

RESPONSIBLE CONSUMPTION AND PRODUCTION

SDG 12, Responsible Consumption and Production, closely links to multiple Sustainable Development Goals (SDGs) due to its focus on sustainable resource management, reducing waste, and promoting efficient production and consumption patterns.



The Dawaa Society, in collaboration with the Department of Pharmacy at CUI Abbottabad Campus, Organized an insightful Breast Cancer Awareness Seminar. For its esteemed faculty members and female students. This significant event was graced by distinguished guest speakers from the oncology team at INOR Hospital.

The primary message to convey to our community is the importance of early detection in identifying any irregularities related to breast health. We emphasize the need for immediate screening if any symptoms deviate from the norm, as early intervention can be a life-saving measure.

This seminar had three key objectives:

1. Early Detection: Recognizing the early signs of breast cancer can potentially save lives.
2. Preventative Measures: Learning about possible preventive actions empowers us to reduce risks.
3. Raising Awareness: Enhancing knowledge about breast cancer and its implications in our society.

We were privileged to have renowned oncologists from INOR Hospital as our keynote speakers for this event. They shared their expertise and insights on these critical topics.

There was an active participation in this seminar.

Seminar on the “Role of geo-sciences in the mining

industry,” which was organized by the Department of Earth Sciences COMSATS University Abbottabad Campus.

Urging the students to learn the skills in addition to formal education, the Director COMSATS University Abbottabad campus, Professor Dr. Muhammad Maroof Shah, on July 13, 2023, stressed the need for bridging the gap between industry and academia through collaborative projects.

The seminar on the “Role of geo-sciences in the mining industry,” which was organized by the Department of Earth Sciences COMSATS University Abbottabad Campus in collaboration with the Society of Exploration Geophysicists, and Earth Explorer Club here.



Professor Dr. Muhammad Maroof Shah stressed that Illegal mining in Pakistan has had severe negative effects. “The country is rich in natural resources, including minerals such as coal, copper, gold, and gemstones. However, illegal mining practices have led to significant environmental degradation and ecological imbalances,” he added. The mining and mineral exploration company's experts said that geo-sciences play a crucial role in the mining industry of Pakistan



They pointed out that key effects of illegal mining on the environment in Pakistan include deforestation, water pollution, soil erosion, air pollution, damage to wildlife and ecosystems, and social impacts. To mitigate the negative effects of illegal mining on the environment in Pakistan, they said, it was crucial to strengthen law enforcement, improve monitoring mechanisms, and promote sustainable mining practices. They recommended strict regulations, effective governance, and public awareness campaigns to combat this issue and ensure the protection of the environment and communities affected by illegal mining.

The Pakistani mining industry, and the workforce in general, should learn from other countries' experiences rather than reinventing the wheel on health and safety.



National Seminar on Innovative Technologies for Soil Management under Changing Climate

The Department of Environmental Sciences at COMSATS University Islamabad, Abbottabad campus, in collaboration with the Soil Sciences Society of Pakistan (SSSP), organized a national seminar on “Innovative Technologies for Soil Management under Changing Climate” on June 15, 2023. The seminar was attended by over a hundred participants, including individuals from academia, the scientific community, and students from various universities such as International Islamic University, BioSciences COMSATS Islamabad, Bahria University, National Agriculture Research Center and WWF Pakistan.

During the welcome speech, Prof. Dr. Zahir Ahmead Zahir the President of SSSP highlighted the importance of the

seminar and presented facts and figures regarding the potential damages to soil quality and agricultural productivity caused by climate change. Following the welcome speech, Prof. Dr. Adnan Ahmad Tahir from the Department of Environmental Sciences at COMSATS delivered a thoughtful presentation on the impacts of climate change on glacier melting and glacier lakes, emphasizing its implications for mountain agriculture and water security.

Dr. Aansa Rukya Saleem from the Department of Earth and Environmental Science at Bahria University enlightened the audience on the use of biological tools for soil stress management, focusing on the potency of microbial ACC-deaminase in regulating plant biomass, ethylene, and isoprene emissions. Dr. Qaiser Hussain from the Institute of Soil and Environmental Sciences at PMAS Arid Agriculture University Rawalpindi presented his research on a new frontier in soil analysis, using soil spectral libraries and artificial intelligence to predict key soil properties.



