



COMSATS Newsletter

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

Issue 2, Volume 16

March - April 2024



Group photo after the Earth Day Event Chaired by Coordinator to Prime Minister of Pakistan on Climate Change and Environment Coordination and attended by senior officials and diplomatic community (Page 6)

Inside this Issue

Highlights from COMSATS Secretariat

2

Article: COMSATS – A Significant Platform for International Cooperation in ST&I in the South

11

Some Activities of COMSATS' Centres of Excellence

13

Announcements

19

Patron:
Ambassador Dr. M. Nafees Zakaria
Executive Director COMSATS

Editor:
Ms. Farhana Saleem

Designing & Development:
Mr. Imran Chaudhry

From the Executive Director's Desk

Scientific research, technology development and innovation play a pivotal role in socio-economic development. The first half of 2024 witnessed a large number of innovations and scientific breakthroughs, globally. I would like to mention some of the major scientific breakthroughs during this period for the information of esteemed readers.

In the realm of Electronics, a battery based on calcium has been presented by a team from Fudan University, China, a founding member of COMSATS, as a potential alternative to lithium. Moreover, a team from Georgia Institute of Technology, USA, developed the first functional semiconductor made from graphene, which could be useful for smaller and faster electronic devices having applications in quantum computing. As another development, the world's largest 3D printer, dubbed Factory of the Future, has been presented by the University of Maine, USA, which can print large objects. Furthermore, two insect-like robots, being the smallest, lightest, and fastest fully-functional micro-robots ever created, were presented by Washington State University, USA.

In Space exploration, China launched its Chang'e 6 probe, which successfully landed on the far side of the Moon, and is the first human sampling and return mission from the lunar far side. Moreover, American company Intuitive Machines' Nova-C lander, named Odysseus, became the first commercial vehicle to land on the Moon.

Colombian scientist, Prof. Eduardo Posada's research in Agritech pertaining to the use of spectral fingerprints for precision agriculture and production of bio-fertilizers from plant wastes using high-performance microorganisms, led to improving agricultural production. Colombia is also a founding Member State of COMSATS.

The area of Medical sciences also witnessed several advancements. A South African Doctor became the first Surgeon in the world to successfully perform surgery to cure deafness. Moreover, scientists from Brown University, USA, demonstrated a wireless network of 78 tiny sensors able to gather data from the brain, which paved the way for implantable and wearable biomedical microdevices. Interestingly, researchers at Google have mapped a tiny piece of the human brain in astonishing detail, which revealed new patterns of connections between brain cells. Elon Musk's startup Neuralink implanted first microchip into a human brain, which aims to enable people to control a computer cursor or keyboard using their thoughts alone. Furthermore, scientists from Uppsala University, Sweden, have discovered a new class of antibiotics with potent activity against multi-drug resistant bacteria.

In the field of Physics, researchers from the Institute of Photonic Sciences in Barcelona have discovered a new phase of matter, named a

continues on page 03

✉ newsletter@comsats.org ☎ (+92-51) 9214515-7



www.comsats.org



@comsats_en



COMSATSofficial



@comsats_en



company/comsats



COMSATSSecretariat

HIGHLIGHTS FROM COMSATS SECRETARIAT

Liaison and Diplomatic Engagements

Iftar Reception hosted by Executive Director COMSATS

The Executive Director COMSATS, Ambassador Dr. Mohammad Nafees Zakaria, hosted Iftar Reception, on March 26, 2024, in Islamabad.

Pakistan's Minister of State (IT & Telecommunication), H. E. Ms. Shaza Fatima Khawaja, was the Chief Guest on the occasion. The Ambassadors/ diplomats of various COMSATS' member states and friendly countries attended the reception. Senior Government officials – both civil and military, Heads of international organizations, academic institutions, S&T organizations, public departments and private sector, got together to celebrate the Holy Month of Ramadan.

The event had eminent presence of H.E. Dr. Reza Amiri Moghaddam, Ambassador of Islamic Republic of Iran; H.E. Dr. Maen Khreasat, Ambassador of Hashemite Kingdom of Jordan; H.E. Mr. Yerzhan Kistafin, Ambassador of the Republic of Kazakhstan; H.E. Mr. Mohamed Karmoune, Ambassador of the Kingdom of Morocco; H.E. Mr. Ahmad Rabei, Ambassador of the States of Palestine; H.E. Dr. Ramez Alraee, Ambassador of the Syrian Arab Republic; H.E. Mr. Khazar Farhadov, Ambassador of Azerbaijan; H.E. Mr.

Jemal Beker Abdula; Ambassador Extraordinary and Plenipotentiary of the Federal Democratic Republic of Ethiopia; H.E. Ms. Nyambura Kamau, High Commissioner of Kenya; H.E. Mr. Totuiaev Ulanbek Asankulovich, Ambassador Extraordinary and Plenipotentiary of Kyrgyzstan; H.E. Mr. Mohammad Azhar Mazlan, High Commissioner of Malaysia; and Dr. Shahid Rashid Butt, Honorary Consul General of Republic of Ghana.

President ECO Science Foundation (ECO-SF), Prof. Seyed Komail Tayebi, along with his senior officials, President NDU, General Asif Ghafoor; Head of Welthunger Hilfe (WHH), Ms. Aisha Jamshed; Chairman Intellectual Property Organisation of Pakistan (IPO-Pakistan); Ambassador Farukh Amil, Senior officials of Ministry of Science and Technology, Ministry of Foreign Affairs, Chief Commissioner and Commissioner Regional Tax Office (RTO), Islamabad; ex-Chairman Federal Public Service Commission (FPSC), Capt. (R) Mr. Zahid Saeed; CEO NITB, Dr. Baber Majid Bhatti; CEO AGECO (Pvt) Ltd, Mr. Aslam Azad; CEO EZShifa Pvt. Ltd.; Mr. Adnan Siddiqui; CEO Ignite- National Technology Fund, Mr. Asim Shahryar; DIG Islamabad Police; Deputy Commissioner Islamabad; Project Director NIC, Mr. Parvez Abbasi; and other distinguished guests attended the august ceremony.

Speaking on the occasion, Dr. Zakaria

welcomed and thanked the guests for their participation in the reception and hoped for peace and harmony among nations across the globe. Ambassador Zakaria highlighted the importance of international cooperation in science and technology for providing tech-based solutions for various global challenges.

Spirit of Ramadan unity and exchange of fraternal sentiments were the essence of the event. Diplomats and senior officials availed the opportunity to discuss with the IT Minister the matters of common interest pertaining to Science and Technology (S&T).

Executive Director COMSATS Condemns Efforts to Impede Cooperation with China

Ambassador Dr. Nafees Zakaria, Executive Director COMSATS, visited the Chinese Embassy in Islamabad to record his message of condolence and sympathies at the loss of precious lives of Chinese nationals and their Pakistani co-worker in the wanton terrorist attack near Besham.

He strongly condemned the terrorist attack and joined the UN's call for calling to account the sponsors and financiers behind the terrorists. Admiring the strong bonds of friendship between the COMSATS' two founding members, Pakistan and China, Ambassador Zakaria urged joint effort to defeat the designs of the common



enemy of both the countries to impede China's successful march to be a Global Power and its partnership with closest friend, Pakistan.

Events and Trainings

Earth Day 2024 Event with Climate Ministry, Pakistan

On 29th April 2024, COMSATS and the Ministry of Climate Change and Environmental Coordination (MoCC&EC), Government of Pakistan, jointly organized an event titled "Pakistan's Roadmap for Plastic Action" to mark Earth Day 2024. The event featured introduction of the Pakistan National Plastic Action Partnership (NPAP), a government initiative implemented as part of the Global Plastic Action Partnership (GPAP) under the auspices of the World Economic Forum.

