



NEWSLETTER



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▲The President of Pakistan Gave Assent for Establishment of Capital University of Science & Technology, ACT

Previously known as Mohammad Ali Jinnah University, Islamabad Campus

The President of Pakistan gave assent on September 18, 2015 for the promulgation of an Act No. XVI of 2015 of Majlis-e-Shoora (Parliament) for the establishment of the Capital University of Science & Technology, Islamabad. The said Act has been published by the Senate Secretariat, Government of Pakistan in the Gazette of Pakistan vide No. F.9 (19)/2015 – legis dated 22-09-2015.

2. Prior to promulgation of the Act, C.U.S.T. was operating as Islamabad Campus of Mohammad Ali Jinnah University, Karachi Since 1998 and offering degrees through Departments of Electrical Engineering, Mechanical Engineering, Civil Engineering, Computer Science, Bioinformatics, Mathematics and Management

& Social Sciences. All programs are duly accredited by the Higher Education Commission and Pakistan Engineering Council. The University believes in research and publications, and its professionally trained and devoted faculty has made tremendous contribution to the advancement of knowledge in the higher education. The University has excellent infrastructure, modern class room facilities and well equipped engineering and IT labs. It is ranked amongst W-4 category of Universities by the Higher Education Commission of Pakistan (HEC). The management is confident that the C.U.S.T. will also continue to strive hard for the promotion of higher learning with more enthusiasm.



▲Seminar on Female Health Issues

Genix Society of Capital University of Science and Technology, Islamabad organized a seminar on “Female Health Issues” to enlighten the young girls about female hygiene and problems associated with their health on December 9, 2015. This seminar was conducted under the supervision of Dr. Sahar Fazal. Dr. Shahnaz Nawaz was

invited as the guest speaker who is a consultant obstetrician and a gynecologist at Shifa International, Islamabad. It was a very interactive session as students actively asked questions regarding their health issues. A souvenir was presented to the guest speaker and tea for faculty and guest speaker was also arranged.



11th Convocation of M.A.J.U.

Mohammad Ali Jinnah University, Islamabad Campus organized its 11th Convocation on November 19, 2015 at Convention Center, Islamabad. In this Convocation total 634 students of BBA, MBA, BS, MS and PhD received their degrees. This year 07 graduates were awarded PhD degrees; 04 in the field of Management Sciences and 03 in the field of Engineering. Apart from this, in this Convocation 20 Gold, 14 Silver and 14 bronze medals were also awarded to the graduates who stood 1st, 2nd, and 3rd in their respective program. This year Quaid-e-Azam Gold Medal was awarded

life and now they are ready to serve the industry. He said that in this regard the role of university, its faculty is also commendable who are putting their level best to contribute in the field of higher education.

Engr. Muhammad Baligh Ur Rehman, Minister of State for Education and Professional Training addressed the students and the proud parents. He congratulated the graduates and their parents. He said that it is hoped from all graduates that they are going to add their efforts towards scientific and technological advancement of the



to Ms. Qudsia Adalat, MBA graduate. The Quaid-e-Azam Gold Medal is awarded to the university's best graduate who has distinguished performance in both curricular and extra curricular activities.

The Chief Guest of 11th Convocation was Engr. Muhammad Baligh Ur Rehman, Minister of State for Education and Professional Training. Renowned scientist, Prof. Dr. Anwar-ul-Hassan Gilani, Sitara-e-Imtiaz, Chairman Pakistan Council for Science and Technology also graced the occasion as Guest of Honour; while Mian Amer Mahmood, Chancellor Mohammad Ali Jinnah University presided over the convocation. A large number of distinguished guests and the parents of graduating students were also present.

Dr. M. Mansoor Ahmed, Executive Vice President, Mohammad Ali Jinnah University, Islamabad Campus welcomed all the guests, students and their parents to that significant occasion. He said that it's really an important day when they are going to complete one academic phase of their

country through their skills, knowledge, determination and commitment. He hoped that this would not be the end of their journey, rather they would keep on exploring new vistas for them within their particular fields and they will be ready to face all sorts of new challenges. The Chief Guest was awarded the University Shield by Mian Amer Mahmood, The Chancellor of the University and The Chairman Punjab Group of Colleges.

The graceful ceremony was also honoured with the presence of renowned scientist Prof. Dr. Anwar-ul-Hassan Gilani as the Guest of honour. In his address to the convocation he emphasized the importance of research. He said this is the only way to progress in any field. He advised the graduated students to continue their journey through research and keep on adding up in their respective fields. He congratulated the proud parents and students on their big day. The ceremony ended with a lavish lunch for the parents, guests, students and faculty.

3rd International Conference on Emerging Trends in Bioinformatics and Biosciences

The Department of Bioinformatics and Biosciences, Capital University of Science and Technology, Islamabad organized annual Conference titled “3rd International Conference on Emerging Trends in Bioinformatics and Biosciences (ICETBB 2015)” on October 03, 2015. The Conference was led by expert speakers and provided an opportunity to young scientists to share and discuss their ideas and polish their understanding of amalgamation of computational and biological concepts. Conference attracted

Biosciences. In his address, he welcomed the participants and wished that this Conference will produce fruitful results in bringing the scholars and scientists together and bridging the gap between academia and Industry. Dr. Gilani delivered an informative keynote lecture on medicinal value of food. Dr. Shaukat Iqbal Malik gave vote of thanks and appreciated the participants for showing keen interest in conference.

The concluding ceremony was chaired by Prof. Dr.



about 74 participants and 29 guests from different institutes and universities from all over the country.

