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2023

SUSTAINABILITY REPORT

DIRECTORATE OF SUSTAINABILITY AND ENVIRONMENT
CAPITAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

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OUR MISSION



Mission

To integrate resource conservation practices at CUST and to value and cherish nature that fosters the wellbeing of future generations through environmental sustainability.



Vision

CUST is engaged in going green and sustainability initiatives to ensure efficient resource conservation within the campus in the service of social responsibility to the planet and promote biodiversity that remains the answer to sustainable development.



Strategy

- Setting and Infrastructure
- Energy and Climate Change
- Water Conservation
- Research and Education
- Waste Minimization
- Transportation



DIRECTOR'S MESSAGE



Going green and sustainability has become the core value in campus action. The Directorate of Sustainability & Environment initiative is aligned with the Sustainable Development Goals of the United Nation to promote environmental sustainability within the CUST.

Efficient resources conservation using unique sustainable solutions is essential to social prosperity. The Directorate of Sustainability & Environment is highly committed to constructing an eco-friendly sustainably operating framework by incorporating environmental and social dynamics into processes of decision making.

Becoming a sustainable and responsible educational institute not merely enhances our reputation but also enlightens a sense of pride in our students and faculty to be an integral part of an organization that cares for the planet. I believe that these initiatives will play a significant role in helping to realize a sustainable society.

CUST aims to become an educational institute that shares the joy of creating new value with all of its stakeholders as it steadily



DSE-CUST INTRODUCTION

Capital University of Science and Technology significantly contributes to implementing sustainable practices to address environmental issues. Front-runners of every department are collaborating for making the environment clean and green starting from engineering to business and social sciences.

The aim is to encourage individuals to play a pivotal role in making the world a safer place for future generations through recycling initiatives and participating in free planting. CUST has been comprehensively engaged in extensive research, innovative teaching, and concrete environmental sustainability to ensure the availability and conservation of resources for future generations. Going green and sustainability has become the core value in campus action. The University is consistently making efficient investments in and taking significant steps for sustainability at the operational and programmatic levels.

The Directorate of Sustainability and Environment (DSE) is inclined to create sustainable strategies and leads those strategies and initiatives on campus physical infrastructure and programs in energy and climate, water conservation, transportation, and research and education. DSE empowers ambitious partnerships and collaborations that play a pivotal role in making the world sustainable.

All the university departments are integrated with DSE to ensure effective communication and collaborative works with them for the execution of sustainability-specific goals. The DSE focused key areas are communication, training, and education; assessments, evaluation, and reporting; events, campaigns, and talk; organizational effectiveness and infrastructural planning support. DSE emphasizes an economic model that focuses on the efficient use of resources and maximizing the product's life cycle.

DSE-CUST COMMITTEE



Prof. Dr. Ishtiaq Hassan
Director, DSE



Engr. Sajjad Khan Niazi
Secretary, Research Associate DSE



Dr. Arshia Amin Butt
Department of Bio-Sciences



Ms. Rabia Habib
Department of Management Sciences



Ms. Sadaf Adalat
Department of Accounts & Finance



Ms. Shumaila Rasheed
Department of Mechanical Engineering



Engr. Waleed Farooq
Department of Electrical Engineering



Engr. Talha Ahmed
Department of Civil Engineering



Ms. Nitasha Gohar
Department of Pharmacy



Ms. Uzma Mushtaq
Department of Psychology



Ms. Saeeda Ibrahim
Department of English

DSE-CUST POLICIES



Capital University of Science and Technology focuses on the going green and sustainability strategy to bring campus eco-system at equilibrium and ensure efficient utilization of resources. CUST has become a pillar and custodian in embedding sustainability in higher education through its dedicated teaching faculty.

Students conduct comprehensive research to develop unique environment friendly solutions for making sustainable change. The going green policy also incorporates directing and inspecting human actions to take useful measures for mitigating adverse impacts on the natural resources and biophysical environment.

Currently, DSE is engaged in directing Waste Management, Recycling, and infrastructure that are aligned with its 6 key themes of sustainability.

RECYCLING POLICY

Capital University of Science and Technology seeks maximizing the recycling of waste materials a top priority. The recycling policy is inclined towards substantial pathways embedded with **4 R's of reduce, reuse, recycle, and rethink**. The waste management team uses a paper shredder which helps the institute to handle its paper waste effectively.

Trash bins with labels of Plastics, Paper, Metals, etc., are placed within the campus, so the students and faculty can help the recycling team by pre-categorizing the waste to make the recycling process more efficient, fast, and easy. Students also steered a cleaning drive at CUST where everyone gathered and picked up garbage and other plastic-related non-recyclable items and disposed them off. Not only did this make the university a cleaner place but it also spread awareness among the students and teaching staff to support our cause.



The recycling program also caught the attention of print and electronic media including Radio Pakistan and the director of DSE was invited to live broadcast her message on a live show at Radio Pakistan. The radio broadcasts have remarkably helped to spread the message of change which calls on the masses to become responsible members of society.

WASTE MANAGEMENT POLICY

Capital University of Science and Technology is committed to making sustainable environmental practices through effective resource management. The directorate of Sustainability and Environment (DSE) has proposed a waste management policy to contribute to the circular economy by eliminating toxic, organic, and inorganic waste from the campus. It's a pivotal initiative taken by DSE to significantly contribute to the SDGs of the United Nation at a local and regional level.

Solid waste plays a key role as a lot of waste ends up in the oceans and landfills which is causing problems for everyone by creating greenhouse gases (GHG) and increasing carbon emissions. Pakistan generates almost 48 million tons of solid waste per year which is increasing by the growth rate of almost 2.4% while the collection rate is only 60% which is also not being dumped properly.

DSE-CUST is engaged in using multiple social media platforms such as Twitter, Instagram, and Facebook to create awareness not only among people on campus but also among individuals of twin cities for making the environment clean and green. This social media campaign is actively running with the chant of "Pick up-Clean up" with an aim of saving the Earth together. CUST waste management policy targets to adopt a 'Base to zero approach', achieve a recycling rate of 70 percent by 2023, and eliminate waste production by 10 percent by 2023 across the campus.



CUST PEDESTRIAN PATH POLICY

Capital University of Science and Technology seeks to establish the Pedestrian path policy to accommodate pedestrians on campus and hence reinforcing the network. The master plan of campus has designed a framework by which the university can achieve the crucial research and academic mission of the institute while enhancing the life quality on campus, absorbing growth, and creating sustainable ethics. A keystone strategy of this pedestrian path framework is circulation and access within the campus. This policy is designed around an “integrated plan to circulation” that depends on well-utilized pedestrian networks.

Besides reducing on-campus vehicular traffic, means of active transportation even diminish greenhouse gas emissions and contribute to healthy lifestyles. CUST has performed premeditated engineering and design efforts for supporting the pedestrian network viability on campus as a top priority. The university is facilitating and supporting on-campus pedestrian network through the following engineering and design efforts:



- At the design phase of the pedestrian path plan affecting paths and transportation on campus, engineering teams have identified ways to meet the pedestrians' needs. The Pedestrian Counseling Committee regularly reviews and provides input to pertain to pedestrians.
- As CUST is centrally located at Expressway so, the Pedestrian Counseling Committee has reinforced connectivity of bike routes outside campus premises through demarcating and evaluating connection points from Islamabad Expressway bike routes to entry points on campus.

The vehicle parking area on campus is developed and strengthened through car lanes, signage, shared lane markings, and bike boulevards.



CUST PARKING AREA POLICY

Capital University of Science and Technology has designed a parking area policy to ensure efficient utilization of limited parking resources. All university faculty and students on the campus have to register their vehicles and must show a valid parking permit. Citations will lead to various Penalties and Sanctions such as fines and warnings. To mitigate vehicle traffic on the campus, CUST has restricted entry of private vehicles to the campus except for unordinary circumstances. Also, parking spaces designated separately for faculty and students have been removed.

This policy aims to institute a formula of assigning parking permits grounded on the requestor's role on longevity and campus. The university seeks to close off-campus central areas to cars for cutting down on congestion. It will lead to a pedestrian-friendly core campus. The university will use parking lots in the following ways:



- Cars must be parked merely in cars racks reserved by the university.
- Motorbikes must be parked only in bikes racks allotted by the university. They shall not be parked on sidewalks or lawns.
- Buses must be parked separately in buses racks to avoid vehicle congestion.
- Vehicles inadequately parked might be subject to the removal of a locking device.
- All vehicle operators intending to avail the campus parking facilities are required to register themselves for a parking permit to permanently affix to the vehicle.

CUST WELL-BEING POLICY

Capital University of Science and Technology has created a dedicated hub for the well-being of students and faculty.

The wellbeing centre offers an array of welfare services to support students and staff throughout their university hours.

The purpose is to provide psychological, social, and therapeutic support to the CUST community seeking health services. Wellbeing hub has a pharmacy and a full-time general practitioner responsible for healthcare assistance.



CUST CONSTRUCTION & RENOVATION POLICY

Capital University of Science and Technology promotes stewardship to plan, design, construct and maintain the physical environment of the university. The purpose is to become sustainable, aesthetic, enduring, and contextual to protect the safety and welfare of the university community. The construction and renovation policy of CUST include:

- Improvement, alterations, or renovation of existing facilities within the campus.
- Modifications in utility systems such as heating, plumbing, air conditioning, gas, air, electrical, etc.
- Installation of major equipment that requires utility connections.
- Window coverings, floor coverings, furnishings, and interior decorating.
- Program planning, development, and facility design.
- Cost estimates or feasibility studies on construction and renovation.

Only authorized contractors are hired for such services to ensure compliance with campus standards. All vendors/contractors commence the contractual work after signing a contract for campus projects. Despite the contract amount, CUST management can request bids on a particular construction project. This policy seeks risk mitigation for the CUST associated with campus renovation, construction, and property maintenance as well.

CAPITAL UNIVERSITY'S ACHIEVEMENTS

The Capital University of Science and Technology (CUST) is now ranked among the top 350 universities in the world and among the top eleven universities in Pakistan. According to the UI GreenMetric World University Ranking 2022, CUST is the 341st most sustainable university in the world, out of a total of 1050 universities worldwide. This has been accomplished using GreenMetric's competitive and rigorous ranking system for the evaluation of on-campus sustainability, which has been in place since 2007.

Among the important performance indicators were CUST's campus setting and infrastructure, as well as its research and development efforts, its energy and climate change efforts, waste management practices, water conservation strategy, and the carbon footprint of its transportation operations. The Directorate of Sustainability and Environment (DSE) at CUST is taking substantial steps to promote responsible action and incorporate sustainability on campus to achieve the Sustainable Development Goals (SDGs) established by the United Nations.