Her Excellency Ms. Romina Khurshid Alam, Coordinator to the Prime Minister of Pakistan on Climate Change and Environmental Conservation (CC&EC), graced the occasion as the Chief Guest. Ambassadors, High Commissioners, and Diplomats from COMSATS member states and other countries in Islamabad also graced the event with their presence.

H.E. Ms. Romina emphasized Pakistan's pressing issue with plastic pollution, especially in urban areas. Owing to these daunting challenges, Pakistan has taken proactive steps, such as banning single-use plastics and polythene bags in 2019, to mitigate plastic waste generation. She stressed the importance of global cooperation in combating plastic pollution, citing initiatives like the Global Plastic Action Partnership (GPAP) led by the World Economic Forum and UNEP.

She also highlighted Government of Pakistan's commitment to climate



...continued from page 1

"light-matter hybrid", which may reshape understanding of how light interacts with matter. Moreover, US Scientists have managed to repeatedly produce nuclear fusion ignition for the first time, marking a major milestone towards achieving near-limitless clean energy at scale.

The afore-mentioned advancements and breakthroughs are promising for addressing the global socio-economic needs. However, the R&D organizations, particularly those of countries in the South, must dedicate enhanced financial support in order to make tangible contributions towards a sustainable future. The challenges of the present day and age have added to the importance and relevance of international cooperation in science and technology. For developing countries, Intra-South dependence, i.e. South-South cooperation is highly important. In this regard, intergovernmental organizations, such as COMSATS, have a key role to play.

We at COMSATS, recognize the fast changing dynamics of international cooperation in science and technology. In line with global efforts for achieving SDGs, Climate Change is an important area for COMSATS' programmatic undertakings. COMSATS is striving to promote Electric Vehicles (EV) as a way to conserve the environment, and in this regard, the organization's partnership with

change adaptation and mitigation through policies like the National Adaptation Plan and initiatives such as the Living Indus Initiative, Recharge Pakistan, and GLOF-II.

AGECO bore fruit in the form of developing indigenous solutions for EV development (Page 10). COMSATS observed the Earth Day 2024 by holding an event in collaboration with Pakistan's Ministry of Climate Change and Environmental Coordination (Page 03). A training session was also organized by COMSATS on Carbon Credits (Page 04). Moreover, an agreement was signed between COMSATS and the National Institute of Disaster Management (NIDM), Pakistan, for cooperation in Climate Change/Environment (Page 09).

In the area of medical/health sciences, COMSATS organized a useful training on Sexual and Reproductive Health (Page 06). Moreover, a MoU has been signed between COMSATS and EZShifa for cooperation in tele-health sector.

During the reporting period, COMSATS collaborated with its Centres of Excellence and partner organizations to hold international events in various fields in China, Kazakhstan and Pakistan (section Highlights from COMSATS Secretariat).

This Newsletter aims at keeping the readers informed about the latest development in the field of science and technology and COMSATS' endeavors to keep pace with the development. We will appreciate and be encouraged by the worthy readers' feedback.

In his opening remarks, Ambassador Dr. M. Nafees Zakaria underscored the necessity of a cohesive global strategy to address the issue of plastic



waste, emphasizing the importance of not solely focusing on its sources. He remarked that while enacting legislation and policy measures are commendable steps, the true challenge lies in their execution amidst resistance from pressure and interest groups. Dr. Zakaria also stressed the urgent need for initiatives and innovations, supported by scientific solutions.

Speaking on the occasion, Azerbaijan's Ambassador to Pakistan, H.E. Mr. Khazar Farhadov, expressed hope that COP29-Azerbaijan would help gain momentum for climate action and international collaboration, furthering the objectives of the UNFCCC and the Paris Agreement. He underscored the importance of collective action

among various stakeholders, including countries, international organizations, financial institutions, and the private sector, to deliver meaningful outcomes at COP29. Further, Ambassador Farhadov highlighted that, under the directive of President Ilham Aliyev, Azerbaijan has designated 2024 as the "Year of Solidarity for a Green World." This reflects Azerbaijan's commitment to accelerating environmental protection efforts and addressing climate change on a global scale, as demonstrated by its hosting of COP.

During the event, the NPAP team presented the partnership's roadmap for Plastic Action in Pakistan, that includes several key components, such

as crafting engage multi-stakeholders national action partnerships, deemed crucial for shaping a circular plastics economy and developing comprehensive plans informed by top-tier analysis, to facilitate the realization of national objectives.

The event also made a landmark launch of COMSATS-AGECO joint Electric Vehicle (EV) Project in Pakistan to promote emission-free transportation sector for a cleaner environment in the country.

The Earth Day event emphasized COMSATS' dedication to strong Climate Action and environmental conservation, emphasizing its goal of promoting resilience, mitigation, and a sustainable future.

Training Workshop on Carbon Markets and Carbon Credits

COMSATS Centre for Climate and Sustainability (CCCS) organized an in-house training workshop on Carbon Credits and Carbon Markets, at COMSATS Secretariat on 30th April 2024. The event was organized a recognition of a need to raise awareness and build capacity among stakeholders about carbon market mechanisms, especially post-COP28, where Article 6 played a pivotal role.





The workshop gave a comprehensive overview of Carbon Credits and Carbon Market, Carbon Trading Mechanisms, Project Cycle and Key Players in the Carbon Market. Participants gained insights into Core Carbon Principles and Project Integrity, understanding their own carbon footprints, and theories applied in setting up National Emissions Trading Systems. Additionally, discussions covered carbon trading prospects in Pakistan, emerging carbon trading policy frameworks, and real-world case studies.

In his opening remarks, Ambassador Dr. Mohammad Nafees Zakaria, Executive Director COMSATS, emphasized the significance of leveraging carbon markets for common benefit. He stressed the importance of reducing all sources of GHG emissions close to zero and encouraged participants to seek guidance from experts on the basics, regulations, and issuance process of carbon credits.

Dr. Sohail Malik, Technical Team Lead at the Climate Resourcing Coordination Centre (CRCC), shared insights on carbon pricing instruments for achieving decarbonization objectives, including emission trading systems, and provided an overview of international practices. He outlined the evolution of global carbon markets over the last two decades and elucidated the Carbon Offset Project Certification Process.

Dr. Mazhar Hayat, Deputy Secretary at the Ministry of Climate Change and Environmental Coordination (MoCC&EC), Government of Pakistan, presented a case study on project registration with carbon standards Verra. He provided detailed insights on Delta Blue Carbon, outlining the preparation document required for Carbon credit and offset projects. Dr. Hayat explained the potential integration of carbon credit and offsets toward Pakistan's Nationally Determined Contributions (NDCs) and also highlighted the efforts of Government of Pakistan in reducing major emissions.

Ms. Minha Hanif, Climate Change Analyst at Resources Future, provided participants with insights into the project cycle of carbon credits, the Core Carbon Principles including governance and sustainable development, and the concept of project baseline, boundaries, and leakages.

Collaboration with KazNU, Kazakhstan, for International Forum

COMSATS Centre of Excellence in Kazakhstan, Al-Farabi Kazakh National University (KazNU), in collaboration with COMSATS, the Ministerial Standing Committee on Scientific and Technological Cooperation of the OIC (COMSTECH), and Institute of Dendrology Azerbaijan National Academy of Sciences, held an

International Forum on "Modern Trends in the Sustainable Development of Biological Sciences", on 27-28 March 2024, in Almaty, Kazakhstan. The event marked the 90th Anniversary of Al-Farabi Kazakh National University and its Department of Biology and Biotechnology. The primary objective of the Forum was to facilitate discussions on current advancements in the realms of biology, address pressing challenges within this field, and promote the networking of an international scientific and educational community.