The inaugural session was chaired by Prof. Dr. Anwar-ul-Hassan Gilani (SI), Chairman Pakistan Council for Science and Technology (PCST). Inaugural address was delivered by Dr. Aamer Nadeem, HoD Bioinformatics and

Muhammad Mansoor Ahmed, Vice Chancellor, C.U.S.T., Islamabad. Dr. Muhammad Mansoor Ahmed appreciated the efforts of Dr. Aamer Nadeem, Dr. Shaukat Iqbal Malik, Organizing Chair, and the whole organizing team. At the end, Acting Dean (FoC), Dr. Nayyer Masood presented the Conference Souvenir to Dr. Anwar-ul-Hassan Gilani.

Family Trip of Civil Engineering Faculty

A family trip to Nathigali and Harnoi of 25 members was organized for the Civil Engineering Faculty, Capital University of Science and Technology, Islamabad on August 08, 2015

by Mr. Muhammad Usman Farooqi. These scenic places are known for their beauty, wildlife and geological formations. Faculty along with families enjoyed the trip.

Society Awareness Day- Fall 2015

“Society Awareness Day-Fall 2015” was held by Department of Civil Engineering on October 16, 2015 at Capital University of Science and Technology, Islamabad. The event was organized by the senior students (Batch-2014) of CE Department for new batch of Fall-2015, under the supervision of Mr. Muhammad Usman Farooqi. The program commenced with recitation of the Holy Quran followed by the introductory presentation of different societies of Civil Engineering. Dr. Muhammad Atiq ur Rehman Tariq,

Head of Civil Engineering Department, in his closing note appreciated the organizing team and advised to organize such events on regular basis under the umbrella of different engineering societies. Prof. Dr. Amir Qayyum, Dean Faculty of Engineering, concluded the event by appreciating the organizing team along with Mr. Muhammad Usman Farooqi for organizing such a successful event and also emphasized on the importance of student societies in grooming the confidence and personality of students.

▲Seminar on Detection of Molecular Signatures in Tumor Aggressiveness Using Computational Methods

The Department of Bioinformatics and Biosciences conducted a seminar on “Detection of Molecular Signatures in Tumor Aggressiveness Using Computational Methods” on October 07, 2015 under the supervision of Mr. Mohammad Haroon Khan. The seminar was presented by Mr. Faiz Muhammad Khan from the Department of Systems Biology and Bioinformatics, University of Rostock, Germany. The seminar was specially focused on the importance and role of E2F1 signaling network in tumor progression and metastasis using a systems biology approach. The guest speaker highlighted the importance of developing integrative methods to analyze and model large scale biochemical networks. At the end, Mr. Mohammad Haroon Khan presented the university souvenir to the guest speaker.



▲Scavenger Hunt

Genix Society of Capital University of Science and Technology, Islamabad organized a “Scavenger Hunt”, on December 16, 2015. This event was organized by the Genix students under the supervision of Dr. Sahar Fazal. The event was comprised of three rounds; first round was riddle finding. At the end of this round only seven teams were short listed for the next round which was item collection round. Only three teams were shortlisted from second round and they played third round. Winning team was given a cash prize of Rs. 1500/- and runner up teams were given certificates.



▲Welcome Party for CS & SE 1st Semester Students

A welcome party was arranged on November 25, 2015 at Capital University of Science and Technology, Islamabad. This party was arranged by the 2nd Semester students of Computer Science Department for the 1st Semester students of CS and SE. The students of 2nd Semester performed different plays, skits and sang songs to entertain their juniors. The event was supervised by

Ms. Raabia Asif. The Chief Guest of this event was Dr. Nayyer Masood, Head of Computer Science Department. He appreciated the efforts of all the organizers and participants. At the end, Dr. M. Tanvir Afzal distributed the certificates among the organizers and the participants. Hi-tea was served to all the guests, organizers and faculty members.



▲Shukria Pakistan

As per the set tradition, Genix, under the supervision of Dr. Sahar Fazal organized a Patriotic event “Shukria Pakistan” on October 21, 2015. The Guest speaker was Squadron Leader Ghulam Abbas. Different documentaries depicting patriotism were played. The guest speaker shared the glorious memories of heroes of 1965 war. Human flag was made by the students by holding green and white charts to pay tribute to our country. The National Anthem was sung by students. The event was full of enthusiasm and a great effort by the young students to show patriotism to their beloved country Pakistan.



▲Seminar on Homesickness Issues

Civil Engineering Department arranged a seminar on October 21, 2015 on “Home Sickness Issues”. The target audience was students of civil engineering, currently studying in first and third semesters. The aim of the seminar was to let new students know about causes of homesickness and suggest remedial measures. The guest speaker was Brig. (R) Engr. Mansoob Raza (Sitara-e-Imtiaz), D.G. SUPARCO, the National Space Agency of Pakistan. Engr. Mansoob Raza made a very well-structured presentation which covered and highlighted not only the factors affecting vulnerability to home sickness, but also suggested remedial measures to mitigate homesickness.



▲Microsoft Session at C.U.S.T.

A Microsoft session was arranged on October 12, 2015 at Capital University of Science and Technology, Islamabad. The session was organized by the Department of Computer Science. The guest speaker was Mr. Sheikh Rizwan. Mr. Rizwan is currently serving as the Project Manager at Microsoft Islamabad. The speaker introduced the students to the products & services of Microsoft, Microsoft Student Partner Program, Office 365 and Image Cup. The session proved to be very useful for the students. At the end, Dr. Nayyer Masood, Head of Computer Science Department presented the souvenir to the guest and the Hi- tea was served to the guest speaker and the faculty.