IMPLEMENTATION OF THE SUSTAINABLE DEVELOPMENT GOAL

<p>01 NO POVERTY</p>	<p>02 ZERO HUNGER</p>	<p>03 GOOD HEALTH AND WELL-BEING</p>	<p>04 QUALITY EDUCATION</p>	<p>05 GENDER EQUALITY</p>
<p>06 CLEAN WATER AND SANITATION</p>	<p>07 AFFORDABLE AND CLEAN ENERGY</p>	<p>08 DECENT WORK AND ECONOMIC GROWTH</p>	<p>09 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>	<p>10 REDUCED INEQUALITIES</p>
<p>11 SUSTAINABLE CITIES AND COMMUNITIES</p>	<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p>13 CLIMATE ACTION</p>	<p>14 LIFE BELOW WATER</p>	<p>15 LIFE ON LAND</p>
<p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p>	<p>17 PARTNERSHIPS FOR THE GOALS</p>			



SUMMARY OF SDGs EVENTS

Sr. No.	SDG TITLE	NO. OF ACTIVITES
1.	NO POVERTY	02
2.	ZERO HUNGER	03
3.	GOOD HEALTH AND WELL BEING	18
4.	QUALITY EDUCATION	22
5.	GENDER EQUALITY	01
6.	CLEAN WATER AND SANITATION	02
7.	AFFORDABLE AND CLEAN ENERGY	01
8.	DECENT WORK & ECONOMIC GROWTH	03
9.	INDUSTRY, INNOVATION & INFRASTRUCTURE	19
10.	REDUCED INEQUALITIES	01
11.	SUSTAINABLE CITIES AND COMMUNITIES	02
12.	RESPONSIBLE CONSUMPTION & PRODUCTION	02
13.	CLIMATE ACTION	04
14.	LIFE BELOW WATER	00
15.	LIFE ON LAND	01
16.	PEACE, JUSTICE & INSTITUTIONS	02
17.	PARTNERSHIPS FOR THE GOALS	01
18.	OTHERS (CONFERENCES AND TRAININGS)	04
TOTAL NO. OF EVENTS		88



01

NO POVERTY



01

ACTIVITY 1



A total of 5 local entrepreneurs were aided in the form of mentorship, and financial support with the aim to reduce the poverty level in Pakistan by introducing entrepreneurship among the masses.

The event was organized by CUST Helping Hands Society under supervision of Ms. Maria Mashkooor

The Participants of event was BBA Students & CUST Helping Hangs Members



ACTIVITY 2

Social Welfare Club's Team comprising of Members and Executives managed to have Chit Chat with young fellows, residing in a boarding orphanage, in Islamabad on 26/02/2023. The visit was paid with reference to Human Solidarity Day, where mini gifts were also distributed. The visit let the aim achieved i.e. to bring up smiles on all the young faces there.



This visit aimed to promote the children's rights which covers many UN Sustainable Development Goals including Goal #01 (No Poverty) and Goal #02 (No Hunger) and Goal #04 (Education).

02

ZERO HUNGER



02

ACTIVITY 1



A total 16 food rationing projects were carried out which facilitated 36 families. Ration is bought from small scale vendors and hawkers in order to support the local economy and daily wagers.

The event was organized by CUST Helping Hands Society under supervision of Ms. Maria Mashkooor

The Participants of event was BBA Students & CUST Helping Hangs Members



ACTIVITY 2

Social Welfare Club, under the supervision of Faculty of Pharmacy, organized an interactive colloquium on the topic, “Social Welfare/Development (Domains, Factors/Basis)” on 24-02-2023.



Hafiz Harris (Founder, Allah Call & Director, Savvy Engineers Ltd) led the discussion as Guest Speaker. During the procession, different issues were indicated. The session concluded with the solutions of those issues, ancillary to the said topic. Moreover, basics and domains of Social Welfare were also discussed there.



ACTIVITY 3

Title	Description	Date	Attendees/organizers
Colloquium on Social Welfare/Development (Domains, Factors/Basis)	The colloquium was intended to promote UN Sustainable Development Goal # 01 and 02 (No Poverty and No Hunger), through awareness of the basis for mobilizing the social	24-Feb-2023	Organizers Social Welfare Club, Pharma Spark Society

ACTIVITY 4

Title	Description	Dat	Attendees/organizers
Ramazan Drive for Distribution of Ration Packages	The sole purpose of this Drive was to initiate a sense of Teamwork, Responsibility and welfare of human kind among students. Ration was to be bought by Funds collected from this Ramazan Drive which was distributed among the needy and deserving. The attempt aimed at practically promoting the UN Sustainable Development Goal#2 (No Hunger), specifically the target 2.1 , to ensure the provision of sufficient food to deserving families, in the holy month of Ramadan.	March-22-2023	Organizers: Pharma Spark Society, Faculty of Pharmacy Attendees: Students and faculty of faculty of pharmacy.

03

GOOD HEALTH & WELL-BEING



03

ACTIVITY 1



The department initiates mental health awareness in the schools and orphanages of the twin cities and Rawat to highlight emotional management strategies, stress management and personal boundaries

The event was held in December 2022 organized by Ms. Rabia Habib and the attendees of the event was BBA Students (8 Projects)



ACTIVITY 2



Biosafety includes protection of infectious material, personnel as well as environment. Our small organizations are exposing their paramedical staff and lab attendants untrained to infectious materials. These practices are exposing everyone in the vicinity with deleterious agents. Being central organization in the surrounding and an advocate of safe environment CUST took initiative to train paramedical staff of local government hospitals and lab technicians.

Pakistan Biological Safety Association's team will be invited for the training.

The targets of the event was

1. Safe removal of contaminated gloves
2. Spill management protocols
3. Transportation of infectious materials
4. Waste management
5. Accident and incident reporting
6. Drills related to biosecurity breach management
7. Risk Mitigation



ACTIVITY 3



A seminar was organized by the Department of Accounting & Finance on topic of 'Anger Management' on 3rd Jan, 2023. The resource person was Ms. Sadaf Zeb (Senior Lecturer/Consultant Clinical Psychologist at Psychology Department, CUST). The seminar was attended by undergraduate students of Accounting & Finance (7th & 8th Semester) of Capital University of Sciences and technology, Islamabad

The objective of the seminar was to provide awareness and basic knowledge to the students regarding the anger management and to enhance their understanding of how to manage anger appropriately in different settings & maintain good health.



ACTIVITY 4



The purpose of this session was to make faculty members familiar and well aware with the healthy food and diet plans for healthy lifestyle. The seminar was started with the recitation of Holy Quran. Engr. Muhammad Zaheer – Coordinator DSE (Department of Civil Engineering) welcomed the resource person and thanked her for sparing her precious time. Resource person, Dt. Sadaf Sajid explained the necessity and importance of being well known of healthy diets for healthy lifestyle keeping in view the daily routine and profession of an individual.

Following topics were covered:

- Why should we eat healthy?
- The importance of a balanced and varied diet, macronutrients and micronutrients.
- MY PLATE concept by USDA with three pillars of health as food, exercise and sleep.
- Tips for maintaining healthy lifestyle.
- New food trends and diets.



ACTIVITY 5



GeniX Society for Department of Bioinformatics & Biosciences organized a “Seminar on Mental Wellness of Teenagers” on Friday, 3rd March, 2023. A healthier mind leads to a healthier life style and mental peace can be achieved by using different psychological techniques. Ms. Sadaf Zeb, Consultant Clinical Psychologist and Senior lecturer Department of Psychology CUST, was invited as guest speaker. She is member of the CUST wellbeing cantor. Overall, it was an interactive session and proved to be a great source of knowledge for the participants.

The seminar was to spread awareness regarding the mental health of the teenagers. Guest Speaker discussed hierarchy of mental health and related disorders. Common psychological terms like depression and anxiety were also explained. Closing remarks were given by our Chief Guests Dr. Sahar Fazal (Dean FoHLS) and Dr. Marriam Bakhtiar (HOD Bioinformatics & Biosciences), and presented the souvenir to the guest.



ACTIVITY 6



An event titled “Cycling Event” was arranged by the DSE on March 08, 2023 at CUST campus. The honorable Vice Chancellor, Prof. Dr. M. Mansoor Ahmed, inaugurated the event along with the Registrar, Mr. Malik Arshad Mehmood and Director DSE, Prof. Dr. Ishtiaq Hassan.

Director DSE, paid special thanks to Engr. Zaheer, Member DSE CE CUST, Mr. Sajjad and Mr. Zain (President and vice president ASCE student capital chapter) whose dedicated efforts made the event a success.

This event, focusses the targets of 3.6.1 and 3.9.1 which demand to take such measures which help to reduce road accidents and illness/deaths due to hazardous air, water, chemical and soil pollution. These days, more vehicles are seen on road which cause road accidents and an increase in GHG (specially CO₂) during their frequent movement and especially during period of traffic congestions.



ACTIVITY 7



The Seminar initiated at 2:20 pm, starting with the Name of Allah, Mr. Zohaib recited a few verses of the Holy Quran. On this occasion, Respected Faculty Members, Madam Nitasha Gohar, Madam Nadia Shamshad Malik, Mr. Mahboob Alam, Mr. .Asif Safdar, and Mr. Farhan along with the Dean of Faculty of Pharmacy, Dr. Muzaffar Abbas were present.

After Recitation of the Holy Quran, Mr. Muhammad Yasir Khan (Chairman of Strive Trust) was invited to speak few sacred words and enlighten our minds with some interesting knowledge of the world then, Dr. Muzaffar Abbas were invited who thanked Mr. Muhammad Yasir and everyone including all the students, Faculty Members, Volunteers from Strive Trust and Mr. Muhammad Yasir Khan Dr. Muzaffar Abbas also presented Shield to Mr. Muhammad Yasir Khan acknowledging his efforts and volunteers of Strive Trust.



ACTIVITY 8



Pharma Spark Society, Faculty of Pharmacy organized an awareness walk on March 24th, 2023 titled, "AWARENESS WALK TO MARK WORLD TB DAY" on World TB Day to intensify efforts to stop the global TB epidemic and to educate the public about the destructive effects of tuberculosis (TB) on one's health, society, and economy. The activity greatly served the UN Sustainable Development Goal 3 (Good Health and Well-Being) Specifying the target 3.4.

The awareness walk commenced at 11:00 am across the campus with information banners regarding TB, starting from J-Block to K-Block. By 11:10 am, a Group Photo posed with awareness banners/Posters after the walk at K-Block. The Event was well attended by reputable Faculty Members Dr. Nadia Shamshad, Miss. Nitasha Gauhar. Moreover, the awareness walk's brilliance was boosted by the involvement of the students.





ACTIVITY 9

Title	Description	Dated	Attendees/organizers
Seminar	A seminar was organized for students of Psychology Department on Power of Positivity	9-Dec-2022	Students of Psychology Department/ Ms. Rabia Batool

ACTIVITY 10

Title	Description	Dated	Attendees/organizers
Seminar conducted by Ms. Ayesha Yaqoob	Sensitivity and inclusivity of persons with disabilities in right based development process Venue: A1 Timings: 3:10-5:10	9-Dec-2022	Organizers: Psychology department Attendees: BS psychology students

ACTIVITY 11

Title	Description	Dated	Attendees/organizers
Seminar conducted by Ms. Aysha Aneeq	Stress Management Venue: C5 Timings: 2.20-3.10	19-Dec-2022	Organizers: Management Sciences Attendees: BBA VIII semester (section I)

ACTIVITY 12

Title	Description	Dated	Attendees/organizers
Seminar by Dr. Iram Gul, Associate Professor and Chairperson Behavioral Sciences Department FJWU.	Living with Chronic Illness: Coronary Heart Diseases, Risk factors, Rehabilitation and Psychological Interventions	26-Dec-2022	Organizer: Ms. Ayesha Aneeq Lecturer, Department of Psychology Attendees: Faculty members and Semester VI students (Section 1 & 2 Health Psychology)

ACTIVITY 13

Title	Description	Objectives	Attendees/organizers
Session on 'Stress Management'	A seminar was organized by the Department of Accounting & Finance on topic of 'Stress Management' on 28 Dec. 2022 . The resource person was Ms. Irum Noureen (Lecturer Psychologist at Psychology Department, CUST). The seminar was attended by undergraduate students of accounting & finance (7th & 8th Semester) of Capital University of Sciences and technology, Islamabad.	The objective of the seminar was to provide basic knowledge to the students regarding the stress management and to enhance their understanding of how to overcome stress appropriately in different settings & maintain good health.	Organizer: Accounting & Finance Dept. Attendees: 7 th & 8 th semester

ACTIVITY 14

Title	Description	Dated	Attendees/organizers
Training on Time management	Venue: Psychology lab E block	28/29-Dec-2022	Organizers: Head, Department of Psychology, CUST Attendees: BS psychology students

ACTIVITY 15

Title	Description	Objectives	Attendees/organizers
Session on 'Anger Management'	A seminar was organized by the Department of Accounting & Finance on topic of 'Anger Management' on 3rd Jan, 2023 . The resource person was Ms. Sadaf Zeb (Senior Lecturer/Consultant Clinical Psychologist at Psychology Department, CUST). The seminar was attended by undergraduate students of Accounting & Finance (7th & 8th Semester) of Capital University of Sciences and technology, Islamabad	The objective of the seminar was to provide awareness and basic knowledge to the students regarding the anger management and to enhance their understanding of how to manage anger appropriately in different settings & maintain good health.	Organizer: Accounting & Finance Dept. Attendees: 7 th & 8 th semester

ACTIVITY 16

Title	Description	Date	Attendees/organizers
Strawberry Day	The celebration of Strawberry Day in our university was significant in promoting, in general, the UN Sustainable Development Goal 3 (Good health and Well being) by encouraging healthy living and awareness of the importance of incorporating fruits into one's diet.	March-10 th -2023	Students and faculty of department of Pharmacy.

