Criminal Justice System" held in the Prof. Salimuzzaman Siddiqui Auditorium, ICCBS.

SFDL laboratory at the ICCBS is also providing capacity-building opportunities for the police, prosecution, and law enforcement agencies.

A panel discussion was also held in the training session. AIG Investigation Zulfiqar Ali Mehar, Police Surgeon Dr. Summaiya Syed, Amir Hasan, Director Shanakht Project, CPLC, and Project Director and in-charge SFDL Dr. Ishtiaq Ahmad Khan participated in the discussion.

Pakistan's Largest Internship Program Concluded at ICCBS

International Center for Chemical and Biological Sciences (ICCBS) concluded Pakistan's largest internship program. Seventeenth of its kind program this year, provided 135 students belonging to various academic and research institutions with quality training in multiple fields of Biological and Chemical Sciences, Diagnostic Labs, IAC, CBSCR, etc.

Speaking at the certificate distribution ceremony of the summer internship program 2024, held at the Golden Jubilee Hall of the ICCBS, University of Karachi, Prof. Dr. Farzana Shaheen, Director of the International Center for Chemical and Biological Sciences, said that this ceremony is a witness to the hard work, dedication, and the valuable contributions of students. She extended her heartfelt congratulations to the students for their perseverance, adaptability, and willingness to learn and grow.

She said that the prime objective of this internship is to motivate students toward scientific research that attempts to explore and understand the workings of the physical world. Internships provide students with hands-on experience, enabling them to enter the real-work scenario with practical skills.

CUI Strengthens Academic Ties with Australia

In CUI's endeavour to enhance international collaborations, Dr. Hammad Omer (T.I), Head of the International Office (IO) at COMSATS University Islamabad (CUI), recently visited Australia and had engaged in high-level discussions with academic leaders of Macquarie University (MQ), and Western Sydney University (WSU). WSU expressed interest for building



partnerships with Pakistani institutions, especially with CUI. MQ expressed interest in formalizing an institutional-level Memorandum of Understanding (MoU) with CUI, focusing on student and faculty exchange programs.

CUI Welcomes Dr. Adnan Mehmood from Macquarie University Sydney

Dr. Adnan Mehmood, a lecturer from Macquarie University's Computer Science Department, visited COMSATS University Islamabad (CUI) on September 25, 2024, marking a significant step toward international academic collaboration. Hosted by CUI's International Office, Dr. Mehmood met with key faculty members, including Dr. Farhana Jabeen, Head of the Computer

Science Department, Dr. Hammad Omer (T.I), Head of the International Office, and Prof. Dr. Muhammad Fasih ud Din Butt. Their discussions centred on potential research collaborations, student exchange programs, and advancements in fields like Computer Science, Artificial Intelligence, and Engineering.

During the visit, Dr. Mehmood delivered an insightful lecture on the Internet of Things (IoT) to over 50 students. His talk covered current advancements in IoT and the integration of AI with robotics, focusing on challenges such as sensor efficiency and energy harvesting. He also highlighted the importance of training AI systems to understand human context, underscoring the dependence of AI on quality data.



Energy Research Centre of CUI Lahore Campus

The Energy Research Centre (ERC) at COMSATS University Islamabad (CUI), Lahore Campus, has been active in advancing energy research and collaboration in 2023-24. Key projects include developing a five-year action plan in energy and environment for Pak-US Science & Technology Cooperation. Dr. Fawad Azeem led projects on multi-microgrid coordination and power dispatch analysis, resulting in five research articles. ERC also signed a Letter of Intent with Schneider Electric to optimize energy training in Pakistan.

In academic contributions, Dr. Azeem presented research on microgrids and AI systems at conferences in Malaysia and Dubai, while ERC discussed establishing a renewable energy institute with Korea International Cooperation Agency (KOICA) and explored collaboration with a French delegation from Centrale Nantes. Workshops and certifications included a Carbon Capture and Storage session in collaboration with the PAK-UK Education Gateway, and Dr. Azeem earned a Certified Energy Manager certification from the Association of Energy Engineers.

New Equipment of JNMI of RSS to Calibrate Liquid Flow Meters

The Jordan National Metrology Institute (JNMI) at the Royal Scientific Society (RSS) acquired a Water Flow Meter test bench that will be used to calibrate liquid flow meters in the range from 1.5 litres/hour to 10000 litres/hour with unparalleled accuracy of 0.04%. The test bench was donated to JNMI/RSS by the German National Metrology Institute "PTB" within the framework of the project "Quality infrastructure for efficient water supply in Jordan" in



order to minimize water losses in Jordan by calibrating flow meters that are used by the Water Authority of Jordan (WAJ) and Water Utility Companies, hence verifying the accuracy of domestic water meters and reducing Non-Revenue Water.