The Inaugural Ceremony of the event was held on 27th March 2024, which was opened by Prof. Aitzhanova Zhamila Nurmatovna, Vice Rector for Science and Innovation, KazNU, Kazakhstan, who besides various leaders from collaborating organizations, addressed the audience and delivered the opening remarks. These included Ambassador Dr. Mohammad Nafees Zakaria, Executive Director, COMSATS; Mr. Vlastimil Samek, Representative of the United Nations Department of Global Communications and the Head of the United Nations Information Office, Kazakhstan; Prof. Dr. Muhammad Iqbal Choudhary, Coordinator General, COMSTECH; and Prof. Hasanova Minara Yunis, Acting Director General, Institute of Dendrology, Ministry of Science and Education, Azerbaijan.

Ambassador Dr. Mohammad Nafees Zakaria, Executive Director COMSATS, in his online address, highlighted the vital role of biological sciences in shaping essential products and solutions across pivotal areas such as medicine, agriculture, food security, clean energy, and environmental preservation. He underscored the significant contribution of Biological Sciences and Biotechnology in enabling the sustainable manufacturing of various materials and products, including biofuels, bioplastics, textiles, chemicals, construction materials, electronics, and



consumer goods. He stated that artificial intelligence and machine learning has revolutionized biological research, enabling scientists to accelerate the discovery of novel solutions that address the interconnected nature of global challenges.

Amb. Zakaria stated that COMSATS has made some focused efforts to enhance the capabilities of its Member States in this biological sciences. Establishment of the COMSATS Joint Centre for Industrial Biotechnology (CCIB) at the TIB-China, illustrates this commitment.

Amb. Zakaria highlighted COMSATS' recent initiatives for Member Countries in areas, such as AI-based data analytics, digitalization and IT training, Genome Sequencing for Precision

Medicine, IT Trainings, Precision Agriculture, Renewable Energy, Electric Vehicles, Tech-enabled Health Units, Drone Technology, etc. He conveyed COMSATS' readiness to collaborate with like-minded institutions to aiding Member Countries' technological pursuits in line with United Nations Sustainable Development Goals and for socio-economic development. Amb. Zakaria also appreciated mutually beneficial cooperation taking place between COMSATS and KazNU.

The technical sessions of the 2-day Forum comprised four plenary sections covering a wide range of topics, including interdisciplinary research in biophysics, biomedicine, and neuroscience, current issues in biotechnology, basic and applied

research in genetics and molecular biology, and issues related to the study and conservation of biodiversity. The Forum garnered over 200 applications from 104 institutions/organizations spanning 14 countries, including Kazakhstan, Germany, France, China, Japan, Hungary, Turkey, Pakistan, Malaysia, Nigeria, Russia, Azerbaijan, Kyrgyzstan, Uzbekistan, and Tajikistan. Over 100 research articles were selected for publication in the proceedings of BIO Web of Conferences.

In particular, COMSATS supported the participation of four experts from the Tianjin Institute of Industrial Biotechnology (TIB), China, in the event. Additionally, Dr. Huma Balouch, Deputy Director, COMSATS Secretariat, was also among the speakers at the event.

Training on Sexual and Reproductive Health in Collaboration with WHO

From March 6-8, 2024, a refresher training on Sexual and Reproductive Health (SRH) for telemedicine providers was organized by COMSATS, in collaboration with WHO Pakistan, for the doctors working at COMSATS Telehealth Resource Centre, Islamabad. Fifteen doctors from COMSATS Telehealth Resource Centre attended the training workshop.

The focal person of WHO Pakistan, Dr. Sayema Awais, shared the status of SRH in Pakistan and informed the participants that the core content of SRH guidelines includes preconception care, antenatal, intra- natal and postnatal care, along with family planning and selfcare sections.

Dr. Samina Naeem, consultant Gynaecologist, explained the important aspects of antenatal care, e.g, maternal and fetal assessment, nutritional evaluation and physiological symptoms worth paying attentions through examples during her own experience.



Dr. Nabia Tariq, Consultant Gynaecologist & Director Academics Maroof International Hospital Islamabad, expounded counselling techniques that is the most difficult step in contraception.

Dr. Maimoona Saadi, the technical officer, Mental Health, WHO gave insights into the mental health issues related to SRH, especially postpartum depression (PPD) –symptoms and know the counselling and educative measures for treatment.

Dr. Ayesha Babar, Al-Shifa School of Public Health, apprised the participants of the importance of the postpartum as 2/3rds of the approx. 500,000 women that succumb to pregnancy-related complications, are in the postpartum period. She provided detailed insight on the routine checkups, red-flags and abnormal signs to look for in the new born.

Dr. Sayema Awais, inter alia, focused on sexually transmitted diseases, new recommendations on self-screening with ovulation predictor kits (OPKs) for fertility regulation, family planning and elimination of unsafe abortion through self-care.

The event came to conclusion on

International Women's Day, March 8, 2024. Amb. Dr. Mohammad Nafees Zakaria, Executive Director COMSATS and Dr. Ellen Thom, Team lead MNCH, WHO, closed the event. The ceremony included a vote of thanks presented by Dr. Azeema Fareed, Additional Director (Health) and Incharge Telehealth, COMSATS.

Ms. Ellen Thom referred to the previous workshop conducted back in 2020 and expressed her pleasure to be part of the training "as coming back home". She stated how Telemedicine was a new thing back then however it has become a norm since COVID-19. She also pledged to continue collaboration with COMSATS in future.

Dr. Zakaria appreciated the dedication of the doctors working at Telehealth and lectured that the responsibility you shoulder today extends far beyond the confines of this workshop, i.e, to the communities that you serve.

Collaboration to Organize ISPAD'24 with NCP, Pakistan

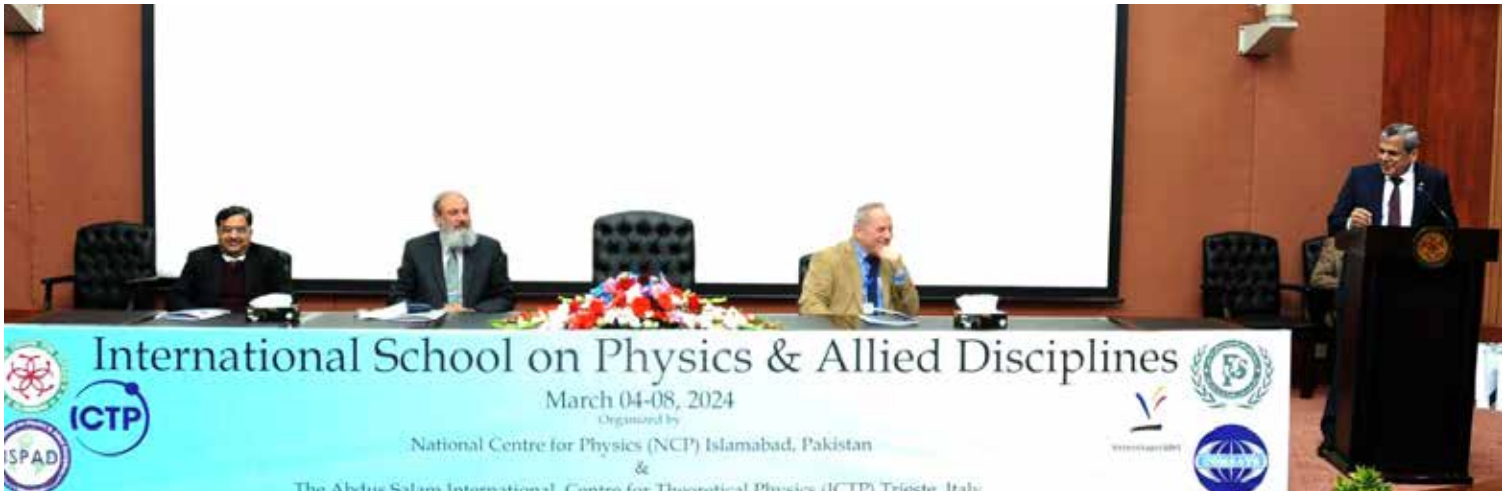
The National Centre for Physics (NCP), Pakistan, organized its flagship training program, titled 'International School on Physics & Allied Disciplines (ISPAD), from March 4-8 2024, at its premises in

Islamabad. The event had patronage of the Abdus Salam International Centre for Theoretical Physics (ICTP), Italy, and support of Commission on Science and Technology for Sustainable Development in the South (COMSATS), and KTH Royal Institute of Technology, Sweden, as co-organizers.