ACTIVITY 17

Title	Description	Dated	Attendees/organizers
Seminar on Mental Wellness of Teenagers	<p>A healthier mind leads to a healthier life style and mental peace can be achieved by using different psychological techniques.</p> <p>Resource Person</p> <p>Ms. Sadaf Zeb, Consultant Clinical Psychologist and Senior lecturer Department of Psychology CUST</p> <p>Objectives:</p> <ol style="list-style-type: none"> 1.To spread awareness regarding the mental health. 2. To discussed hierarchy of mental health and related disorders 	March 03, 2023	GeniX Society of BI&BS

ACTIVITY 18

Title	Description	Dated	Attendees/organizers
International Family Day and World Hypertension Day Social Media Campaign	The primary objective of this part of the campaign was to emphasize the significance of family bonds and promote sustainable development goals among the target audience.	May-15-23	<p>Organizer Pharma Spark Society, Faculty of Pharmacy</p> <p>Participants/Attendees Students and faculty of department of pharmacy</p>

04

QUALITY EDUCATION





ACTIVITY 1

A seminar was organized by department of electrical engineering and the society of EE department with the name SEEK and the society of Civil Engineering Department ASCE with the collaboration of SDG Scouts from NUML University.

A seminar on SDG Goals and its awareness. Dr.Ishtiaq, Dr.Noor Muhammad Khan and Engr. Muhammad Waleed Farooq participated in event from faculty of engineering.

ACTIVITY 2

A seminar was organized for students of Psychology Department on Power of Positivity. The event was organized by Students of Psychology Department and supervised by Ms. Rabia Batool

ACTIVITY 3

A seminar was organized for students of the Psychology Department on Ethics in Special Education. Students of Psychology Department organized the event and supervised by Ms. Uzma Mushtaq

ACTIVITY 4

A seminar was organized for students of the Psychology Department on Psychological Manipulation. Students of Psychology Department arranged the event and supervised by Ms. Rabia Batool

ACTIVITY 5

A workshop was organized for students of the Psychology Department on Administration and Interpretation of Thematic Apperception Test (TAT). Miss Rabia Batool lead the event which was organized by Students of Psychology Department.



ACTIVITY 6



The purpose of this session was to make final year students and faculty familiar with the project management software Primavera P6. The training was started with the recitation of Holy Quran.

Engr. Sohail Afzal – Coordinator Trainings welcomed the resource person and thanked him for his time. Resource person, Engr. Irbaz Hasan explained project management and construction projects. He emphasized on the need and importance of scheduling software.

The training was divided in two sessions. In first session, he explained the theory of project management and primavera software. He solved some examples following the introduction of software tools and commands. In second session, hands-on practice on Primavera software was emphasized. A small project of 6-7 activities were discussed and its scheduling and Gantt chart were prepared by using the software.



ACTIVITY 8

Faculty of Engineering is dedicated to advancing innovation and technological excellence in education for the benefit of society. For this every now and then they try to engage students in different technical and non-technical domains, providing them with an appropriate platform to showcase their skills by applying their knowledge. Keeping that in mind, Faculty of Engineering organized the first ever Science Fair on 14th January 2023. The Science Fair event was an exercise in bringing talent and genius on a single platform. The Science Fair aimed to create an environment where students felt at liberty to bring their ideas and shaped them into reality. It was a breeding ground for young and innovative individuals to come and achieve great feats. We aspired to provide a conducive environment for students to receive valuable feedback from professionals, and a taste in pragmatism.

There was a total of 500 participants who came from 25 different schools and colleges across twin cities. Along with this there were 35 instructors from these prestigious institutes who participated in the faculty development training sessions which was an integral part of this event. This kind of event has a great impact on improving the quality of education as it provides exposure to students in the field of technology and on the updated research moreover this event represents SDG#4 in general. Although this event is further divided in sub events which are further mapped on different SDG's.

ACTIVITY 9

RoboCUST brings the opportunity for every student to showcase their talents at this platform and compete against the best in the game. The main objective of RoboCUST is to improve the critical thinking with new and innovative solutions, set of practical activities, implementing new ideas, enlarging people's will for improving and creating better world. As Robotics is the need of the hour and for coming generations so it has been planned to be organized by the faculty of Engineering. This event addresses the SDG-4 AND SDG-9. The SDG-4 aims to improve Quality

Education by:-

- enhancing and providing access to quality early childhood development.
- ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
- substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
- ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy.

Whereas SDG#9 focuses on Industry, innovation and infrastructure. SDG#9 addresses the following in RoboCUST:-

- Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development

ACTIVITY 10

The CFA Institute Research Challenge is an annual global competition that provides university students with hands-on mentoring and intensive training in financial analysis and professional ethics. Each student will be tested on their analytical, valuation, report writing, and presentation skills. They gain real-world experience as they assume the role of a research analyst. The organizer/attendee of the event was Organizer: CFA Pakistan Research Challenge & Dr. Iftikhar Ali Janjua worked as faculty advisor. Attendees: Team of A&F students.

ACTIVITY 11

Capital University of Science and Technology, Islamabad. Members and Executives presented the services of Mother Teresa, Mam Ruth Pfau, Sir Abdul Sattar Edhi, Shehzad Roy, Dr. Muhammad Amjad Saqib and many others to close up the hour.

The event was designed to promote UN Sustainable Development goal # 04, mainly focusing on target 4.7 which includes educating and spreading awareness for sustainable development and sustainable lifestyles, human rights, gender equality and promotion of a culture of peace and non- violence. The organizer/attendee of the event was Organizer Faculty of Pharmacy, Social Welfare Club Attendees Members of the social welfare club.

ACTIVITY 12

The event was designed to promote UN Sustainable Development goal # 04, mainly focusing on target 4.7 which includes educating and spreading awareness for sustainable development and sustainable lifestyles, human rights, gender equality and promotion of a culture of peace and non- violence.

The Social Welfare Club, under the supervision of Faculty of Pharmacy, organized a Tribute Hour to commemorate the services of some big names of history and current era that have served humanity in various ways, rendering their lives for the said mission.

Activity was named as "Tribute Hour for Social Workers" held on 27/02/2023, in Capital University of Science and Technology, Islamabad. Members and Executives presented the services of Mother Teresa, Mam Ruth Pfau, Sir Abdul Sattar Edhi, Shehzad Roy, Dr. Muhammad Amjad Saqib and many others to close up the hour.



ACTIVITY 13

Title	Description	Dated	Attendees/organizers
Educational Trip	Educational Trip to Fountain House, Lahore	10-Dec-2022	Students of Psychology Department/ Psychology

ACTIVITY 14

Title	Description	Dated	Attendees/organizers
Seminar	A seminar was organized for students of the Psychology Department on Ethics in Special Education	13-Dec-2022	Students of Psychology Department/ Ms. Uzma Mushtaq

ACTIVITY 15

Title	Description	Dated	Attendees/organizers
Seminar by Dr. Adeela Rehman, Assistant Professor FJWU	Qualitative Report Writing; Formatting & Skills	20-Dec-2022	Organizer: Ms. Aysha Aneeq Lecturer, Department of Psychology Attendees: Faculty members and Semester VI students (Section 1 & 2 Research Methods-II, Qualitative Analysis)



ACTIVITY 16

Title	Description	Dated	Attendees/organizers
Workshop	A workshop was organized for students of the Psychology Department on Administration and Interpretation of Thematic Apperception Test (TAT)	27-Dec-2022	Students of Psychology Department/ Ms. Rabia Batool

ACTIVITY 17

Title	Description	Dated	Attendees/organizers
Student of the semester - SOTP (SDG4,9)	IEEE CUST Student branch under the supervision of Mr. Qazi Abdul Moqueet organized a one-of-a-kind weeklong event by the name of Student of the Semester under the umbrella of WIE Chapter from 19 th December to 27 th December. There was a total of 60 students who participated in the event. The event comprised of four rounds. Before the starting of first round, an opening ceremony was arranged in which specific rules and regulations were discussed for this competition. This event addresses the SDG-4 AND SDG-9	27-Dec-2023	Qazi Abdul Moqueet

ACTIVITY 18

Title	Description	Dated	Attendees/organizers
Educational Trip	Industrial Visit to Dar-ul-Shifa, Shifa Neurosciences Institute.	03-01-2023	Students of Psychology Department/ Ms. Rabia Batool & Ms. Irum





ACTIVITY 19

Title	Description	Date	Attendees/organizers
Bilingual Essay and Debate Competition	<p>Pharma Spark Society, Faculty of Pharmacy organized a bilingual essay and debate competition on the topic, “Is Women’s Empowerment a Myth in Developing Countries?” in recognition of International Women’s Day.</p> <p>The activity greatly served the UN Sustainable Development Goal 4 (Quality Education) Specifying the target 4.7.</p> <p>The aim was to highlight the current governmental and cultural limitations, leading to gender inequality in developing countries, which forms part of a broader landscape in Pakistan.</p> <p>The goal was to raise the awareness and promote equitable provisions like quality education, leading towards a sustainable development.</p>	March-8-2023	<p>Pharma Spark-Literacy Club</p> <p>Faculty and Students of Pharmacy Dept.</p> <p>jury panel that consisted of Mr. Mateen Abbas, Mr. Mohammad Nauman and Ms. Asma Qandeel.</p>

ACTIVITY 20

Title	Description	Date	Attendees/organizers
Art and Culinary Club	<p>The Color of Unity event promotes diversity and inclusivity among students and staff. The event celebrates the cultural and ethnic diversity on campus and promotes a sense of community among the university's student.</p> <p>The main aim was to promote UN Sustainable Development Goal 4 (Quality Education), specifying the target 4.7 which describes the role of cultural diversity in sustainable development.</p>	March-9 th -2023	<p>Organizers Arts and Culinary Club, Pharma Spark Society, Faculty of Pharmacy.</p> <p>Attendees Students and faculty of department of Pharmacy.</p>