▲Two days Competition

On October 29-30, 2015, a two day competition was arranged. The following competition was held: An E-Gaming competition of computer games was arranged in the university. The Students from all the departments of the university actively participated in this event. The Games of

Competition were: Call of Duty 4 Modern Warfare, Dota 2 & FIFA 15. Around 15 teams from the CS Department participated in the Programing Competition & 30 teams from the same department participated in the Quiz Competition.

Participation in Visiospark

Teams from the Computer Science Department, of Capital University of Science and Technology, Islamabad participated in All Pakistan Competition entitled as Visiospark 2015 which was held on November 07, 2015 at COMSATS Institute of Information Technology (CIIT) Wah. C.U.S.T. teams secured 1st position in Mobile Application Development and 2nd position in On Spot Programming and brought laurels to their university.



Participation in TECTIQS at Iqra University

A Team from the Computer Science Department, Capital University of Science and Technology,

Islamabad participated in All Pakistan Competition at Iqra University, Islamabad Campus. The competition was held on November 26-29, 2015. The participation provided an opportunity to the students to learn and compete with the students of other university to show their mettle.

Seminar on Penetration Testing

A seminar on Hacking Counter Measures was arranged on October 13, 2015 by the Department of Computer Science of Capital University of Science and Technology, Islamabad. The guest speaker was Mr. Mansab Chaudhary. He is a Cyber Security Expert. He briefed the students about different types of hacking. He also briefed the students about their counter measures too. The session proved to be fruitful and interactive as students openly asked questions and their queries were satisfied by the guest speaker. A souvenir was presented to the guest speaker and hi-tea was served to the guest and the faculty.



Double Wicket Cricket Tournament

A double wicket cricket tournament was arranged by the Department of Computer Science on December 2-3, 2015 at university playground. The students from all the departments of the university actively participated in this cricket tournament. Around 43 teams from all departments of Capital University of Science and Technology,

Islamabad participated in this event. The event was inaugurated by the president JSPark. The final match was played between the team of Management Sciences & Computer Science Department. In the end of the event shields were awarded to the winning & runner up team of the event. The event was supervised by Mr. Saleem Anwar. This event provided students a healthy activity that is good for body and mind.

A Tribute to the Victims of APS Peshawar

An event was arranged by the students of Computer Science Department, under the umbrella of JSpark Society, Capital University of Science and Technology, Islamabad on December 16, 2015 to pay tribute to the victims of the incident that was occurred in Peshawar on December 16, 2014. The students from the Department of Computer Science paid tribute to the APS victims; they expressed their sorrow and grief to the families of the victims by expressing their thoughts in the form of speeches and by singing national songs. A large number of students participated to show their concern. At the end

of the event prayer was offered for the APS victims. The event was supervised by Ms. Humera Aftab.



Two Days Workshop on ASP.net

A two days workshop on ASP.net was arranged by the Department of Computer Science on December 7-8, 2015. The guest speaker of this event was Mr. Syed Ali Taqi Abbas. He is an ex-student of Computer Science Department, Capital University of Science and Technology, Islamabad. The basic



purpose of this workshop was to give an understanding of the ASP.net language to the students of computer science. ASP.net is a kind of computer programming language which is used to prepare different kinds of websites. At the end of the event Dean, Faculty of Computing presented the shield to the guest speaker. The event was supervised by Mr. Saleem Anwar.

Graduate Seminar, Faculty of Computing, Fall 2015

Four sessions of the graduate seminars were held in Fall 2015. First session was held on September 30, 2015 by Mr. Riaz Ahmed. Title of the presentation was "Research Paper

Recommendation by Exploiting Co-citation Occurrences in Structure of Scientific Papers".

Second session was held on October 28, 2015 by Mr.



Nadeem Fakhar. Presentation topic was "Achieving State Space Reduction in Generated AJAX Web Application State Machine". Second presentation was presented by Mr. Tassawar Hussain. His topic was "Framework for Mining Emerging Click Stream Trends". Third speaker was Ms. Saba Inaam and her topic was "ElGamal like Cryptosystem Based on Group Rings".

Third session was held on December 9, 2015. First speaker was Mr. Muhammad Ibrahim and his topic was "SIM-Cumulus: An Academic Cloud to provide Network-Simulation-As-A-Service". Second speaker was Mr. Sajid Hussain. He presented the topic "Unsteady flow and heat transfer of nano fluid over stretching sheet".

Fourth session was held on December 30, 2015. First presenter was Ms. Shamsa Kanwal and her topic was "Cryptosystem with non commutative platform system". Second presentation was by Mr. Shafiq ur Rehman, who presented the topic "Spatio Temporal Aspects in Information retrieval".

Triangular Cricket Series among FoE Departments

Civil Engineering Department arranged a Triangular Cricket Series among Faculties of Engineering Departments in the second week of October, 2015. Civil, Mechanical and Electrical Engineering Departments participated in this cricket

series. Each team played two matches against each other. Top two teams (Mechanical and Electrical Departments) played the final match and Mechanical Engineering Department team was the winner of the tournament.

Workshop on Climate Friendly Business Strategies

Office of Corporate Linkages in Collaboration with FNF Foundation arranged a one day workshop on Climate Friendly Business Strategies. The main objective of the

workshop was to sensitize business students to consider the environmental implications while developing venture business plan. The event had a fair participation of students from different departments. Certificates of participation were distributed among the participants. The lunch, trainer and training material was provided by the FNF.