The School provides a platform for local and foreign participants to exchange scientific knowledge and generate enthusiasm for science and innovation. Over 200 young Pakistani M.Phil./Ph.D. students, researchers, and university faculty member benefited from the training, which was conducted by local and foreign subject expert.

Dr. Qaiser Ahsan, Director NCP, delivered the welcome remarks during the inaugural ceremony of ISPAD, held on 4th March 2024. He expressed gratitude to the Chief Guest, Executive Director COMSATS, Ambassador Zakaria, and gratefully acknowledged the presence of foreign guests.

Addressing the inaugural ceremony, Ambassador Zakaria, emphasized the pivotal role of high-energy and condensed matter physics in uncovering the Universe's fundamental essence and material behaviors. He highlighted the potential for revolutionary innovation



through the synergy between artificial intelligence and physics, leveraging advanced computational techniques for scientific inquiry.

Ambassador Zakaria highlighted the pivotal role of regional and international cooperation in ST&I, particularly through South-South and Triangular cooperation. He also elucidated the role of COMSATS as an inter-governmental organization dedicated to advancing science, technology, and innovation-led sustainable development across its 27 Member States. He highlighted COMSATS' efforts in promoting South-South and Triangular Cooperation in science and technology, facilitating exchanges, knowledge networking, capacity-building, and collaborative research among member countries. He underscored COMSATS recent initiatives in fields like Artificial Intelligence-based data analytics, IT trainings, precision agriculture, renewable energy, and electric vehicles.

Amb. Zakaria commended the National Centre for Physics for its noteworthy contributions to the advancement of science and technology. He also committed to strengthening ties with organizations like NCP and ICTP to enhance capacity-building efforts for developing countries.

The inaugural ceremony also featured

talks by Dr. Joseph J. Niemela, Senior Scientist (Emeritus) and Advisor International Programs, ICTP, Italy, and Dr. Ishaq Ahmed, Director-General COE, NCP.

The four-day School consisted of plenary, parallel and poster sessions, as well as tutorials and structured discussions relevant to various technical activities in the chosen topics. The training concluded on the 8th March 2024.

Participation in the Eighth Term of ANSO-BIDI School

From the platform of the Belt & Road International Innovation Development Institute Network (ANSO-BIDI Institute Network), COMSATS, the Centre for Environmental Economics of the University of Chinese Academy of Sciences (CEE-UCAS), the Alliance of National and International Science Organizations for the Belt and Road Regions (ANSO), and other members of ANSO-BIDI Network, have collaborated to organize the eighth term of ANSO-BIDI School (online training), titled 'Innovation, Sustainable Development and Leadership Enhancement'. So far, CEE-UCAS, in collaboration with COMSATS and other members of ANSO-BIDI Institute Network have organized seven terms of ANSO-BIDI School (online trainings), benefitting

over 800 leaders/scientists from various developing countries, including over 400 trainees nominated by COMSATS belonging to its various Member Countries.

The opening ceremony of the event was held virtually on 24th April 2024, which was attended by over 100 participants from a number of countries. Among others, 68 trainees registered for the 8th edition belonging to various Centres of Excellence and Member Countries of COMSATS, including Iran, Kazakhstan, Nigeria, Pakistan, and Tanzania, participated in the opening ceremony.

The training was inaugurated by Prof. Desheng Wu, Director of the Research Centre for Environmental Economics of UCAS, China. Moreover, various leaders from collaborating organizations, including Dr. Guo Lugang, Vice President of Beijing Association for Science and Technology (BAST), China; Ambassador Dr. Mohammad Nafees Zakaria, Executive Director COMSATS, Prof. Avid Budeebazar, General Secretary of the Mongolian Academy of Sciences, Mongolia, Prof. Dr. Hasan Mandal, President, The Scientific and Technological Research Council of Türkiye (TUBITAK), Türkiye; and Prof. Luis Seco, Professor, University of Toronto, Canada, addressed the audience at the opening ceremony.



During his address, Amb. Zakaria emphasized that the path to sustainable development is laden with challenges, especially for developing nations. He underscored the significance of tech-based solutions, education, and innovation for fostering sustainable development in the Global South.

Amb. Zakaria noted that COMSATS has been facilitating S&T exchange, knowledge networking, capacity-building, and collaborative research and development among its 27 Member States. Amb. Zakaria reflected upon the ongoing mutually advantageous cooperation between COMSATS, ANSO, and UCAS, and reaffirmed COMSATS' unwavering dedication to sustained active collaboration with the ANSO-BIDI Institute Network in promoting scientific excellence, building capacity, and nurturing leadership development among individuals in developing countries.

Cooperation Agreements

Letter of Agreement with NIDM-Pakistan

COMSATS and the National Institute of Disaster Management, Pakistan (NIDM), formalized the signing of a Letter of Agreement (LoA) on April 4, 2024. The agreement paves way for

cooperation, coordination, and resource mobilization in disaster management, with a specific emphasis on mitigating the vulnerability of communities affected by climate change and natural disasters. The ensuing partnership seeks to integrate climate considerations into their respective activities and operations, offering tools, assessment methodologies, and information resources to support decision-makers.

Ambassador Dr. Mohammad Nafees Zakaria, Executive Director of COMSATS, and M. Tanveer Paracha, Chief Coordinator of NIDM, signed the agreement on behalf of their respective organizations. The collaboration will focus on the exchange of knowledge and data to strengthen climate resilience, alongside advocacy and policy development to raise awareness and shape effective frameworks for climate adaptation and disaster management.

The signing ceremony was attended by distinguished guests and significant stakeholders, comprising policymakers, climate and finance professionals, and practitioners representing various governmental bodies such as the Ministry of Science and Technology (MoST) Pakistan, the Ministry of Climate Change and Environmental Coordination (MoCC&EC) Pakistan, SDG Unit, Planning Commission, the

ECO Science Foundation (ECOSF), and the Climate Resource Coordination Centre (CRCC).

This partnership underscores a shared commitment to building a more resilient future for communities in Pakistan and other member states.

Memorandum of Understanding with EZShifa

On March 11, 2024, COMSATS formalized a Memorandum of Understanding with EZShifa. The MoU aims to foster collaboration for provision and advancement of Telehealth and telemedicine services, and leveraging technology and operations, with a common vision of making quality healthcare accessible and affordable for all.

The agreement was signed by Ambassador Dr. M. Nafees Zakaria, Executive Director COMSATS, and Dr. Adnan Siddique, Chief Operating Officer EZShifa. The agreement will strengthen COMSATS' Telehealth program for its Member States, enriching it with technological options for tele-medical consultations. Moreover, the MoU provides grounds for collaboration in developing technology products, particularly biomedical devices, as well as academic/training activities.