ACTIVITY 21

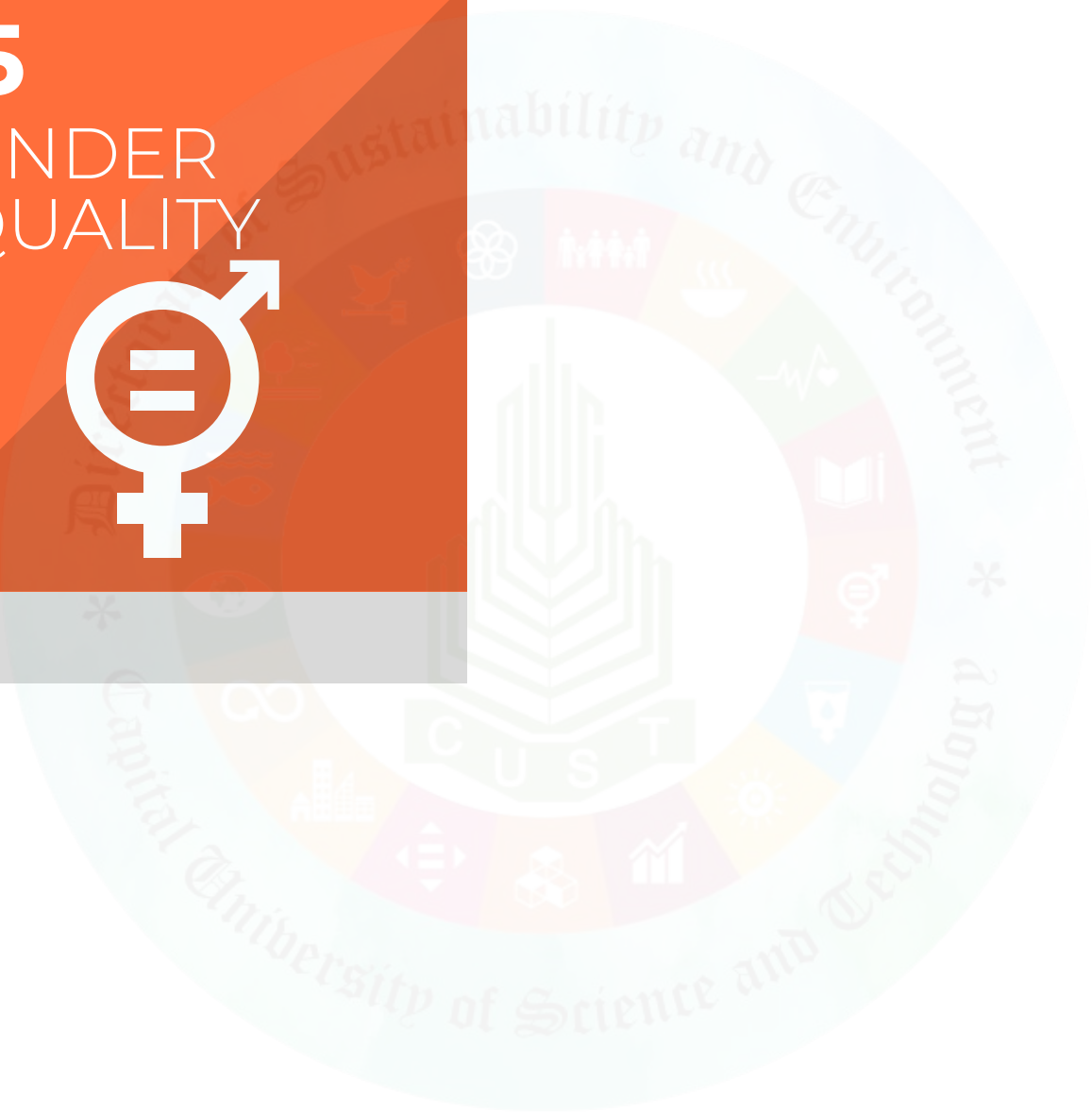
Title	Description	Dated	Attendees/organizers
<p>“Data Analysis Workshop”</p>	<p>Department of Bioinformatics & Biosciences organized a “Data Analysis Workshop This is done to help the researchers of masters and PhD to acquire the skill of analyzing the structure and function of proteins using different online tools which are available to students and researcher for free.</p> <p>Resource Person Dr. Muhammad Faheem, Associate Professor at NUMS</p> <p>Objectives:</p> <ol style="list-style-type: none"> 1. To make students and faculty Familiar with the computational tool. 2. To acquire the skill of analyzing the structure and function of proteins using different online tools 	<p>March 17, 2023</p>	<p>Dr. Sania Riaz</p>

ACTIVITY 22

Title	Description	Date	Attendees/organizers
Level 3 Leadership Seminar	<p>Pharma Spark Society under the supervision of Faculty of Pharmacy organized a Seminar on the topic, “Level-3 Leadership”</p> <p>The main aim was to increase awareness of current leadership style and abilities and provide a toolkit to increase <u>leadership skills</u> in the workplace. Its main aim was to promote UN Sustainable Development Goal 4 (Quality Education), specifically the target 4.4 for inculcation of relevant skills for professional development.</p>	March, 15 th -2023	<p>Organizers Pharma Spark Society, Faculty of Pharmacy.</p> <p>Attendees Students and faculty of department of Pharmacy.</p>

05

GENDER
EQUALITY



05

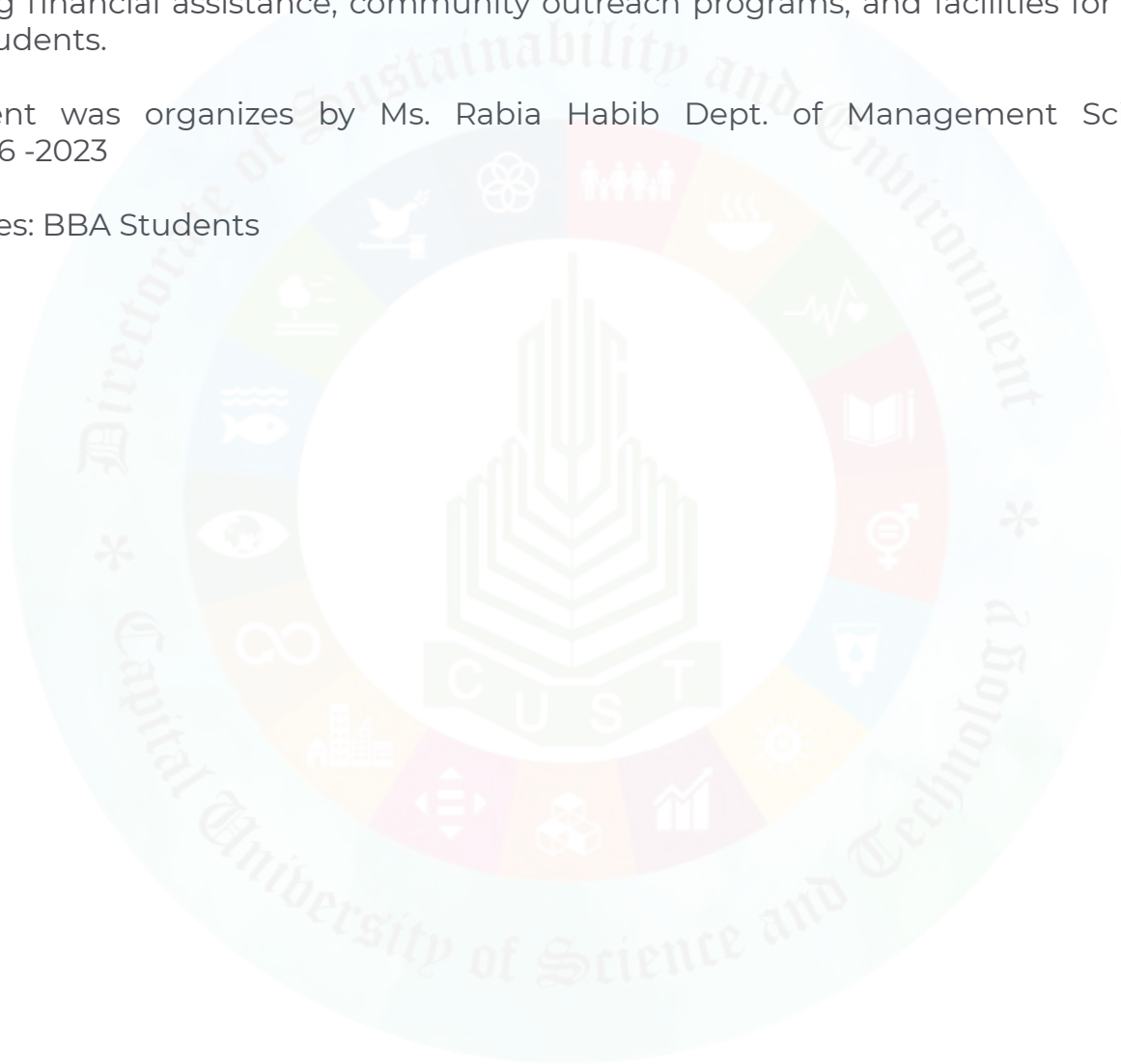
ACTIVITY 1

Awareness walk related to the SDGs 5 (Gender Equality and Women Empowerment) and SDG-10 (Reducing inequalities within and among the countries).

The event was aimed at promoting the awareness of SDG 5 (Gender Equality) & SDG 10 (Reduced Inequalities). The aim was to create awareness of the university initiatives regarding the women empowerment and equal opportunities provided to all students on campus, including financial assistance, community outreach programs, and facilities for differently abled students.

The event was organized by Ms. Rabia Habib Dept. of Management Sciences on March -16 -2023

Attendees: BBA Students



06

CLEAN WATER AND SANITATION



ACTIVITY 1

World Water problems and their solutions on WORLD WATER DAY.



Importance of World Water Day on the topic of water problems and their solutions. Water is the fundamental and social need of the human being. An awareness seminar on the necessity and importance of water and its possible reuses keeping in view the modern water challenges.

Attendees:

Students and faculty from all departments.

Organizers:

DSE with collaboration of Helping Hands for Relief and Development.

Dr. Ishtiaq Hassan (Director, DSE) gave a presentation outlining the problems that developing nations like Pakistan are facing in terms of water crisis. He said that today's wars are not by use of weapons but by means of exploitations of natural sources and the most precious one is Water. We as nation shall have to play our individual and community level roles to conserve water.

The problems start from unintelligent and careless use of water and aggravate with no concept of ZLD (Zero Liquid Discharge).



ACTIVITY 2

World Water problems and their solutions on WORLD WATER DAY.