Seminar on E-Government, Theories & Practices

A seminar was arranged by the JSpark Society of Computer Science Department on December 11, 2015 on “E-Government: Theories and Practices”. The guest speaker of the event was Mr. Khizar Iqbal. Mr. Khizar is performing his duties in the Ministry of Information and Broadcasting. The participants of this seminar were briefed about the concept of E-Government, that how the government is changing its system to online from the manual system. At the end a shield was presented to the guest speaker. The event was supervised by Mr. Noman Sharif. Hi-tea was served to the guest speaker and the faculty.

Participation in Techslavo 2015

The teams from the Department of Computer Science, Capital University of Science and Technology, Islamabad participated in the event entitled “Techslavo 2015” at University of Engineering & Technology, Taxila on December 18, 2015. The teams participated in the Web designing, Poster designing, Chess, E-Gaming & programming competition. The teams secured 1st



Position in Web & poster designing competition, and 2nd in the E-gaming competition of FIFA 15. The event provided an opportunity to the students of C.U.S.T. to compete with the students of other universities and prove their mettle.

ExcITeCup 2015 (Excel in IT)

Department of Computer Science, Capital University of Science & Technology, Islamabad, organized ExcITeCup on 12th December, 2013. The event offered seven competitions, including: Programing competition, Software Project Exhibition, E-Gaming Competition, IT Mushaira Competition, Photography Competition, Quiz and Poster Design Competition.

All competitions offered an opportunity to students to exhibit their skills and prove their metal. Total 135 teams from 24 different universities of Pakistan registered for different competitions. Cash prizes, shields, and certificates were awarded to the winning teams. The exciting and thrilling competition was inaugurated by Prof. Dr. Anwar ul Hassan Gillani, Chairman, PCS, Islamabad. The event started with the recitation of verses from the Holy Quran. It was followed by the address of Dr. Tanvir Afzal, Convener of the Event. He warmly greeted and thanked all



the participant teams of various universities. The inaugural session ended with tea and refreshment for all participant teams and faculty members. The first half of the event consisted of Programing competition, Software Exhibition, E-Gaming, Photography Idea discussion and Quiz Competition. Finalist teams were selected in the first half. Participants and faculty was served lunch. All competitions continued after the Jumma Prayer and lunch break. In the second half of ExcITeCup 2015, Mushaira Competition, and Poster Design Competition also started. Other Competitions also continued and moved to their decisive round. The judgment was made in the second half and results



were announced in prize distribution ceremony. The ceremony ended with distribution of cash prizes and shields among the winning teams and certificates to all the participants by the Chief Guest. In the end Hi Tea was served to all participants, guests, judges and faculty by the university.

Welcome Party

Genix organized a welcome party in Fall 2015 for the freshmen of Department of Bioinformatics and Biosciences, Capital University of Science and Technology, Islamabad. The warm welcome was extended to new students. Freshmen were introduced to all faculty members and they exchanged their views with teachers and senior students. Lunch was served at the Old Cafe of the campus and everybody enjoyed the hot food and good weather. Freshmen and teachers appreciated and thanked Genix team of dedicated students who opened doors for them to social life at campus.



Participation in Declamation contest at FAST-NU

A team from the Department of Computer Science participated in the declamation contest at National University for Emerging Computer Sciences – (FAST, Islamabad).

Seminar on Importance of Civil Engineering in Telecom Sector

Civil Engineering Department, Capital University of Science and Technology, Islamabad arranged a seminar on November 04, 2015 on “Importance of Civil Engineering in Telecom Sector”. The aim of the seminar was to let new students know about the role of civil engineers in telecom sector. The guest speaker was Engr. Naveed Irshad, Manager Network Engineering Department, Telenor, Islamabad. Mr. Naveed Irshad made a very well-

structured presentation which covered and highlighted not only the various aspects of civil engineering in telecom sector but also developed interest of the audience by sharing his over one decade vast experience of civil engineering telecom projects. Dr. Atiq-ur-Rehman Tariq (HoD, CE) in his concluding remarks appreciated the presentation and extended vote of thanks to Engr. Naveed Irshad.



E-Gaming and Computer Gaming Competition

On October 29-30, 2015, two competitions (E-Gaming Competition and Gaming Competition) were arranged for all the students of Capital University of Science and Technology, Islamabad. The Students from all the departments of the university actively participated in this event. The Games of Competition were: Call of Duty 4 Modern Warfare, Dota 2 & FIFA 15. The event provided a healthy mental activity to the students. Large number of participation of students proved that students take interest

in such type of intellectual activities.



C.U.S.T. Holds Jinnah Employment Expo, 2015

Capital University of Science and Technology, Islamabad organized Jinnah Employment Expo 2015: JEE 2015 on December 02, 2015. The objective of JEE 2015 was to provide a platform for C.U.S.T. students and M.A.J.U. graduates to interact with recruitment professionals for Jobs, internships, apprenticeships, and project opportunities. The Office of Corporate Linkages was the chief organizer of JEE 2015.

Mr. Ashraf Noor Shares Secrets of his Entrepreneurial Success

Mr. Ashraf Noor, CEO, London City Trading visited C.U.S.T. on December 11, 2015 and shared with the class of MBA the secrets of his entrepreneurial success in UK and USA. He enlightened the audience by sharing his personal experiences and concluded that helping others is the best way to become successful in both personal and professional lives. He discussed with the students that his entrepreneurial journey is not based on the family push, but it was his own decision to start a business. He also shared that he stayed focus despite getting an easy job.



C.U.S.T. Faculty Participates in the HRDN's 16th Annual Member Meeting

C.U.S.T. is an institutional member of HRDN network. C.U.S.T. faculty members including Dr. Shazia Akhtar, Dr. Ansir A. Rajput and Ms. Rumesa Pervez Khan, attended HRDN's 16th Annual Member Meeting on November 10,

2015. The event included extremely helpful members' hour in which faculty received valuable feedback and suggestion to further the agenda of Human Resource Development in Pakistan.