Greenchemistry Workshop at RSS

The Water, Environment, and Climate Change Centre (WECCC) at the Royal Scientific Society (RSS) concluded a highly insightful training on greenchemistry, targeting various stakeholders across Jordan. The training

was delivered by Prof. Philip Jessop from Queen's University in Canada, and Dr. Lars Ratjen & Mr. Matthew Moroney from Yale University in the United States. It was part of the Global Green Chemistry Project, which WECCC at RSS is implementing in collaboration with Yale University and UNIDO Jordan, and aims at strengthening the sound management of industrial chemicals and their waste through better control, reduction & elimination protocols, and scaling up green chemistry solutions for persistent organic pollutants (POPs) and mercury replacement through capacity building and innovation.

KazNU's Joint Interdisciplinary Research in the Sustainable Development Paradigm

On October 1, 2024, Al-Farabi Kazakh National University hosted a guest lecture by the USAID Regional Project on Water Resources and Environment on the topic "Interdisciplinary studies of the Water-Energy-Food-Ecosystems (WEFE) Nexus in the sustainable development paradigm."

Al-Farabi KazNU, the Faculty of Geography and Environmental Sciences, the Ban Ki-moon Institute for Sustainable Development and the





USAID Regional Water and Environment Project, organized the event.

The event was attended by young scientists, master's students, doctoral students, practitioners from Central Asian countries specializing in various fields of nature management (hydrology, geography, recreational geography, land management and cadastre, meteorology, ecology, etc.), social development, and diplomacy.

The research agenda in the paradigm of sustainable development was presented by research in the field of water resources protection in Central Asia by A.A. Rysmagambetova, PhD, Deputy Dean for Research and Innovation and International Relations of the Faculty of Geography and Environmental Sciences and Zh.S. Issaeva, director of the Ban Ki-moon Institute for Sustainable Development.

Moderator Aliya Tankibaeva, PhD, MPA, Senior Lecturer at the Faculty of Geography and Nature Management, presented the educational components of the event.

As part of the event, a brainstorming session on the creation and updating of an interdisciplinary research project in the field of WEFE Nexus, as well as practical work on Nexus simulation were organized for the participants.

KazNU and NWPU to Jointly Launch a Microsatellite

On September 16, 2024, Chairman of the Board - Rector of Al-Farabi Kazakh National University Zhanseit Tuimebayev held a meeting with the Director of International Cooperation Department of Northwest Polytechnic University of China, Professor Kong Ji.

The two sides exchanged views and worked out a project to launch a joint microsatellite in late 2025.

The aim of the co-operation is to jointly develop and test payloads of small satellites, create a small constellation of 1 main star (100kg) and 2 secondary stars (6U CubeSat).

The microsatellite to be launched into space will fulfil three main tasks. In particular, to measure the Earth's gravity and gravity field inversion in orbit, to conduct technical testing of LoST based on the remote LoRaWAN protocol, and to test the onboard intelligent data processing system using COTS devices.

As a result of the negotiations, parties agreed to set up a working group for detailed elaboration of the technical aspects of the project and defined the main stages of its implementation. It was also agreed to hold a joint meeting

in the coming months to finalise plans and schedule for the launch of the microsatellite.

KazNU's Academic affiliations with the University of Michigan

On September 12, 2024, a meeting of the rector of the university with representatives of the University of Michigan took place at Al-Farabi KazNU.

The meeting discussed key issues related to joint scientific research, exchange of students and teachers, as well as the implementation of joint educational programmes.

Chairman of the Board - Rector of Al-Farabi Kazakh National University Zhanseit Tuimebayev emphasised the importance of international cooperation for improving the quality of education and scientific activity, noting that partnership with such prestigious universities as the University of Michigan contributes to the integration of Kazakhstani education into the global educational space.

The head of the university also noted that KazNU closely cooperates with the American Councils for International Education. During the programme more than 120 American students were accepted to the language programme of the Faculty of Philology on the programme 'Flagship' and 300 students on the RLASP programme at the Faculty of International Relations. To date, 43 students from the USA are studying on language courses at KazNU. Four professors from the USA were invited to the university as part of attracting foreign teachers.

The meeting resulted in the signing of a Memorandum of Understanding, which secured the intentions of both parties for further cooperation.

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.

TÜBİTAK-Türkiye Open Calls

1501-Industrial R&D Projects Grant Programme and 1507-SME R&D Startup Support Program 2025 1st Calls, to which Small and Medium-Sized Enterprises (SMEs) can apply.

The Technology and Innovation Support Programmes Directorate (TEYDEB) conducts the 1501-Industrial R&D Projects Grant Programme and the 1507-SME R&D Startup Grant Programme to support the project-based research, technology development, and innovation activities of Small and Medium-Sized Enterprises.

Applications for the TEYDEB 1501-Industrial R&D Projects Grant Programme and the 1507-SME R&D Startup Grant Programme for the first period of 2025 will start to be accepted as of 02.01.2025 through <https://eteydeb.tubitak.gov.tr>.

Deadline: 17th March 2025

For more details, please visit: <https://tubitak.gov.tr/en/announcement/1501-industrial-rd-projects-grant-programme-and-1507-sme-rd-startup-grant-programme-1st-calls-2025-are-opening>

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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



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ITS-Indonesia
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IROST-Iran
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