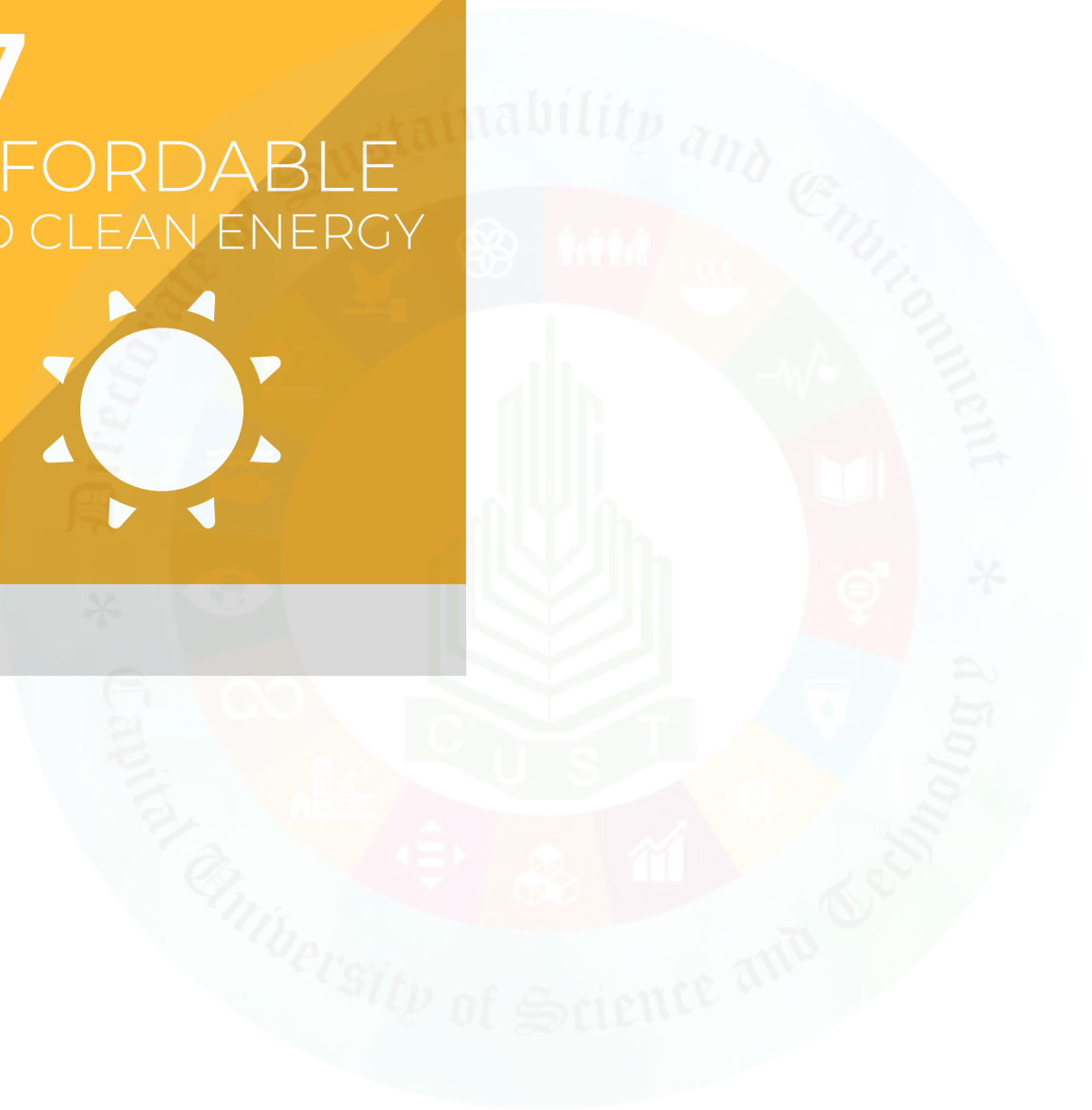
The purpose of this awareness walk was to make students and faculty familiar with the present situations of depletion in surface and groundwater resources due to climate change in urban area activities. In most of the major cities of Pakistan like Karachi, Peshawar, Lahore, Rawalpindi and Islamabad, wastewater is thrown in the water bodies like natural stream, canal or river without treating it.

This discharged water is matter of concern as the quality of drinking water is concerned. The awareness walk was joined by the honorable Prof. Dr. Ishtiaq Hassan (HoD, Civil Engineering), Mr. Amjad Mehmood Amjad (Director programs Helping Hand for Relief and Development). Students from multiple departments joined the awareness walk to show their willingness and interest in the awareness walk.



07

AFFORDABLE
AND CLEAN ENERGY



07

ACTIVITY 1



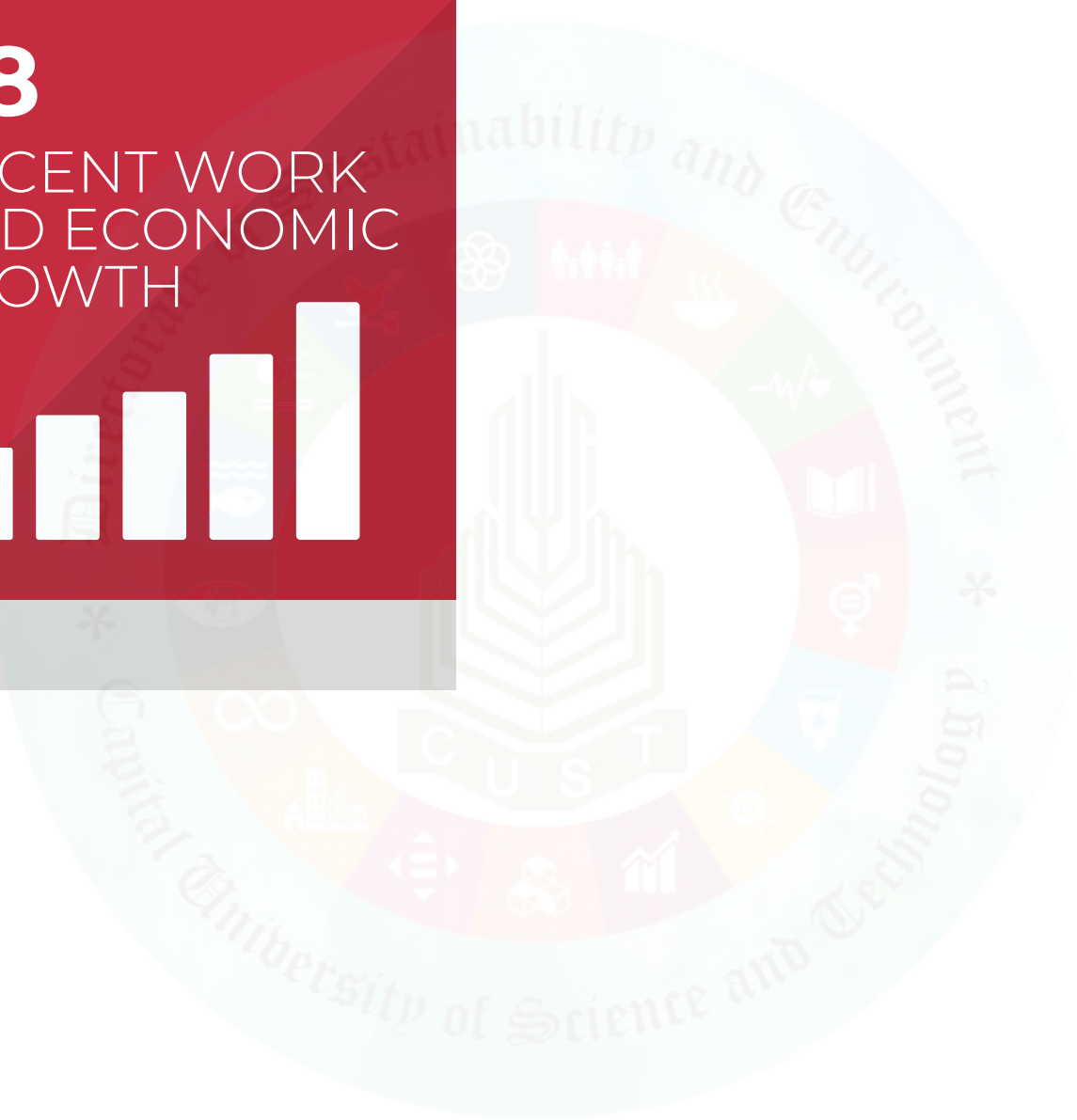
The purpose of this session was to make students and faculty familiar with the renewable energy potentials of Pakistan. The seminar was started with the recitation of Holy Quran. Engr. Muhammad Zaheer – Coordinator DSE (Department of Civil Engineering) welcomed the resource person and thanked him for sparing his precious time. Resource person, Dr. Munawar Iqbal explained the scope and contribution of different government institutions and departments towards the generation, transmission and distribution of the electrical energy by hydro, wind and solar resources. He emphasized on the need and importance of hydropower in the country.

The seminar was divided in three parts. In first session, he explained the Power projects development modes in Pakistan and bodies responsible for the generation and management of energy. In second session, the hydropower development and importance of hydropower in the country was explained including the basic concept of using water with geography of the country as energy generation resource. In the same part the importance of environmental issues and legislative concerns in hydropower were also explained. In third session of the seminar the other renewable resources and present trends in energy resources were explained with the way forward to the wise utilization of the national resources, specially the electricity.



08

DECENT WORK AND ECONOMIC GROWTH



ACTIVITY 1



Department of Accounting and Finance organized an “Interactive session with graduating students of A&F 8th semester on Career Counseling & Higher Education”.

Organizer: Department of Accounting & Finance Head of Department (HoD) A&F, CUST Dr. Nousheen Tariq Bhutta, Mr. Iftikhar Ali Janjua, Mr. Muhammad Aksar, Ms. Saddaf Adalat

The purpose of these interactive sessions is to

- Encourage students for their untiring effort in degree competition.
- Highlighted the job security & monetary benefits.
- Provide guidelines for job hunting.
- Create opportunities by freelancing.
- CV/ Resume Writing.
- Encouraging students for securing admission to higher education.

Enhance your skills through certification (Preach-Tree, QuickBooks, Tax-returns & Creating Financial Accounts).



ACTIVITY 2



Department of Bioinformatics & Biosciences organized a “Open House and Job Fair” for graduating students on Monday, 06th February, 2023. In this fair Final Year Project-II (FYP-II) students display their researches to various industrialist. Honorable Industrialist include Dr. Awais Siraj (Chief Executive Officer at CHAL Foundation Rehabilitation Center), Syed Taimoor Hassan (Manager Business Incubation Center at Foundation University). Other guest of honour are Dr. Rabail Raza, Dr. Abdul Rehman, Dr. Aatka Jamil, Dr. Nazia Rehman, Dr. Sara Sadiq, Ms Safeena Inam and Mr. Ali from renowned industries of Pakistan. 12 different findings are represented.

After that guests viewed student’s final year projects. Students are critically evaluated based on their research. Then different market skill sets and professional advices are shared by our guest of honor. Various job opportunities and Entrepreneurship qualities were discussed.

The vision of the fair is to be acclaimed as a leading institution for nurturing the students to become competent professionals and instrumental in societal growth.



ACTIVITY 3



Department of Bioinformatics & Biosciences, organized a “Career Counseling Session at Fazaia Inter College Nur Khan” on Thursday, 09th March 2023. Career Counseling is to not only help students to make the decisions, but to give you the knowledge and skills they need to make future career and life decisions.

Mr. Muhammad Ammar and Ms. Rafia Shakeel, Students of department of bioinformatics and biosciences, delivered this session. More the 150 students of Fazaia Inter College participated in this session.