▲ Awareness Campaign against Drug Abuse

ANF - North Region (Leading Law Enforcement Agency) in its meager capacity is striving hard on multi fronts of conducting operations against Narco mafia awareness and free treatment to addicts and is committed to aware youth of

Pakistan about the ill effects of Drugs. Capital University of Science and Technology, Islamabad is working on this front as well in cooperation with ANF.

▲ Dining Etiquette Workshop

On January 8, 2015, Ms. Maria Mashkoo organized a Dining Etiquette workshop for the students of “Personal Grooming and Development” course. Dining with good manners is an important way to make a great lasting impression, especially in professional life.



▲ Breakfast Gathering

On December 23, 2015 students of Introduction to Management organized a “Breakfast Gathering”, under the supervision of Ms. Maria Mashkoo. The first semester students were trained regarding the management



of finances, ordering, arranging resources and time management.

▲ Soft Skills in Management

Ms. Maria Mashkoo organized a 4 workshops on “Soft Skills in Management” focusing on Interpersonal Communication skills, Empathy, Time and Resource

Management. This activity required the use of balloons to impart important lessons in a fun way.



Entrepreneurial venture: DSLR Photography and DSLR Film-making

On December 10, 2015, Ms. Maria Mashkoo organized a Workshop on “Entrepreneurial venture: DSLR Photography and DSLR Film-making”. Mr. Salman Nasir (Brand ambassador/ Brand Mentor for Pentax) was the trainer. Pentax is a very established brand in photography across the globe, but they are relatively unknown in Pakistan with limited audiences such as collectors, professionals and photography enthusiasts.



Seminar on Discover Yourself

A seminar on “Discover Yourself” was , organized on December 12, 2015 and supervised by Ms. Rabia Habib Guest Speaker was Ms. Shaiza Shahid (Motivational Speaker & Lecturer in Quaid-e-Azam University, Szabist). The Guest speaker has recently launched a Book “Discover Yourself”, which was distributed among the students during the seminar and the content was discussed. The main purpose of seminar was to make students realize how important it is to discover their strengths and areas of interest, to set goals and to have explicit path in life to be successful and prosperous.



IEEE Glee- Every Smile Counts

IEEE WIE AG C.U.S.T. organized an event on August 22, 2015, "IEEE Glee- Every Smile Counts" with the sole purpose of making our youth aware of their social responsibilities. Funds were raised from different universities; different food items and some clothes were purchased for the people at old age home (Najjat Foundation). Students spent almost four hours there with old people, Students as Volunteers from C.U.S.T., COMSATS, Air University, EME and Bahria University participated in this activity.

Her BI-Wheeler Journey

IEEE WIE AG C.U.S.T. Chapter Organized an Inspirational Seminar by Ms. Gulafshan on October 28, 2015. The objective was to bring to light the Story



of two girls who set an example of friendship, bravery and women power as they travelled from Islamabad to Khunjerab (China Border) on bicycles.

All about UGRAD

IEEE WIE AG C.U.S.T. Chapter organized an informative Seminar by Ms. Um-E-Salma on October 29, 2015. The objective was to familiarize the student to the US Undergraduate Exchange Program and guide them about the Procedure, details along with the tips and tricks to increase the chance of selection. There was also an interactive session of questions and answers in the end. The session proved to be very fruitful to the students.



IEEE Oath taking & Orientation Session 2015

On October 14, 2015 IEEE C.U.S.T. Student Branch organized an "Oath Taking Ceremony" of the new executive committee of IEEE C.U.S.T. student Branch and CS Chapter. Along with the oath taking ceremony, there was also an orientation session organized for newly inducted members of the student Branch. The event was attended by IEEE C.U.S.T. Student Branch, HoD of Electrical Engineering Department, Dr. Imtiaz Ahmed Taj and counselor Dr. Sajjad Hussain. The event was concluded by a cake cutting ceremony and a group photo at the end.



5th Annual IEEE Day Celebrations

IEEE C.U.S.T. Student Branch celebrated the 5th annual IEEE day on October 15, 2015. Students showed up with lot of Zeal and enthusiasm. Students wore specially designed IEEE T-shirts to show dedication, love and support to IEEE.



Workshop on Recycling

Recycling is a process to change waste materials into new products to prevent waste of potentially useful materials, to reduce the consumption of fresh raw materials, to reduce energy usage and to reduce air pollution and water pollution. IEEE WIE C.U.S.T. organized a workshop on October 15, 2015 based on recycling in which students were given a little information about recycling and then they were given waste materials to recycle and produce a model that works. There were a total of 30 students who participated in this activity.

Workshop on Smart Cities Project, Smart Grids, Smart Buildings & Opportunities for Control System

IEEE and Control and Signal Processing Society (CASPR) organized a workshop on Smart Cities Project, Smart Grids and Smart Buildings & Opportunities for Control Systems on October 27, 2015. Dr. Amir Iqbal Bhatti (IEEE Control System Society Joint Chair Islamabad, Karachi and Lahore Section) introduced the Guest Speaker Dr. Samad Tariq (President of the American Automatic Control Council for 2014-15 and served as the President of IEEE Control Systems Society in 2009). Dr. Samad gave a detailed presentation highlighting the significance of control systems.