COMSATS-AGECO Partnership Leads to Landmark Achievement EV

COMSATS and AGECO JV have developed 100% indigenous kits converting ICE vehicles to EV by retrofitting. Made by COMSATS' partner AGECO's Technologist & CEO, M. Aslam Azad, an EV bike was handed to Dr. Fareed Sial on behalf of Executive Director COMSATS, Amb. Dr. M. Nafees Zakaria. This EV is a result of the collaboration between COMSATS and AGECO Pvt. Ltd., (alias Economia) that was formally initiated on 25th August 2023 through an MoU at strengthening the Electric Vehicle (EV) industry in Pakistan and other COMSATS Member States.

The prototype of the said bike was successfully tested for its fuel economy and load bearing on inclined services



and platforms. It has been shown to: be economical with running cost Rs. 0.50 to 1.00; be environment friendly; have potential for reduced import bill of oil and to open new avenues for development in EV field.

Dr. Sial who has since brought the bike for routine use concurs the fuel economy observation. He is confirmed that his eBike is indeed economical & environ friendly – with no noise or emissions – with fuel expense down to PKR 600 from PKR 20-25k monthly. Dr. Sial expressed gratitude to ED COMSATS, and CEO AGECO.

The project was formally launched during the Earth Day Event (page 03).

Delegation from Kenya's IT Department Explores Collaborative Opportunities at COMSATS

A delegation comprising officials from Kenya's IT department, Ms. Fridah M. Mwangangi and Mr. Osbert K. Kororia, accompanied by Mr. Masoud J. Rasam, Counsellor of the Kenyan High Commission, paid a visit to the COMSATS Telehealth Resource Centre on March 5, 2024. Mr. Irfan Hayee, Additional Director (Programs) at COMSATS and Dr. Azeema Fareed, Additional Director (Health) COMSATS coordinated different components of the visit.

During the visit, the delegation received an overview of the Telehealth service model operating in remote areas of Balochistan province of Pakistan. They expressed interest in the technological aspects of the Telehealth system, and had informative exchange with the doctors working at the Resource Centre. Ms. Fridah elaborated on Kenya's health system, with the predominant role of nurses in basic health facilities. The hosts highlighted the importance of the role of paramedics in the Telehealth program, the benefits of Telehealth and insights into daily patient turnout.

Following the visit to the Telehealth Resource Centre, the delegation met with the Executive Director of COMSATS to explore avenues of collaboration. Discussions focused on potential support from COMSATS in cybersecurity and further cooperation in the field of Telehealth to benefit Kenya.

COMSATS on X



COMSATS – A Significant Platform for International Cooperation in ST&I in the South*

COMSATS was founded on the idea propounded by the world's renowned scientist and Nobel Laureate, Prof. Abdus Salam in early 90's. Overarching objective of COMSATS since its inception in 1994 was collective and cooperative endeavours of the countries belonging to Global South to keep pace with the rapid developments in the fields of science and technology and bridge knowledge and technology gap with the developed members of the Global North. COMSATS is now a significant Intergovernmental organization of 27 Member States from Asia, Africa, Middle East and Latin America. COMSATS draws its strength from its affiliated Network of 25 Centres of Excellence with expertise, inter alia, in Biotechnology, Food Technology/Agriculture, Health/Medical Sciences, ICTs, Clean Energy, Climate Change/Environment, Nanotechnology, Water Conservation, and Material Sciences. Inclusion of latest Centre of Excellence from Spain signifies a new initiative of opening an avenue of cooperation with a member of Global North – a milestone that will go a long way in building bridges to the mutual advantage.

The Secretariat of the Commission is hosted by its founding Member State, Pakistan, since October 1994, in Islamabad. The Prime Minister of Pakistan was elected as the first Chairperson of COMSATS during the inaugural meeting with participation from 36 countries. Currently, the Chairperson of COMSATS is the President of Republic of Ghana, H.E. Nana Addo Dankwa Akufo-Addo. Ambassador Dr. Mohammad Nafees Zakaria is the incumbent Executive Director of COMSATS Secretariat. COMSATS' activities and technology based solutions are aimed at sensitizing

the countries in the South to the centrality of science and technology in the development process, adequate resource allocation for research and development, and integration of science and technology in the national and regional development plans.

The membership of COMSATS is inclusive. Currently, the COMSATS Membership exhibits a cultural, ethnic and religious diversity. The activities of the Network of CoEs are supervised by the COMSATS' statutory body called 'Coordinating Council'. A seasoned scientific expert from Egypt, Prof. Ashraf H. Shaalan is currently the Chairman of the Council. All the activities and programs are coordinated and facilitated by the Secretariat. The Network includes two Centres of Excellence from Pakistan; the International Center for Chemical and Biological Sciences (ICCBS), and the COMSATS University Islamabad (CUI), making headways in their respective fields, both nationally and internationally.

The statutory bodies of COMSATS, i.e., General Meeting, the Consultative Committee, the Coordinating Council and the Secretariat, administer the main functioning of the organization. The General Meeting of the Commission is participated at the summit level, two of which were hosted by the Government of Pakistan. The Ministerial level Consultative Committee has highest representation of the relevant Focal Ministries/Government Departments of the Member States (Pakistan holds the Chair of the Consultative Committee). The Coordinating Council comprises of the Heads of designated Centres of Excellence that are part of COMSATS' Network. A Technical Advisory Committee, comprising lead Scientists and Technologists, also supports

COMSATS with its valuable advice, as and when sought.

COMSATS has been contributing to the national development of the Member States, mainly by building capacities of their scientists, researchers, scholars, students, as well as policy makers. COMSATS works in partnership with a number of international and intergovernmental organizations, pursuing its organizational objectives, as well as the global agenda set out by the world community in the form of United Nations Sustainable Development Goals (SDGs).

Over the years, COMSATS has implemented various programmes of science and technology. Realizing that there was no Internet related infrastructure in Pakistan, the organization established the COMSATS Internet Services (CIS) in 1996. CIS is now the most diversified ISP of Pakistan offering technical services and solutions involving wireless/ on-demand broadband, domain & web hosting, Data Center services, video conferencing, website designing and development, Search Engine Optimization, Virtual Private Servers, networking, IT training, and Internet related research facilities. Presently, CIS has presence and operations in 9 cities across the country, and possesses a state-of-the-art training center.

In order to deliver technical and higher education in the field of information technology, COMSATS established the COMSATS Institute of Information Technology (CIIT) in Islamabad in 1998. The Institute was renamed as COMSATS University Islamabad (CUI) after attaining the status of public sector university and has campuses in seven

* The article was originally published in Daily Pakistan Today to show solidarity to COMSATS' host country, Pakistan on its Republic Day, and provides a brief overview of the organization and its operations.

cities of Pakistan. It is among the top five universities of Pakistan, and is ranked top most, in the country, in the field of 'Computer Science and Information Technology'. The University offers over 110 academics programs with a faculty strength of around 2,100, including over 1,100 PhDs. The university is catering to the educational needs of the country and has produced over 100,000 graduates with current enrollment around 35,000. Under a program with COMSATS, CUI offers 100 post-graduate Scholarships to students from COMSATS Member States. Information on how to avail these can be viewed at: https://ww2.comsats.edu.pk/internationalstudents/COMSATS_HQ.aspx.

COMSATS is the pioneer of Tele-health services in Pakistan, which started back in 2001 as a pilot-project with the utilization of indigenous resources to provide cost-effective solution and access to healthcare service to the needy and marginalized. Currently, 29 Tech-enabled Health Clinics in Balochistan are providing tele-consultations to the people living in remote areas with its Resource Centre of Doctors located at the COMSATS' Technology Park, in Islamabad.