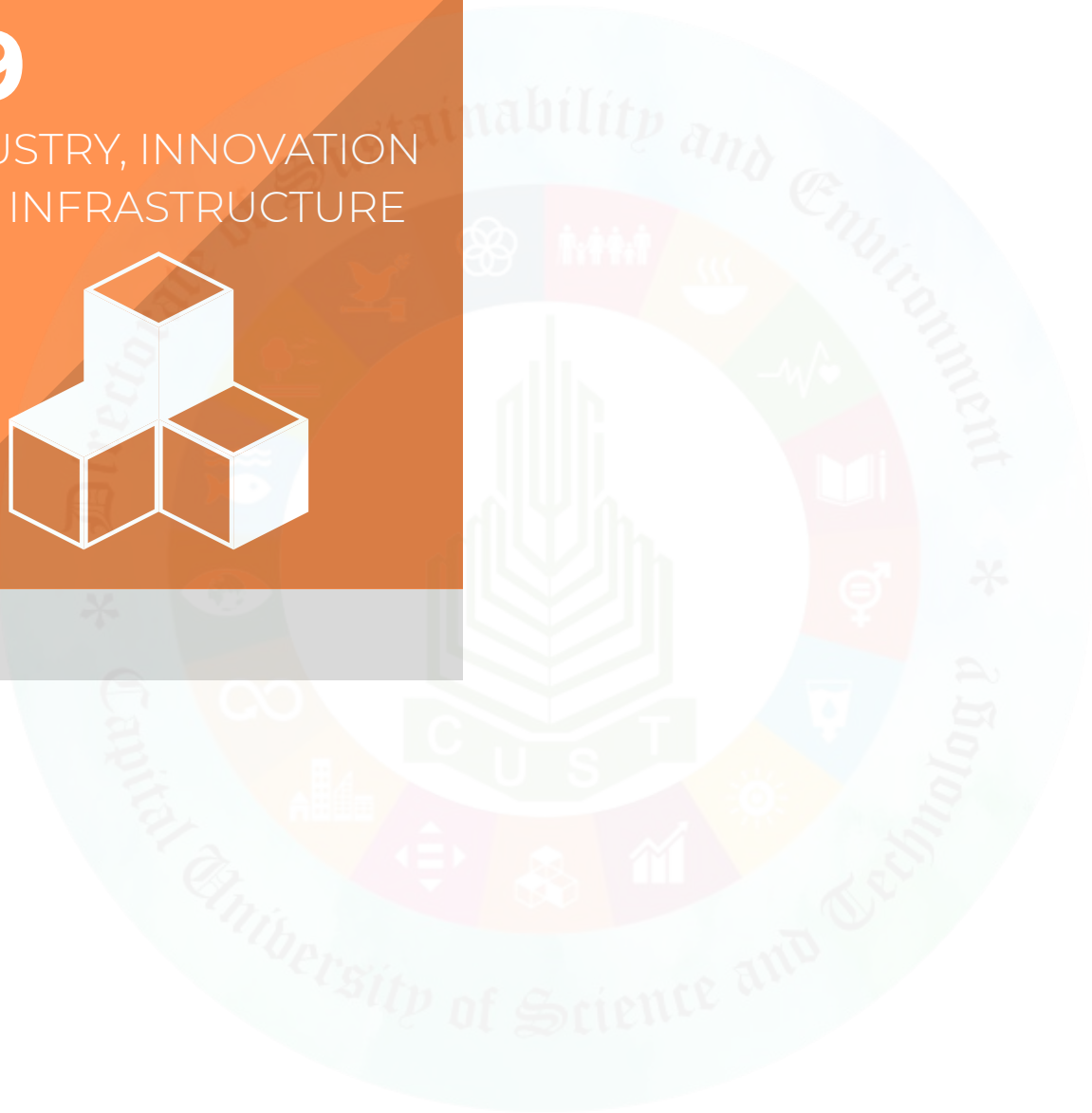
During the session, the Mr. Muhammad Ammar and Ms. Rafia Shakeel discussed various career paths available in the health sciences field, including medical professions, nursing, public health, and allied health professions. T

hey also highlighted the required educational qualifications and experience for each career path, as well as the job outlook and potential earnings. Special focus was emerging fields in biology like Bio-Entrepreneurship, Data Sciences and Bioinformatics etc.



09

INDUSTRY, INNOVATION AND INFRASTRUCTURE



ACTIVITY 1

Title: Smart Car Parking System

Date: 2/1/2023

Attendee/Organizers: Muhammad Waleed Farooq

Description:

The use of automated systems in the modern world, have provided us with enormous varieties of services that can be easily and accurately achieved through technology. Internet of Things provide automated systems which further provide services to help mankind work efficiently in a professional environment and also keep a record of those services that are being provided. In this project, with help of IR sensors and SERVO motor, the car parking can easily be analyzed in terms of whether or not the space is present in the parking lot.

ACTIVITY 2

Title: SA Brief Research study on MAGLEV Train

Date: 5/1/2023

Attendee/Organizers: Muhammad Waleed Farooq

Description:

Transport along with communication, forms the core of day to day life of modern world. Conventional rail transport through wide spread is now being considered inefficient in terms of fuel consumption and is time consuming. A genuine replacement for railways which is not only fuel efficient but also highly comfortable and can attain unimaginable velocities of around 450 – 500kms/hr are Maglev Trains whose idea was given by Robert Goddard, an American Rocket scientist, in 1904 who gave a theory that trains could be lifted off the tracks by the use of electromagnetic rails. Many assumptions and ideas were brought about throughout the following years, but it was not until the 1970's that Japan and Germany showed interest in it and began researching and designing. The motion of the Maglev train is based purely on magnetism and magnetic fields. This magnetic field is produced by using high-powered electromagnets. By using magnetic fields, the Maglev train can be levitated above its track, or guide way, and propelled forward. Wheels and moving parts are eliminated on the Maglev train, allowing the Maglev train to essentially move on air without friction.

ACTIVITY 3

Title: A Brief Study on Future of Robotics

Date: 12/2/2023

Attendee/Organizers: Muhammad Waleed Farooq

Description:

There was an author named Isaac Asimov, he said that he was the first person to give robotics name in a short story composed in 1940's. In that story, Isaac suggested three principles about how to guide these types of robotic machines. Later on, these three principles were given the name of Isaac's three laws of Robotics. These three laws state that:

- Robots will never harm human beings.
- Robots will follow instructions given by humans with breaking law one.
- Robots will protect themselves without breaking other rules.

Unimate was the first industrial robot, which worked on a General Motors assembly line at the Inland Fisher Guide Plant in Ewing Township, New Jersey, in 1961. It was an "Arm" type robot invented by George Devol in the 1950s

ACTIVITY 4

Title: Artificial Intelligence and its importance in coming days

Date: 5/1/2023

Attendee/Organizers: Muhammad Waleed Farooq

Description:

Robotics and artificial intelligence are two related but entirely different fields. Robotics involves the creation of robots to perform tasks that are fixed. While AI is programmed to think like a human mind to make decisions and 'learn.' While you can have robotics with an AI element (and vice versa), both can, and usually do, exist independently of each other. For most robots, designed to perform simple, repetitive tasks, there's no need for advanced AI as the duties are simple, and pre-programmed. But many such AI-free robotics systems were created with artificial intelligence in mind, and as the technology continues to advance each year, the growth of AI increased rapidly in various fields.

ACTIVITY 5

Title: Abrasive Blasting

Date: 4/12/2022

Attendee/Organizers: Moin Qasim

Description:

Abrasive blasting operations forcibly apply abrasive materials to surfaces using pneumatic pressure, hydraulic pressure, or centrifugal force. In addition to exposure to the impact of rebounding material, hazards related to abrasive blasting include the toxicity of the abrasive material and the surface being abraded.

This will review the Oregon OSHA code OAR 437 Division 2 Subdivision G Occupational Health & Environmental Control 1910.94 (a) Abrasive blasting, and other safety information to guide you in safe abrasive blasting operations.

ACTIVITY 6

Title: A Project Report on Hazardous Drug Exposure in Healthcare

Date: 18-12-2022

Attendee/Organizers: Moin Qasim

Description:

This report discusses about the hazardous drugs and how they are dangerous in health Care. Health care professionals in a variety of contexts are at risk for negative health effects from exposure to these substances because of their role in the transport, handling, preparation, delivery, or disposal of hazardous pharmaceuticals. this review offers solutions to reduce the hazardous exposures that are supported by research. these include the requirement for an extensive hazardous drug control program that includes education and training for health-care professionals, engineering controls, the complete use of personal protective equipment, medical and environmental monitoring, hazard identification, and engineering controls

ACTIVITY 7

Title: DESIGN OF AN AUTOMATIC SEED INJECTING AND PLANT WATERING SYSTEM

Date: 1-1-2023

Attendee/Organizers: Qazi Abdul Moqueet

Description:

The main objectives behind this project to renovate the agriculture field. As we know that our agricultural techniques were not meet the today's modern farming which requires more humanefforts and also the excessive amount of water required for this. Farm Robot just settling downevery thing that we are lagging in agricultural department in Pakistan

ACTIVITY 8

Title: High Voltage Engineering

Date: 12-12-2022

Attendee/Organizers: Dr.Muhammad Naeem

Description:

Our modern society has become more dependent on high-voltage engineering, from the different parts of the power system grid to the common machines. Recent developments in high voltage engineering have given forward new issues that demand specialized attention from experts. For instance, with the rising use of high-voltage DC systems, it is necessary to carefully investigate the design of both external insulators and underground cable insulation under higher stress conditions. The development of a new class of materials known as "micro dielectrics," which have great potential for application in both solid and liquid insulation systems, is another field of interest in high-voltage engineering

ACTIVITY 9

Title: Recovery losses at High Voltage Projects

Date: 12-12-2023

Attendee/Organizers: Dr.Muhammad Naeem

Description:

The From the various components of the power system grid to everyday equipment, high-voltage engineering has become more important in today's society. Recent advances in high voltage engineering have raised new problems that necessitate specialized attention from professionals. For instance, with the expanding use of high- voltage DC systems, it is vital to carefully analyze the design of both external insulators and subterranean cable insulation under increased stress levels. Therefore, the brief survey was done in which the important points of high voltage engineering was high lightened which includes the importance of high voltage engineering in society and the risks of them. For risk determination, we carried out some crucial risks caused by high voltage power and also mentioned the prevention of those risks.

ACTIVITY 10

Title: Design of filter of audio devices

Date: 12-12-2023

Attendee/Organizers: Attabik Tabib

Description:

This report is about the design and implementation of audio filters using the DSK6713 DSP kit. Audio circuits perform signal processing to represent sound in the form of electrical signals, manipulate electrical signals such as filtering and mixing, play sounds from audio signals, and save audio to computer files., and play audio from an audio file systems, is another field of interest in high-voltage engineering

ACTIVITY 11

Title: Metaverse A Comprehensive study on Metaverse and its impact as need of Future and to tackle with coming challenges for Physical world

Date: 1/1/2023

Attendee/Organizers: Muhammad Waleed Farooq

Description:

What form that landscape will take is a subject of debate. Firms such as Meta (Facebook) are investing heavily in an immersive experience, where users with wearable hardware discard reality for a purely virtual world, interacting via avatars – the basis for the ‘Oasis’ depicted in Ernest Cline’s novel, Ready Player One. Others see the metaverse as more like an integration of the physical environment with the digital, where the real world is overlaid with digital surfaces and objects. This augmented reality approach builds on experiences like the highly successful Pokemon Go phone game, which allows players to seek and discover digital creatures in real-world locations. At the moment the metaverse is mainly a commercial enterprise. The building blocks are being rapidly developed by big corporates including gaming and technology companies. Firms like Facebook, Apple, Google and Microsoft are in direct competition, drawing on their enormous technological resources to design their own metaverse offerings. This situation has serious implications for society. Just as the internet transformed the world in unexpected ways, the next iteration of our digital world will have an impact far beyond delivering more exciting entertainment and efficient commerce. The metaverse could fundamentally change not only how humans interact with technology but also how they interact with each other and the world around them. It also raises questions about the effect on national and individual identities in a society where people spend increasing amounts of time in a parallel world.