IEEE Educational Trip to Grid Station

IEEE C.U.S.T. Student Branch organized an educational trip to "Grid Station" for professional development of students on October 15, 2015. IEEE counselor, Dr. Sajjad Hussain along with Dr. Ashraf accompanied the students for guidance. Around 80 students visited the Grid Station.



Tribute to the Martyrs of APS

On December 16, 2014, there was a terrorist attack on the Army Public School in Peshawar. In this regard the Genix society of Bioinformatics and Biosciences planned a Dua session for APS victims on December 16, 2015. The session started with the recitation of Holy Quran. After recitation a speech was delivered to the audience. After

the speech two documentaries were played. Dr. Shaukat Iqbal delivered a speech on the reality of this life and the life here after. He motivated the students to behave nicely and to do good deeds in this life. The audience prayed for the APS martyrs and for their families. The overall session was full of emotions and dedication.



Dr. Saif-ur-Rehman

HoD Mechanical Engineering

Q1. We would like to know about your academic qualification and professional achievements so far?

Dr. Saif. I did my bachelors in Mechanical Engineering in 1978 from University of Engineering & Technology (U.E.T) Lahore. I worked as a Professional Mechanical Engineer at Pak Arab Refinery (PARCO) for 8 years, and my job consisted of designing, constructing, commissioning, and operating pipelines. My biggest project at PARCO was my involvement in building a pipeline from Karachi to Muzafargarh. In 1987, I moved to Texas, United States to obtain my master's degree in Mechanical Engineering from Texas A&M University; and I decided to pursue my PhD in Petroleum Engineering from the same institute. After obtaining my PhD, I started working at King Fahd University, KSA as a Research Engineer and Assistant Professor. Now, I consider myself lucky to be back in Pakistan.

Q2. Having studied abroad, we would like to know about your experience in the United States as student?

Dr. Saif. I didn't face too much difficulty in absorbing the new system abroad. Research in America was relatively easier as they had systemized research. For me the biggest challenge was the fact I was restarting my studies after 8 year after my bachelor's degree.

Q 3. Can you enlighten us on some of the researches you have done?

Dr. Saif. I did most of my researches on thermodynamic fluids. One of my longest researches was on developing

MEET THE FACULTY

special fluids which would help with drilling. Those fluids would not penetrate into the formation while drilling and help maintain the pressure which builds up as you go deeper into the well. I also did a research on the petro-physical properties of different fluids, such as crude oil and synthetic oils.

Q4. What role mechanical engineering can perform in the development of a country?

Dr. Saif. Any nation that wants to develop has to develop mechanical engineering. For the development of industry we need to set up new industries and for that mechanical engineers are needed. Mechanical engineering is the backbone of any industry thus of any society or country.

Q5. As Pakistan is an agricultural country, what is the role or scope of mechanical engineering here?

Dr. Saif. The biggest problem with our agriculture is that we are not treating it as an industry. Agriculture is an industry and helps several other industries to develop and grow. Agriculture and mechanical go hand in hand. In many places both the terms appear together.

Q6. Would you like to give any advice or message to the students?

Dr. Saif. The message I give to every young person is to pursue a field they feel passionate about, and not to choose a field due to popularity or parental command. Once you choose your field, always work hard and never study for grades or for the goal of getting a well-paid job. Study to acquire knowledge and if you do that, the grades and jobs will come to you automatically.



STUDENTS' CORNER

My Trip to China

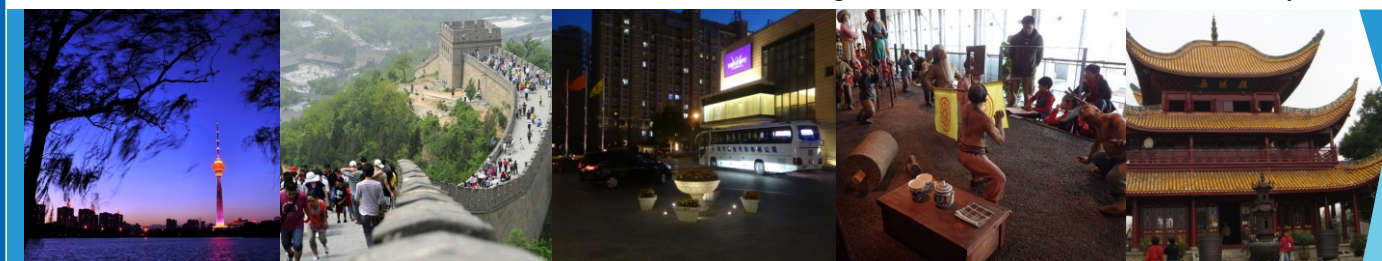
I had been working for quite a several days and I was exhausted. I direly needed a vacation when my friend suggested a trip to the wonderful country of China. After planning for a week I set out to China with my friend. I had never been to China before despite hearing about its admirable beauty. I went to China through Pakistan International Airlines; reached in about 4 hours and landed at Beijing Capital International Airport. Looking out of the airplane window, I may have seen just buildings and cars like anywhere else, but it felt like being in a whole new world.

I stayed in Mercure Hotel, Downtown Beijing along with my friend for 9 days. After resting for a day, we started touring. First, I feasted my eyes on the unparalleled sceneries as I travelled. The Great Wall and the Terracotta Warriors are the marvelous sceneries of China. The former is famed for its magnificence and art, while the later is famed for its vivid and detailed carvings. As I continued, I breathed the clean air on the top of the Great wall in one city and had a close observation of the vivid Terracotta Warriors and Horses in

a good look at the ancient Chinese art. Being made with jade, lacquer, porcelain, stone, bronze, and wood, the common crafts included were fine calligraphy, fans, scrolls, jewellery, and silverware. As my trip was a short one I couldn't visit many tourist attractions of China.