Over the years, COMSATS organized, co-organized and sponsored about 450 capacity building events in its member states. Capacity building events held by COMSATS can be broadly categorized in the following: Scientific and Technological Education, R&D; Environment/ Climate Change; Industrial development; New technologies; ICTs; Health; Agriculture/ food security; Energy/ Renewable Energy Technologies; and Economy.

COMSATS has been facilitating joint research activities in various fields of science and technology in order to collectively address the common challenges being faced by the Member States. The focused fields included ICTs; Agriculture, Food Security and Biotechnology; Natural

Products Sciences; Renewable Energy; Mathematical Modeling; and Climate Change and Environmental Protection.

In view of the world focus on Climate Change, COMSATS established the COMSATS Centre for Climate & Sustainability (CCCS) in August 2018. CCCS serves as a platform to connect member countries to identify potential areas of collaboration, share knowledge and expertise and offer their perspectives and solutions in addressing common challenges in the framework of the UN 2030 Development Agenda.

The Centre currently has membership of 20 countries along with 24 institutions belonging to different regions of the world. So far CCCS has organized more than 30 capacity-building activities on a range of subjects in the context of the agreed SDGs. CCCS webinars have generated a lot of interest at the regional and international levels.

COMSATS Joint Centre for Industrial Biotechnology (CCIB) was established in April 2021, at the Tianjin Institute of Industrial Biotechnology (TIB), under the framework of the National Center of Technology Innovation for Synthetic Biology (NC SynBio) of China, in order to promote meaningful cooperation among the Member States in industrial biotechnology. CCIB has so far initiated five high-level joint R&D projects involving over 10 research teams from the Member States; supported 14 young visiting scholars; published four Science Citation Index (SCI) papers; and applied two patents. CCIB has also significantly contributed towards capacity-building of the Member States by holding nine workshops/training courses in the areas of Bio-medicine; Bio-agriculture; Bio-energy; Bio-chemicals, future foods and Bio-materials.

COMSATS has recently ventured into a series of new initiatives in the fields such as Artificial Intelligence, Data Analytics, IT AI&SQA training courses, Precision Agriculture, Genomic Sequencing, Precision Medicine, Renewable Energy (Vertical Axis Wind Turbine), and Electric Vehicles. In this regard, important agreements have been concluded in the domain of emerging technologies. The National Genomic Sequencing program signed with Synthesis Health Inc., USA, will make the adopting country



a hub of R&D, upgrade pharmacology practices in that country, develop new industries and enable acquisition of expertise in precision medicine field. Drone Technology agreement with a Polish enterprise to assist in relief efforts, monitoring signs that prelude to the disasters, assist in agricultural sector, and so on. Through the agreements signed, COMSATS has gathered resources and expertise in Electric Vehicles technology, Renewable Energy technology, Cyber Security, AI Applications, and SQA. COMSATS has also established a Technology Corridor with The Netherlands. These endeavors are aimed at assisting member countries in their technological pursuits to keep pace with the developments in S&T, socio-economic development and bridging the technology and knowledge gap.

COMSATS remains committed to its mission of scientific and technological progress of the developing world and is thankful to its Host Country, Pakistan, other Member States, Network members and partner organizations for their unwavering support in its noble pursuits.

SOME ACTIVITIES OF COMSATS' CENTRES OF EXCELLENCE

Royal Scientific Society, Jordan, wins the Energy Globe Award 2023 in Biogas

The National Energy Research Centre (NERC) at Royal Scientific Society (RSS), Jordan, won the Energy Globe Award 2023 for the Biogas Pilot project in Zaatar Refugee Camp,

RSS/NERC was granted the Energy Globe Award, from The Austrian Embassy, for the implementation of a Biogas Pilot project in the Zaatar Refugee Camp. The Project presented a solution to many challenges faced by the local community, including energy security, environmental and social issues. Transforming waste to energy (Biogas), the pilot is capable to treat 2 - 4 tones of organic waste a day, and is integrated with an electrical generator and gas treatment and storage systems.

RSS' National Software Quality Assurance Centre became a Platinum Level member of the ISTQB® Partner Program!

The Royal Scientific Society's National Software Quality Assurance Centre

(NSQAC) has become a Platinum Level member of the ISTQB Partner Program! The ISTQB Partner Program acknowledges organizations that show a dedicated commitment to software testing certifications.

KazNU- Kazakhstan: Academic Exchanges

Participation in QS Higher Education Summit: Middle East 2024

Representatives from Al-Farabi Kazakh National University, Kazakhstan, made a significant impact at the QS Higher Education Summit: Middle East 2024 in Ras Al Khaimah, UAE. The event, themed "Culture of Innovation: Improving Education for a Prosperous Middle East," drew over 470 delegates from 35 countries to the American University of Ras Al Khaimah.

Al-Farabi KazNU actively engaged in the summit's discussions and networking opportunities. Key topics included international academic mobility, global employment promotion, and enhancing research impact. Emphasizing the crucial role of universities in fostering innovation, KazNU delegates advocated

for intensified research efforts to drive regional prosperity.

Alliance of Silk Road Universities Forum

The delegation led by Dr. Prof. Zhanseit Tuimebayev, Chairman of the Board and Rector of Al-Farabi Kazakh National University, actively participated in the Silk Road Universities Alliance forum held in Xi'an on March 18, 2024. This international gathering united representatives from universities in China, Iran, Pakistan, and Central Asia, focusing on contemporary trends in digital learning systems and progress towards Sustainable Development Goals within higher education institutions.

During these discussions, Al-Farabi KazNU and Jiaotong University cemented their collaboration by signing a memorandum to implement a double-diploma education program in international law. Following the formal meetings, the KazNU delegation toured Jiaotong University's research laboratories, gaining insights into the institution's scientific infrastructure.

Government of Xinjiang Uygur Autonomous Region

Dr. Prof. Zhanseit Tuimebayev, Chairman of the Board and Rector of Al-Farabi Kazakh National University, conducted substantive discussions with Yerkin Tuniyaz, Chairman of the People's Government of Xinjiang Uygur Autonomous Region of the People's Republic of China (PRC). Both parties expressed support for initiatives aimed at bolstering bilateral partnerships and committed to implementing collaborative projects systematically. Following the talks, Dr. Prof. Tuimebayev met with counterparts from Xinjiang Medical University and Xinjiang Technical Institute of Physics and Chemistry, discussing avenues for





intensified cooperation in the medical field.

II Forum of Rectors of Higher Education Institutions of Kazakhstan and Russia

Al-Farabi Kazakh National University hosted the II Forum of Rectors of Higher Education Institutions of Kazakhstan and Russia on March 29, 2024, attracting prominent figures from academia and government.

Under the theme "Current Trends in Higher Education and Science," the international forum convened key stakeholders including Sayasat Nurbek, Minister of Science and Higher Education of Kazakhstan, and Konstantin Mogilevsky, Deputy Minister of Science and Higher Education of the Russian Federation. Also in attendance were Vladimir Shevchenko, Rector of the National Nuclear Research University MEPhI, and Dr. Prof. Zhanseit Tuimebayev, Chairman of the Board and Rector of KazNU, alongside rectors from 50 universities in Russia and 40 universities in Kazakhstan.

Noteworthy outcomes of the forum included the signing of agreements to establish a branch of Mendeleev

Russian Chemical Technology University at Dulati Taraz Regional University, and to facilitate joint education programs between KazNU and St. Petersburg State University within the CIS Network University framework.

Al-Farabi KazNU Collaborations

New Branch in Omsk, Russia

On April 23, 2024, plans were unfolded for establishment of a branch of Al-Farabi Kazakh National University in Omsk, Russia. The announcement came during a productive meeting between Deputy Minister of Science and Higher Education of the Russian Federation, Konstantin Mogilevsky, and Kazakhstani counterparts.