Creative Seminar on the Evolution and Scope of Animation

A seminar on Creative Seminar on the Evolution and Scope of Animation was organized by Abbottabad Wolf Studios in collaboration with the Coordination Office and the Computer Science Department CUI, Abbottabad Campus was held on 10th June 2023. The event aimed to provide valuable insights into the world of animation and its significance in various industries

The seminar not only enriched participants' knowledge but also created an environment for networking and fostering connections between industry professionals and aspiring animators. Attendees expressed their appreciation for the opportunity to learn from experts in the field and left the seminar inspired and motivated to pursue their passions in animation. We extend our heartfelt gratitude to all the speakers for their valuable insights, the participants for

their active engagement, and the organizers for their meticulous planning and seamless execution of the seminar



Organized a seminar on “World Environment Day – 2023”

Department of Environmental Sciences co-organized a seminar on “World Environment Day – 2023” in collaboration with Water and Sanitation Services Company Abbottabad (WSSCA) to create awareness regarding plastic contribution to environmental pollution. The theme of this year's World Environment Day 2023 was “Beat Plastic Pollution” which was held in the main auditorium of CUI Abbottabad Campus. Prof. Dr. Mohammad Maroof Shah, director COMSATS University Islamabad (CUI) Abbottabad Campus, and Chief Executive Officer (CEO) WSSCA were invited to grace the event. A talk on “Beat Plastic Pollution” was delivered by Dr. Farhan Hafeez. Talking about this very important issue, Dr. Farhan Hafeez briefed the audience on an annual generation of solid waste comprising 18% of plastic waste. He described that Pakistan is adding more than 3.3 million tons of plastic annually that may reach up to 6.12 million tons by 2050 which is very devastating and must be tackled to combat the environmental pollution. Dr. Farhan further enlightened the audience with the ways to reduce and manage plastic pollution. the audience was briefed on the relationship between plastic pollution and climate change. Carbon pollutants are transported and deposited over the snow and glacier



surfaces, turning them into a dark surface that ultimately enhances heat absorption and causes the glacier to melt. Such accelerated melting may cause hazards including glacier retreat, lake formations, and outburst floods. These hazards cause damage to infrastructure, agriculture, human lives, and settlements. Monitoring of such lakes through remote sensing satellite data may help to alert the downstream communities when a potential outburst is predicted.

Mr. Umar Swati from WSSCA highlighted the attitudes, behavior, and responsibilities of society toward the environmental pollution caused by plastic. Prof. Dr. Muhammad Bilal, convener Industry-Academia Liaison Committee, emphasized the importance of linkages of academia and service providers like WSSCA to join hands and develop environmental technology models to showcase low-cost solutions for various environmental issues. Eng. Rehan Yousaf, CEO WSSCA, suggested CUI Abbottabad Campus and selected areas of Abbottabad City be plastic-free places. Prof. Dr. Muhammad Irshad, Chairman – Environmental Sciences, in his closing remarks, thanked the respected delegates for attending the seminar. Prof. Dr. Mohammad Maroof Shah, director CUI, Abbottabad, ensured WSSCA officials his commitment to help and cooperation needed in community services not only in the environment but also for energy optimization and other engineering works being managed by WSSCA. Delegates also visited the biogas and compost facility, being managed by Dr. Iftikhar Zeb of the Biotechnology Dept. Organizers of the program i.e. Prof. Dr. Muhammad Bilal (CUI) and Eng. Wasiq Mansoor (WSSCA) was appreciated for organizing the excellent event. In the end, certificates of appreciation were distributed to the students and faculty while the commemorative shields were to the delegates.



A senior-level delegation meeting was held between COMSATS University

Islamabad, Wah Campus and National Aerospace Science and Technology Park (NASTP), Rawalpindi on February 16, 2023 in the coordination of the Career Development Cell (CDC), CUI Wah Campus to explore the possibilities of promoting the Industry-Academia linkage to establish a cluster of academicians to provide solution of industrial problems and to strengthening research activities. Various modes of collaboration were explored It was discussed that CUI Wah Campus would provide Consultancy Services to develop procedures, processes, and implementation to ensure increased productivity on a scientific basis and an Industrial Chair of NASTP will be established at CUI Wah Campus.



Strategic Partnerships - Industry Academia Linkages

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in-continuation the software Development House (SDH), National Aerospace Science and Technology Park (NASTP) visited CUI Wah Campus on March 10th, 2023 to further strengthen the industry academia linkages.