During my trip I got familiar with the unique food culture of China. On one hand, Chinese food has a special way of cooking. Stir-fry is the typical way and many foreigners take the wok as the symbol of Chinese cooking. With the lovely sizzling noise, a heavenly Chinese meal will be done in the magical cooking utensil. On the other hand, Chinese food possesses artistic characters. A Chinese dish is not only for eating, but also for appreciating. The balanced use of color and delicate use of ornaments attach artistic characters to the food. I ate everything from diced shrimp to egg custards; the assortment of food available was mind blowing. Each dinner was treated like a feast and each feast was treated like a celebration.

As my trip came to an end, it was definitely bittersweet. Traveling in China was absolutely one of the best experiences in my life. Not only did I learn so much about the people of this great nation, I learned much about myself as well.



another city.

After visiting these two wonderful historical places, I went to Forbidden City or Beijing as it is now called, a marvelous and splendid area rich in history and culture. Probably the most interesting and historic part of the city is the Imperial Palace, an incredible glimpse into the Qing Dynasty. It brings together a selection of precious objects such as robes, armor, jewellery, captors, paintings, and a complete throne room. The Forbidden City is now one of the world's foremost museums of Chinese art filled with innumerable cultural artifacts including gifts of state, military campaign loot, and possessions of members of the Imperial household.

In China, the spirit of the people was felt everywhere. Everyone displaced a sense of pride in the place that they called home. Walking in the streets was difficult, they were also very crowded. There were many bikes on the streets. Immersed in the daily life of China, I realized how strong of a work ethic they had. I also got to experience many traditions from Lion Dances to Chinese Operas. The scenery in China is breathtaking; an asset that separates itself from the rest of the world. I felt as if I was in the future as I stared in awe at the Pandora of lights staring up into the night sky. I also had

Pakistan may be my home and place, but China will always provide me with strength, warmth, and happiness. The culture of China is an experience that I will cherish in my heart forever.

Haris Iqbal
BC-141080 (5th Semester)
CS Department



Bridge Building Competition - 2015

American Society of Mechanical Engineers (ASME), Capital University of Science and Technology, Islamabad organized “Bridge Building Competition - 2015” from October 28 to November 4, 2015. Around 100 students in 33 teams from all departments of the university participated in this competition. Organizing team prepared and displayed a model bridge for the learning of new contestants. Dr. Saif ur Rahman, HoD (ME) also visited and commended the good work of the organizing team in arranging a healthy, and creative activity. Refreshments were served to all the contestants. All three winner teams were from Mechanical Engineering Department. The event provided a good opportunity to the students to apply the basic principles of science and engineering learned in classroom.



PEC Visit to Mechanical Engineering Department

A team of experts from Pakistan Engineering Council (PEC) visited Capital University of Science and Technology, Islamabad on August 07- 08, 2015 for accreditation purpose of BS Mechanical Engineering Program. The evaluation team comprised around fifteen experts, with diverse backgrounds from both academia and industry and was headed by Dr. Muhammad Babar Saeed, CAE, NUST Risalpur and Dr. S. Kamran Afaq, HITEC University, Taxila. Welcome note was given by Prof. Dr. M. Mansoor Ahmed, Vice Chancellor of

C.U.S.T. in which he also briefed the team about the infrastructure, various academic programs and facilities available in university. Comprehensive presentation was given to the PEC team by Prof. Dr. Amir Qayyum, Dean Faculty of Engineering, C.U.S.T., regarding academic programs, teaching methodology, faculty, students, R & D activities, quality assurance, and student support program. The accreditation team also visited labs, class rooms, libraries, Cafeteria, and other facilities available in the university. The evaluators highly appreciated the state of the art infrastructure and quality of education being maintained by the University.



Water Rocket Competition - 2015

Capital University of Science and Technology Islamabad, American Society of Mechanical Engineers (ASME) Student Branch organized “Water Rocket Competition - 2015” on October 7, 2015 in the university ground. Around 54 students from all departments of university participated in this competition. The event provided a good overview about the design and launching of water rocket which would be helpful for the society to attract more students in such learning based activities in future. At the end, a prize distribution ceremony was arranged and HoD (ME) Prof. Dr. Saif ur Rahman distributed the shields among the winners.



New Inductions

S.#	Name	Department	Designation	Degree	Institute
1.	Dr. Moueen Aizaz Zafar	Management Sciences	Professor / Dean QEC	PhD	University of Florida, USA
2.	Dr. Rizwan Saeed Choudhry	Mechanical Engineering	Associate Prof.	PhD	University of Manchester, UK
3.	Dr. Junaid Ahmed	Management Sciences	Assistant Prof.	PhD	Georg August University, Gottigen, Germany
4.	Dr. Muhammad Afzal	Mathematics	Assistant Prof.	PhD	Quaid I Azam University, Islamabad
5.	Dr. Muhammad Zeeshan Qader	Management Sciences	Assistant Prof.	PhD	IAE-Aix Graduate School of Business, CERAM, Doctoral Program, France
6.	Dr. Saira Ahmed	Management Sciences	Assistant Prof.	PhD	IMT, Institute for Advance Studies, Italy
7.	Mr. Rizwan Ali Khan	Management Sciences	Assistant Prof.	MS	Georgetown University, USA
8.	Mr. Muhammad Naeem	Electrical Engineering	Lecturer	MS	CASE, University, Islamabad
9.	Mr. M. Rizwan Javed	Electrical Engineering	Lecturer	MS	UET, Taxila
10.	Mr. M. Mateen Hassan	Electrical Engineering	Lecturer	MS	Technische Universitat Chemnitz, Chemnitz (Germany)
11.	Mrs. Saleha Fahd	Electrical Engineering	Lecturer	MS	Foundation University, Rawalpindi
12.	Mr. Qamr uz Zaman	Computer Science	Lecturer	MS	UET, Taxila
13.	Mr. Saqib Shabbir	Computer Science	Lecturer	MS	Center of Advance Studies in Engineering, Islamabad
14.	Mr. Syed Awias Haider	Computer Science	Lecturer	MS	Quaid I Azam University, Islamabad