This significant development stems from the collaborative efforts of both nations, as evidenced by the decision made at the Fourth meeting of the Sub-commission on cooperation in education and science of the Intergovernmental Commission between Kazakhstan and Russia. At this meeting, it was unanimously agreed to form a joint working group tasked with crafting a comprehensive

Agreements

University of Pennsylvania: Al-Farabi Kazakh National University took a significant stride in international cooperation by signing a memorandum of cooperation with the prestigious University of Pennsylvania in the United States on April 29, 2024.

The agreement, a product of the working visit of KazNU's Chairman of the Board and Rector, Dr. Prof. Zhanseit Tuimebayev, to the USA, opens new avenues for collaboration in higher education and scientific research.

One of the key aspects of the agreement is the facilitation of lectures by eminent scholars at each university and the publication of research articles by KazNU scientists in University of Pennsylvania journals, thereby enhancing academic exchange and visibility on a global scale.

Bundang Jeasaeng General Hospital to Advance Healthcare Education: A meeting held on April 26, 2024, that brought together the leadership of Al-Farabi Business School and representatives from Bundang Jeasaeng General Hospital also led to formalization of terms of cooperation in



the form of an MoU.

Powerchina Sepco1 Electric Power Construction Co. Ltd: Al-Farabi KazNU and Powerchina Sepco1 Electric Power Construction Co. Ltd signed an MoU on April 25, 2024, to advance academic and technological frontiers through collaborative endeavors.

R&D Activities at KazNU

Production of Innovative Bio-briquette Technology

Researchers at Al-Farabi Kazakh National University have unveiled a pioneering method to transform low-grade coal into briquetted coal by leveraging the power of bacteria. This innovative project not only promises to mitigate environmental concerns associated with coal usage but also holds significant implications for Kazakhstan's industrial landscape. By infusing bacteria into low-grade coal, KazNU scientists have successfully developed briquettes that significantly reduce smoke emissions and harmful sulfur content. This breakthrough addresses a critical need, as a substantial portion of Kazakhstan's coal production comprises low-grade variants lacking in quality. The

applications of these bio-briquettes are diverse, ranging from use in the food industry to power generation in combined heat and power plants. Additionally, these eco-friendly alternatives hold promise for household heating in regions where natural gas supply is insufficient, thereby reducing reliance on traditional, smoke-emitting coal.

Kazakh-Chinese Joint Laboratory for Environmental Monitoring Inaugurated at KazNU

On March 25, 2024, Al-Farabi Kazakh National University proudly unveiled the Kazakhstan-China joint laboratory "Remote Sensing Technology and Applications," poised to address pressing environmental challenges in the Central Asian region.

This state-of-the-art facility represents a landmark collaboration between Kazakhstan and China in the field of science. With KazNU allocating and refurbishing a 500-square-meter space for the laboratory, and China providing funding of 55 million tenge (approximately 1 million yuan) for equipment, the joint endeavor is poised to make significant strides in environmental research and collaboration between the two nations.

Situated within KazNU's Faculty of Geography and Nature Management, the joint laboratory stands as the sole natural resource monitoring center in Central Asia. Beyond its role in scientific research, it serves as a pivotal hub for promoting sustainable environmental development in the region.

Designed to monitor environmental issues like water scarcity, drought, and land degradation exacerbated by climate change, the laboratory utilizes remote sensing technology to ensure environmental security and sustainable development. It serves as a beacon of international cooperation, fostering a high-tech platform for resource research in Kazakhstan, China, and Central Asia.

The signing of an agreement between KazNU and Xinjiang Institute of Ecology and Geography marked a pivotal moment in the laboratory's establishment, symbolizing a commitment to advancing scientific cooperation.

R&D Activities at NMC, Nigeria

The two-week workshop held (March 3-15, 2024) at the National Mathematical Centre Abuja, with the theme of "Foundation Postgraduate



Course in Emerging Trends in Software Engineering Principles and Programming," attracted participants from diverse backgrounds and expertise, fostering collaborative learning in artificial intelligence (AI), machine learning, cybersecurity, and Agile methodologies for problem-solving.

The program covered both training sessions and group projects, with each project geared towards addressing a specific real-world challenge. The training was conducted under three groups to analyze and propose solutions to three specific problems: Artificial Intelligence-Based Enhanced Data Capturing and Verification System to Support National Identity Database Integrity; Alert System for Safety in Taxi Rides; Alert Monitoring System on Bank Accounts.

NMC, Nigeria, Acquires 'New Generation Library'

The National Mathematical Centre Abuja, Nigeria acquired and implemented the Library Automation Software "New Generation Library" (NewGenLib). This replaces KOHA, which was hitherto used to manage the library cataloguing and user access. NewGenLib addresses the ever increasing sophistication of

library cataloguing (including bar coding of books), circulation and the ease of access of our Mathematical library resource by our wide range of Researchers and library Users, most of whom are online. Access to other library worldwide, such as Library of Congress, for resource sharing becomes simpler.

NMC, Nigeria, Observes International Day of Mathematics

On 14 March, 2024, NMC organised the International Day of Mathematics with the theme "Playing with Math". The event was organized with an aim to raise awareness on the importance of Mathematics in our day-to-day activities. The activities to mark the day included a press conference and Math walk among others.

UK Higher Education Leaders Visit CUI, Pakistan

Higher Education Leaders from UK along British Council officials visited COMSATS University Islamabad (CUI) on April 23, 2024. The visit was aimed at building sustainable person-to-person

and institution-to-institution contacts and collaborations with the British universities.

The delegation was on a visit to Pakistan from April 21 to 27, 2024, under the Pak-UK Education Gateway – a partnership project between HEC and the British Council. Delegates from the University of Glasgow, University of Salford, Cardiff University, University of London, Queen Mary University of London, Staffordshire University, University of Exeter, INTO University and Bangor University were part of the visit. Senior officials from the UK's Department for Business and Trade, Department for Education and Office for Students and the British Council also accompanied the delegates.

A memorandum of understanding on research cooperation between the University of Glasgow, Scotland, and COMSATS University was signed at the occasion. During the visit, the delegates interacted with the faculty and students. A certificate distribution ceremony for Scottish scholarship recipients for female students of CUI was also arranged by the university. Prof. Moyra Boland, Dean for Global Engagement – Central and South Asia on behalf of the Scottish Higher Education Trade Envoy and the UK delegation, expressed delight over the visit and hoped for mutually beneficial outcomes from it.



Ms. Sarah Parvez, Head of Education, British Council Pakistan informed that the British Council is planning to launch the second phase of the Pak-UK Education Gateway project in May 2024 as per the latest directive of the Honourable Prime Minister of Pakistan. The project will develop collaboration between the UK universities and Pakistani universities.

CUI-Pakistan hosts Visitors from University of Manchester

Mr. Christopher Gibson, International Officer of the University of Manchester (UoM), United Kingdom, visited COMSATS University Islamabad (CUI), Islamabad campus on April 24, 2024. Accompanying him were Dr. Panagiotis Sousounis, Senior Lecturer in Economics at the School of Social Sciences, UoM, and Mr. Arsalan A. Shaikh, Country Manager of Aspire Educational Consulting, Karachi. The aim of this visit was to deliberate further on collaboration opportunities between UoM and CUI, explored in one of the earlier visits of the UoM delegation.

Dr. Sousounis also delivered a lecture titled, "The Market for Risky Jobs", attended by faculty and students from the Department of Economics of CUI Islamabad Campus.