ACTIVITY 12

Title: Neutron Stars and Blackholes A Detailed Explanation On How They Are Formed And What Do They Do

Date: 7/1/2023

Attendee/Organizers: Muhammad Waleed Farooq

Description:

What are blackholes and neutron stars and how are they truly formed Well to start they both are created form something called Supernova Every Star has mass thus it has gravitational field. Stars also emit Nuclear Energy This Nuclear Energy Flowing outwards prevents the Stars Gravity from crushing it This Gravity and Nuclear balance are the cause due to which Stars stay alive but eventually the Star runs out of this Nuclear Energy and as a result of this everything that the Star is made of comes crashing into the core All this Matter stuffed into a small place becomes a Time Bomb and all of the Matter and Radiation Blasts out into the Universe in a Catastrophic Explosion called the Supernova Some stars burn out instead of fading. These stars end their evolutions in massive cosmic explosions known as supernovae

ACTIVITY 13

Title: Occupational Safety

Date: 16-12-2022

Attendee/Organizers: Moin Qasim

Description:

The purpose of this project is to provide information on how to tackle safety of the workers or employees in cement factory. Create some rules and regulations for workers to keep them safe from any kind of health hazard in factory. Planning about how to build industry safer from any hazard.

ACTIVITY 14

Title: Management of Hazardous Material

Date: 12-12-2022

Attendee/Organizers: Moin Qasim

Description:

Hazardous Waste are the squanders exceptionally poisonous for wellbeing, and more than 20-30% of worldwide squanders each year are perilous waste. Thus, the fundamental thought of this report is to give SOPs to Hazardous waste. Purpose of the Project The purpose of this project to is to provide safety from hazardous waste materials. Create some rules and regulations for people to keep them safe from any kind of health hazard form hazardous waste.

ACTIVITY 15

Title: Safety and occupational hazards of agricultural workers handling pesticides

Date: 15-12-2022

Attendee/Organizers: Moin Qasim

Description:

This project discusses about the industrial hazards of agricultural workers handling pesticides. The aim of this project is to highlight the issues of industrial hazards and how health and safety measures can save us from hazards. In this project report we have highlighted specific industry of Bhopal in which gas leakage incident occur. On the chilly nights of December 2-3, 1984, when 41 tones Of MIC. gas leaked from the Union Carbide factory in Bhopal, we, the city's then mayor chief of police, found ourselves unceremoniously in charge of managing the biggest industrial disaster in history.



ACTIVITY 16

Title: SEI and AMC using AI techniques and the RTL SDR platform

Date: 1-01-2023

Attendee/Organizers: Qazi Abdul Moqueet

Description:

The purpose of this project is to generate model by making artificial intelligence algorithms using datasets of various walkie talkies to acquire radio frequency signals which can be used to differentiate in between these walkie talkies which will be getting them being demodulated and differentiated. The objectives of the project are clear and widely being used by defense organizations of Pakistan as specially by the armed forces to determine the enemy's communication systems and whatever the communication is being held about in between them.

ACTIVITY 17

Title: Active and passive target detection

Date: 5-1-2023

Attendee/Organizers: Qazi Abdul Moqueet

Description:

The project was selected based on Radio navigation and ranging principle and passive direction finding. The project has been selected as this gives a complete solution for geolocating aerial targets

ACTIVITY 18

Title: Workshop on Robotics

Date: 13-02-2023

Attendee/Organizers: Engr.Muhammad Waleed Farooq

Description:

The project was selected based on Radio navigation and ranging principle and passive direction finding. The project has been selected as this gives a complete solution for geolocating aerial targets

ACTIVITY 19

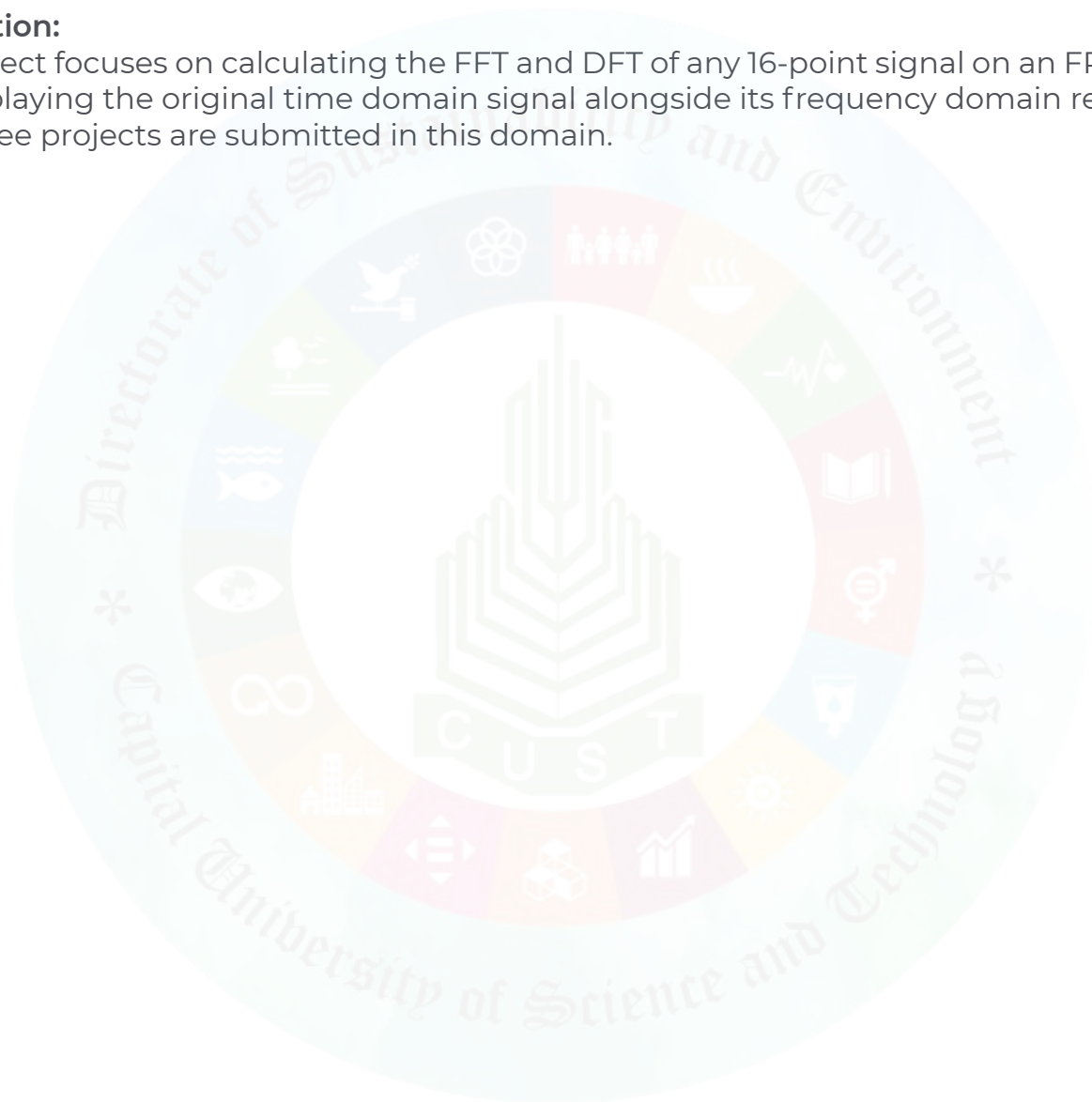
Title: ASIC Design & FPGA

Date: 12-12-2023

Attendee/Organizers: Attabik Tabib

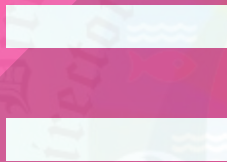
Description:

This project focuses on calculating the FFT and DFT of any 16-point signal on an FPGA, while also displaying the original time domain signal alongside its frequency domain representation. Three projects are submitted in this domain.



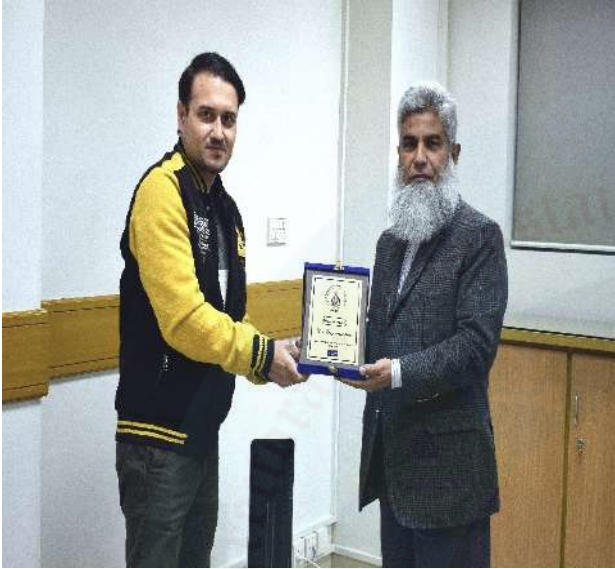
10

REDUCED INEQUALITIES



10

ACTIVITY 1



In order to reach and encourage the foreign students for admission in CUST, the Minister Counsellor of Sri Lankan High Commission Islamabad Mr. U. L. Niyas was invited to CUST. The minister counsellor visited CUST on 12th January 2023 where he joined a session with the Vice Chancellor CUST, Deans, Heads of Departments, and faculty members. During the session, Prof. Dr. Amir Qayyum, Dean External Linkages and International Collaborations briefed the guests about the university. After briefings, the guest paid visited various departments and labs of CUST.

The chief guest Mr. U. L. Niyas appraised CUST for its contribution in quality education. He further aimed to join hands in inviting Sri Lankan students to get admissions in CUST. Moreover, the CUST administration agreed upon providing selected number of scholarships to Sri Lankan students.

Whole project has been launched to provide equal opportunities of education to students belonging to countries with weak education systems.



11

SUSTAINABLE CITIES AND COMMUNITIES



ACTIVITY 1



Importance of World Water Day on the topic of water problems and their solutions. Water is the fundamental and social need of the human being. An awareness seminar on the necessity and importance of water and its possible reuses keeping in view the modern water challenges.

Attendees:

Students and faculty from all departments.

Organizers:

DSE with collaboration of Helping Hands for Relief and Development.

Dr. Ishtiaq Hassan (Director, DSE) gave a presentation outlining the problems that developing nations like Pakistan are facing in terms of water crisis. He said that today's wars are not by use of weapons but by means of exploitations of natural sources and the most precious one is Water. We as nation shall have to play our individual and community level roles to conserve water.

The problems start from unintelligent and careless use of water and aggravate with no concept of ZLD (Zero Liquid Discharge).



ACTIVITY 2



An event titled “Cycling Event” was arranged by the DSE on March 08, 2023 at CUST campus. The honorable Vice Chancellor, Prof. Dr. M. Mansoor Ahmed, inaugurated the event along with the Registrar, Mr. Malik Arshad Mehmood and Director DSE, Prof. Dr. Ishtiaq Hassan.

Director DSE, paid special thanks to Engr. Zaheer, Member DSE CE CUST, Mr. Sajjad and Mr. Zain (President and vice president ASCE student capital chapter) whose dedicated efforts made the event a success.

This event, focusses the targets of 3.6.1 and 3.9.1 which demand to take such measures which help to reduce road accidents and illness/deaths due to hazardous air, water, chemical and soil pollution. These days, more vehicles are seen on road which cause road accidents and an increase in GHG (specially CO₂) during their frequent movement and especially during period of traffic congestions.