The Director Campus, Prof. Dr. Muhammad Abid, T.I., along with In-charge Career Development Cell, Dr. Mushtaq Ahmad Bhatti welcomed the team of NASTP comprising the Chief Director Software Development House (SDH)/ Air Cmdr Amir Azim, Wing Cmdr, Amir Raza and Wing Cmdr, Mehmood Ahmad. The team had a meeting with the HoD Computer Science, Dr. Sheraz Anjum, HoD E&CE, Dr. Muhammad Naeem and HoD Mechanical Engineering, Dr. Attah ur Rehman and with a group of active researchers from the department of Computer Science, Electrical and Computer Engineering, Civil Engineering and Mechanical Engineering to discuss the ecosystem of essential elements required to nurture design, research, development and innovation in the field of web securities



1st International Conference about COP27 Climate Change & Food Security

The Director Campus/UNESCO Water Chair on Knowledge Systems for Integrated Water Resources Management (IWRM), Prof Dr. Muhammad Abid, T.I., delivered the keynote address titled "Sedimentation –Threat to Dams and Food Security" in the 1st International Conference about COP27 Climate Change & Food Security on February 15,

2023 organized by the Arid Agriculture University Rawalpindi, Department of Agronomy, Rawalpindi. He highlighted that dam sedimentation becoming a serious threat for the sustainability of irrigation and addressed the problems framed in water management, flood control, and production of energy.

Ocean Connects World

To promote the exploration and protection of the ocean and boost the development of marine engineering, jointly organized by Mechanical and Vehicle Engineering Division of Chinese Academy of Engineering, Science and Technology Committee of China State Shipbuilding Corporation Limited, and jointly organized by Systems Engineering Institute of China State Shipbuilding Corporation Limited, China Ship Research and Development Academy, Pilot National Laboratory for Marine Science and Technology (Qingdao), and Harbin Engineering University, the International Conference on Marine Equipment & Technology and Sustainable Development (ICMETSD), was organized in Beijing, China on March 31 and April 1, 2023.

During the conference, the Presidents' Forum was organized to discuss and exchange views on the cultivation of marine talents and the future development of ocean, innovation and international cooperation on ocean science and technology, and the development trend of cutting-edge marine science and technology, in order to strengthen exchange and cooperation among China and foreign universities in the field of shipbuilding and ocean, comprehensively improve the competency and level of universities in serving the global ocean governance, and provide intellectual and technological support for global ocean governance.

Prof. Dr. Muhammad Abid, T.I., Director CUI Wah Campus delivered his Keynote on —Marine Education and Technology for Sustainable Development in Pakistan. During his talk he mentioned that Pakistan is located along the Arabian Sea and offers great potential for marine-based activities in Education and Technology for shipping, fisheries, aquaculture & tourism. Hence development of sustainable marine equipment and technology can play a significant role in unlocking the potential of Pakistan's marine sector while ensuring its long-term viability. Above mentioned developments can not be ensured to be sustainable without Capacity building in Marine Engineering and Sciences degrees at BS, MS and PhD levels and through Specialized Courses.



PUBLICATIONS

Publications Title	Author	Publisher	Impact Factor	Weblink
How construction and demolition waste management has addressed sustainable development goals: Exploring academic and industrial trends	Ke Zhang Qing Ke Qasim Umer, Fahad Asmi	Elsevier	8.7	https://www.sciencedirect.com/science/article/abs/pii/S0301479723016110?via%3Dihub
Investigating catalytic oxidative desulfurization of model fuel using hollow PW12/TiO2@MgCO3 and performance optimization via box-behken design	Sadaf Ul Hassan, Hamna Khalid Sidra Shafique Muhammad Asim Farid	Elsevier	8.8	https://www.sciencedirect.com/science/article/pii/S004565352301929X
A novel renewable powered stand-alone electric vehicle parking-lot model	Muhammad Jawad Hira Asghar ehangir Arshad, Abbas Javed, Muhammad Bilal Qureshi, Sahibzada Muhammad Ali, Noman Shabbir, Anton Rassólkin	Elsevier	7.1	https://www.sciencedirect.com/science/article/abs/pii/S2352467722002375
First Identification of Potato Tuber Rot Caused by Penicillium solitum, its Silver Nanoparticles Synthesis, Characterization and Use against Harmful Pathogens	Syed Haseeb Shah, Xiaoliang Shan, Sofia Baig et al	Frontiers Media	5.6	https://www.frontiersin.org/journals/plant-science/articles/10.3389/fpls.2023.1255480/full

Total Publications :23, only high impact factor publications are mentioned here

In 2023 research projects of **10.73 million** worth got approved among them a project titled **“Synthesis of 1,3-Disubstituted Thioureas as Potential pesticides to deal with the Hurdles in Sustainable wheat growth in Pakistan”**, and **“Intelligent service Design Development and Adaptation solution”** are worth mentioning