Chinese, Malaysian and NCP Delegation Explores Collaborative Research Opportunities with CUI, Pakistan

A three-member delegation from Shanghai Jiao Tong University, China, University Technology Malaysia, and the National Centre for Physics, Islamabad, visited CUI on March 5, 2024 at Islamabad Campus. The visitors included Professor Jie Yang, Professor, Director at the Institute of Image Processing and Pattern Recognition,

Shanghai Jiao Tong University, China; Prof. Ir. Ts. Dr. Ahmad 'Athif Faudzi, Director at the Centre for Artificial Intelligence and Robotics (CAIRO), Faculty of Engineering, University Technology Malaysia; and Dr. Hassan Shahzad, Head of Collaborations, National Centre for Physics, Islamabad.

The session provided insights into CUI's rich academic heritage, research prowess, and global collaborations. Following this, the Medical Image Processing Research Group (MIPRG) within the Department of Electrical & Computer Engineering at CUI Islamabad Campus was highlighted. The group's commendable achievements, spanning research areas such as Parallel MRI, AI in MR Image Reconstruction, and ASIC, were duly acknowledged, along with its collaborations with prestigious institutions and significant contributions to medical imaging research.

Subsequently, the visitors shared insights into their respective institutions' endeavours in medical imaging and artificial intelligence. Professor Jie Yang emphasized the robust research infrastructure and collaborations with leading hospitals at Shanghai Jiao Tong University. Prof. Ir. Ts. Dr. Ahmad 'Athif Faudzi elaborated on collaborative opportunities in healthcare and robotics

at the Centre for Artificial Intelligence and Robotics. Moreover, Dr. Hassan Shahzad shed light on ongoing efforts to establish a Shanghai University Innovation Centre at Islamabad, highlighting the potential for fruitful collaborations.

Proposals were made for faculty exchange programs between CUI and University Technology Malaysia to facilitate collaboration in the areas identified during the meeting, as well to formalize cooperative arrangements through MoUs.

BCSIR Gets ISO/IEC - 17025:2017 for Water Testing Worldwide

Institute of National analytical Research and Services of Bangladesh Council of Scientific and Industrial Research achieved 100 numbers of water quality parameter international certificate ISO/IEC - 17025:2017 for testing water worldwide.

Bangladesh accreditation board director general (Additional Secretary) Md. Anwarul Alam handed over the accreditation certificate to Chairman BCSIR, Professor Aftab Ali Shaikh, on 24th April 2024.





Photo Credit: <https://www.facebook.com/photo?fbid=842099074626563&set=pcb.842100111293126>

UCAD, Senegal Receives Minister for Higher Education

The Minister of Higher Education, Research and Innovation (MESRI), Dr. Abdourahmane Diouf, visited Universite Cheikh Anta Diop (UCAD), Senegal, on April 22, 2024. After a visit to the Rector's office, Dr. Diouf had an extended session with the different components of the University. Taking place in the council room of the Faculty of Medicine, the session had the presence of the PCA of UCAD, the vice-PCA, the SG, the deans of the 6 faculties, the school directors and institutes, central directors, and representatives of teaching unions.

The Rector, Professor Ahmadou Aly Mbaye, briefed the Rector about the University's activities, performance and challenges, and hoped for better development of UCAD rising in university rankings.

The minister presented his vision of the university and the challenges to be met, including strengthening of faculty and research capacity. The minister also met representatives of the different unions, namely the SAES, the SUDES and the Intersyndicale des PATS.

Inauguration of University of The Gambia Faraba Banta Campus

On March 3, 2024, the Saudi Fund for Development (SFD) Deputy CEO Eng. Faisal Al-Qahtani has attended the inauguration of the University of The Gambia (UTG) Faraba Banta Campus, to which the fund had provided a \$10 million soft development loan.

SFD is supporting the university's growth and contributing to the advancement of higher education in The Gambia by enabling the construction of a permanent university complex spread over 34,000 square meters.. The project also entailed readying the library



Photo Credit: <https://www.spa.gov.sa/en/N2057769>

building and providing student housing.

The inauguration ceremony was attended by Gambian President Adama Barrow and several other officials.

CSIR, Ghana, R&D Boosts Cashew Processing

The Centre for Scientific and Industrial Research (CSIR), Ghana, has boosted the processing of cashew fruits with an initiative dubbed the Maximizing Gains from Cashew Production for Youth Development Project (MA-Cash). The aim of the M-Cash project is to promote research into efficient methods of processing the by-product of cashew and its consumer acceptability. The 18-month project will be carried out in two regions, notably the Bono and Bono East regions of Ghana. The CSIR will engage relevant stakeholders and partners to implement the project. The relevant stakeholders and partners include six farmer groups, the Institute of Industrial Research and Opportunity International Savings and Loans Limited. The MA-Cash project was launched at the Inception Workshop organized by the CSIR at their head office in Accra.

The MA-Cash project would address the post-harvest losses of the cashew fruits and improve the processing of the fruits into other products, including juices, concentrates, and drinks. The

project to reduce waste, enhance the quality of processed cashew fruits and by-products, and improve cashew yields through agrobiodiversity, while also helping with poverty alleviation and boosting cashew businesses.

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.

TWAS-ICCBS Postgraduate Fellowship Programme (Chemical and Biological Sciences)

Call for Applications is now open for the 2024 TWAS-ICCBS Postgraduate Fellowship Programme. The International Centre for Chemical and Biological Sciences (ICCBS) — comprising the H.E.J. Research Institute of Chemistry and the Dr. Panjwani Centre for Molecular and Drug Research in Karachi, Pakistan — and TWAS offer fellowships to young scientists from developing countries (other than Pakistan). Tenable at the aforementioned ICCBS institutes, these fellowships are for studies leading to a PhD degree in the following fields: organic chemistry, biochemistry, biotechnology, molecular medicine, pharmacology, physical chemistry or analytical chemistry.

Application Deadline: 17 July 2024

For more details:

<https://www.opportunitiesforafricans.com/twas-iccbs-postgraduate-fellowship-programme-2024-for-young-scientists-from-developing-countries/>

COMSATS Network of Centres of Excellence



BCSIR-Bangladesh
www.bcsir.gov.bd



Embrapa Agrobiologia-Brazil
embrapa.br/agrobiologia



ICCES-China
english.icces.ac.cn



TIB-China
english.tib.cas.cn



CIF-Colombia
www.cif.org.co



NRC-Egypt
www.nrc.sci.eg



UTG-The Gambia
www.utg.edu.gm



CSIR-Ghana
www.csir.org.gh



ITS-Indonesia
www.its.ac.id



IROST-Iran
www.irost.org



ICENS-Jamaica
www.icens.org



KazNU-Kazakhstan
www.kaznu.kz/en/



RSS-Jordan
www.rss.jo



ICCBS-Pakistan
www.iccs.edu



NMC-Nigeria
www.nmc.edu.org



CUI-Pakistan
www.comsats.edu.pk



AQU-Palestine
www.alquds.edu



UCAD-Senegal
www.ucad.sn



UGR-Spain
www.ugr.university



ITI-Sri Lanka
www.iti.lk/en



IRCC-Sudan
www.ircc.gov.sd



HIAST-Syria
www.hiast.edu.sy



TIRDO-Tanzania
www.tirdo.or.tz



CERTE-Tunisia
www.certe.rnrt.tn



TÜBİTAK-Türkiye
www.tubitak.gov.tr



Contributions from readers are welcome on any matter relevant to the mission of COMSATS, namely the promotion of South-South cooperation in science and technology for sustainable progress of the developing countries. The same could be provided via newsletter@comsats.org. The responsibility for the accuracy of any information rests with the original source. Views expressed in this publication do not necessarily reflect those of its editors, publisher or COMSATS.