12

RESPONSIBLE
CONSUMPTION AND
PRODUCTION



12

ACTIVITY 1



Pharma Spark Society, Faculty of Pharmacy organized an activity on March 22nd, 2023 titled, “EVERY DROP COUNTS, SAVE THE WATER-SAVE THE WORLD” on World Water Day to raise awareness regarding the importance of freshwater and inspire actions to tackle the water and sanitation crisis. The primary goal of this activity was to motivate people to become more knowledgeable about global water challenges and to take appropriate action to make a difference. The activity greatly served the UN Sustainable Development Goal 12 (Responsible Consumption and Production) Specifying the target 12.8.

The event initiated at 12:50 pm with a 10-min walk across the campus with cutouts, starting from J-Block to D-Block, followed by a Group Photo posed with cutouts/Posters. The Event was well attended by reputable Faculty members Dr. Nadia Shamshad, Miss. Nitasha Gauhar, Dr. Muzaffar Abbas (HOD of Faculty of Pharmacy) and Dr. Ishtiaq Hassan (Director of DSE- CUST). The distribution of water bottles, a modest act of humanism, illuminated the activity.

The 40 clean water bottles were distributed by Dr. Ishtiaq Hassan and Dr. Muzaffar Abbas to attendants and other workers. Moreover, the participation of students enlightened this act. The event videography captured student’s views towards this activity and water importance.



ACTIVITY 2

Department of Accounting and Finance organized a “Awareness walk on SDG-12: Sustainable Consumption and Production” on Tuesday, 6th June 2023. The purpose of the walk to provide awareness to the students with SDGs and importance of these goal in academics. Sustainable consumption (sometimes abbreviated to "SC") is the use of products and services in ways that minimize impacts on the environment in order for human needs to be met in the present but also for future generations.



The walk was organized for the students of department of Accounting and Finance. By using different colorful posters and banners made by the student of 1st & 6th semester of Accounting and Finance convey the message on SDGs and awareness topics includes:

- Ensure sustainable consumption and production pattern
- Save the Resources
- Ack Responsible
- Conserve the goods and
- Reduce, Reuse and Recycle
- Planation Drive

Faculty members includes Dr. Nousheen Tariq Bhutta, Dr. Iftikhar Ali Janjua, Mr. Muhammad Askar, Ms. Saddaf Adalat and Ms. Aroosa Zai appreciated the work done by the students.

ACTIVITY 3

Title	Description	Dated	Attendees/organizers
Ecotourism-Videography Competition	<p>In contrast to tourism, ecotourism is about more than simply visiting natural places; it's about doing so in a responsible and sustainable manner. The term itself refers to traveling to natural areas with a focus on environmental conservation.</p>	May-06-23	<p>Organizer Pharma Spark Society, Faculty of Pharmacy</p> <p>Participants/Attendees Students and faculty of department of pharmacy</p>

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CLIMATE ACTION



ACTIVITY 1



Beauty of earth lies in greenery and water. On March 22, 2023 a Tree Plantation Drive was coupled with World Water Day in the form of a thematic series of events focusing “Let’s make a better planet”. The honorable Prof. Dr. M. Mansoor Ahmed (Vice Chancellor) inaugurated the event. He was accompanied by Mr. Malik Arshad Mehmood (Registrar), Mr. Naeem Ullah Khan (Director VIS), Prof. Dr. Ishtiaq Hassan (Director DSE) Mr. Amjad Mehmood Amjad (Director Programs Helping Hands), professors and staff of CUST. The Vice Chancellor planted a fruit tree besides A-block lawn followed by others adding trees.

To combat the adverse effects of climate change by reducing the appreciable amount of carbon dioxide from the atmosphere, a number of carbon sinks play important role. Trees and green belts are one of the carbon sinks. In this regard an activity of Tree Plantation Drive was conducted by Directorate of Sustainability and Environment with collaboration of Helping Hand for Relief and Development (an International organization).

A total of 42 fruits and shade plants were provided by Helping Hands planted along the river side of the campus. In addition to that, the university has planted a number of many shade trees besides play grounds on river side as regular university affair.



ACTIVITY 2



Seminar on Environmental Challenges of Pakistan and our line of action. This awareness seminar was arranged to make students and faculty familiar with the importance of preserving nature by knowing the current environmental issues of Pakistan and our line of action as a nation.

The purpose of this seminar was to make students and faculty familiar with the current environmental challenges of Pakistan and steps taken by the federal and provincial governments towards the conservation of the environment.

The seminar was divided in three major segments. In first segment, he elaborated the current emerging environmental challenges of Pakistan in the form of different types of pollutions and their serious consequences. In second segment, he emphasized and illustrated the climate change impacts on Pakistan and causes of the land, air, water and radioactive pollutions. In the same segment he enlightens the governance and management issues related to these challenges and role of the different stakeholder to conserve the nature and its habitats. In the third segment, different initiatives taken by the government, like Clean-Green Pakistan,



ACTIVITY 3



FM Radio Broadcast (SDGs Awareness) was held. The broadcast was aired to highlight the key issues linked with SDG 4, 7,8,11 and 13. A total of 10 questions were asked to the participants and a constructive discussion was carried.



ACTIVITY 4



An event titled “Cycling Event” was arranged by the DSE on March 08, 2023 at CUST campus. The honorable Vice Chancellor, Prof. Dr. M. Mansoor Ahmed, inaugurated the event along with the Registrar, Mr. Malik Arshad Mehmood and Director DSE, Prof. Dr. Ishtiaq Hassan. The event was aimed to promote culture of cycle use to meet the following SDGs:

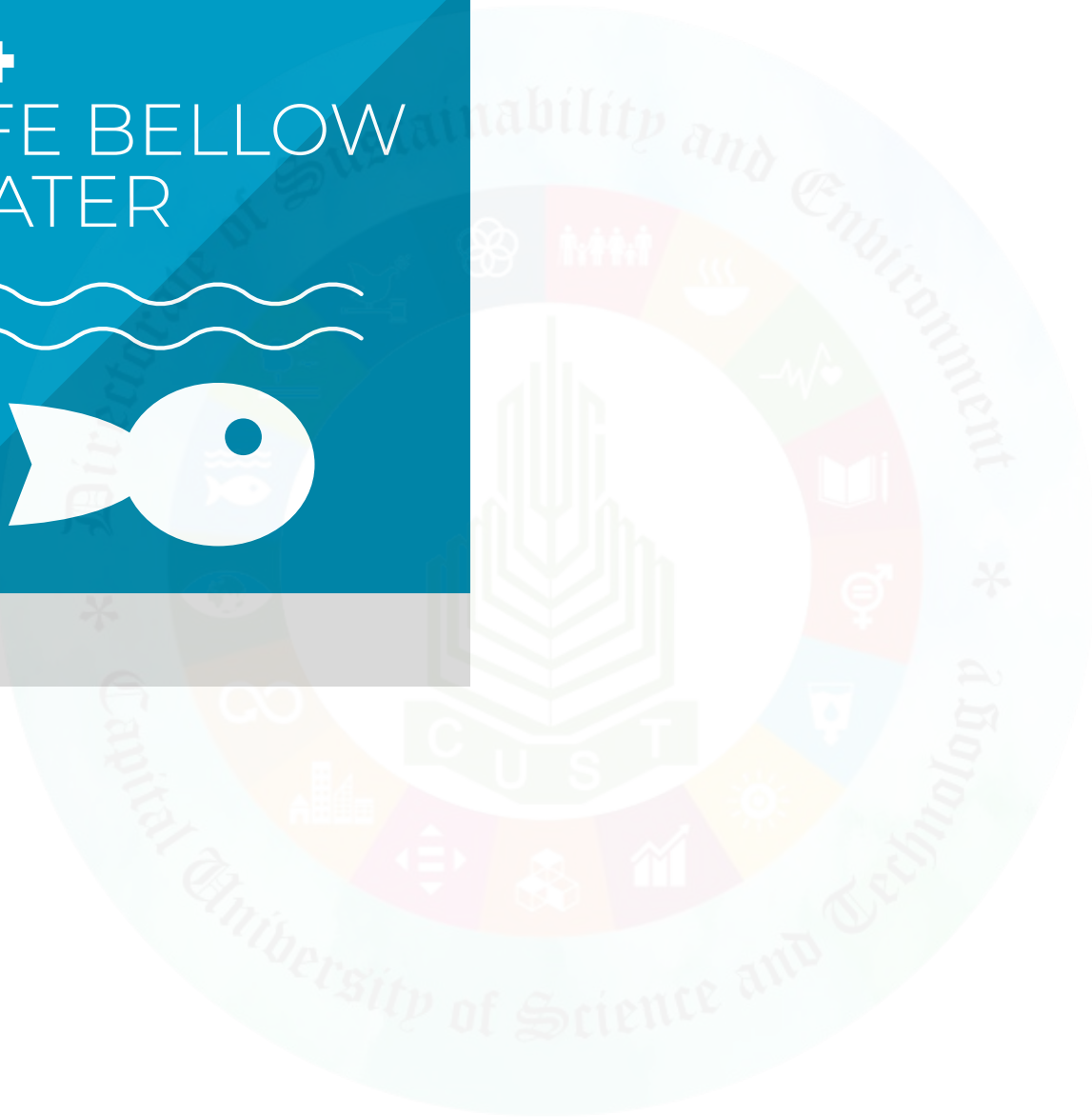
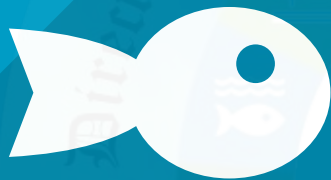
SDG-13: Climate Action. (Environment)

Promotion of cycles’ use will address target 13.2.2 as it will help to reduce total GHGs emissions per year.



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LIFE BELLOW
WATER



14

15

LIFE ON LAND



15

ACTIVITY 1



Beauty of earth lies in greenery and water. On March 22, 2023 a Tree Plantation Drive was coupled with World Water Day in the form of a thematic series of events focusing “Let’s make a better planet”. Capital University of Science and Technology has acquired more land for the purpose of some of the infrastructure (buildings) and most of the space is left for plantation activities and for the purpose of outdoor activities of department of biosciences and bioinformatics. In newly acquired area plantation is done on periodic bases and till now around 650 to 700 plants have been planted.



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PEACE, JUSTICE AND
STRONG INSTITUTIONS



16

ACTIVITY 3

2. Activity 2

Title	Description	Dated	Attendees/organizers
Kashmir Day	<p>On the occasion of Kashmir Solidarity Day, the Pharma Spark Society Social Welfare Club organized a poster competition to raise awareness about the ongoing humanitarian crisis in Kashmir under the supervision of Faculty of Pharmacy at Capital University of Science and Technology for the students of Faculty of Pharmacy.</p> <p>The main aim of this activity was to target the United Nation Global Goal no. 16 (Peace, Justice, and Strong Institutions) for Sustainable Development.</p>	22 nd Feb 2023.	<p>Organizers Faculty of Pharmacy Dept.</p> <p>Attendees Students of Faculty of Pharmacy</p>

ACTIVITY 1



The purpose of this orientation session was to make the student members familiar with their role and responsibilities keeping in view the respective allocated SDGs to the departments. The session was started with the recitation of Holy Quran. Dr. Ishtiaq Hassan – Director DSE welcomed the student members and explained the necessity and importance of the orientation session. He emphasized on Sustainable Development Goals (SDGs), Scope of the Directorate of Sustainability and Environment (DSE) and the role and responsibility of the student members assigned with a particular SDG to each student member. Department wise responsibilities to organize the seminars and workshops to address assigned particular goals. In the third session, individual responsibilities of the student members were explained and discussed.