PUBLICATIONS FALL-2015

- Munir Ahmed, Shahzadi Tayyaba, **Muhammad Waseem Ashraf**, "Effect of Buckling Restrained Braces Locations on Seismic Responses of High-Rise RC core Wall Buildings", Shock and Vibration, Article ID 943928 (Impact Factor=0.722), (2015).
- Ali M.**, "Use of Coconut Fiber Reinforced Concrete and Coconut-fiber Ropes for Seismic-resistant Construction", Materials de Construction (Impact Factor = 0.961), 2015.
- D. Shehwar**, T. Kamran, "C*-valued G-Contraactions and Fixed Points", Journal of Inequalities and Applications, (2015).
- S. Batul** and T. Kamran, "C*-valued Contractive Type Mappings", Journal of Fixed Point Theory and Applications, (2015).
- M. Sajid, **Imtiaz A. Taj**, Usama I. Bajwa, and Naeem I. Ratyal, "Role of Facial Asymmetry towards Recognizing Age-Separated Face Images", Computers & Electrical Engineering (Elsevier), December 2015.
- M Asif, **Imtiaz A. Taj**, SM Ziauddin, MB Ahmad, M Tahir, "A Hybrid Scheme Based on Pipelining and Multitasking in Mobile Application Processors for Advanced Video Coding", Scientific Programming, Hindawi Publishing Corporation, Volume 2015, Article ID 197843, <http://dx.doi.org/10.1155/2015/197843>, 2015.
- M Asif, **Imtiaz A. Taj**, SM Ziauddin, MB Ahmad, M Tahir, "An Efficient inter Prediction Mode Selection Scheme for Advanced Video Coding Based on Motion Homogeneity and Residual Complexity", Transactions of IEEE, 2015.
- B. Mughal, **Sajjad Hussain**, Abdul Ghafoor, "Cluster Based Cooperative Subcarrier Sensing Using Antenna Diversity Based Weighted Data Fusion", Arabian Journal for Science and Engineering, 2015.
- K. Karimov, **M. Mansoor Ahmed**, F. Noshin, M. Saleem, M. M. Tahir, S. Abdul Moiz, K. M. Akhmedov, M. Zahid, S. Z. Abbas, Abdul Rashid, "Nickel Phthalocyanine Based Organic Photo Transistor: Effect of Semiconductor Film Thickness", The European Physical Journal Applied Physics 72(2), DOI:

10.1051/epjap/2015150307, September 2015.

10. Syed Imran Haider and **Noor M. Khan**, “MIMO-OFDM Communication System with Opportunistic Diversity-Order Selection and Kalman Filter-based Channel Estimation,” Wireless Personal Communications (Springer WPC), Vol. 84, No. 1, September 2015, pp. 587-603
11. Muhammad Riaz, **Noor M. Khan**, and Syed Junaid Nawaz, “A Generalized 3-D Scattering Channel Model for Spatiotemporal Statistics in Mobile-to-Mobile Communication Environment,” IEEE Transactions on Vehicular Technology (IEEE TVT), Vol. 64, no. 10, October 2015, pp. 4399 - 4410.
12. Tauqeer Ahmed and **Noor M. Khan**, “Direct Radio Frequency Sampling Methodology for Multiple Signals in an Energy-Sparse Spectrum,” In Press, Turkish Journal of Electrical Engineering & Computer Sciences, DOI: 10.3906/elk-1501-83, Available Online: <http://journals.tubitak.gov.tr/elektrik/accepted.htm>, 2015
13. Syed Ussama Ali, Raza Samar, M. Zamurad Shah, **Aamer I. Bhatti**, Khalid Munawar, Ubaid M. Al-Sggaf, “Lateral guidance and control of UAVs using second-order sliding modes”, Aerospace Science and Technology (Elsevier), DOI:10.1016/j.ast.2015.11.033, December 2015.
14. M. Z. Shah, R. Samar and **A. I. Bhatti**, “Lateral control of UAVs using the sliding mode approach: from design to flight testing”, published in the Transactions of the Institute of Measurement and Control, doi: 10.1177/0142331214543093.
15. M. Z. Shah, R. Samar and **A. I. Bhatti**, “Guidance of air vehicles: a sliding mode approach”, published in IEEE Transactions on Control Systems Technology”, DOI .1109/TCST.2014.2322773, ISSN 1063-6536, Volume 23, Issue 1, Pages 231-244.
16. A. Hussain, **A. Nadeem**, M.T. Ikram, “Review on formalizing use cases and scenarios: Scenario based testing”, 11th International Conference on Emerging Technologies (ICET 2015), Dec. 19-20, 2015, Peshawar, Pakistan.
17. M. Touseef, N. Anwer, A. Hussain, **A. Nadeem**, “Testing from UML Design using Activity Diagram: A Comparison of Techniques”, 11th International Conference on Emerging Technologies (ICET 2015), Dec. 19-20, 2015, Peshawar, Pakistan.
18. M. Rizwan, **A. Nadeem**, M.B. Khan, “An Evaluation of Software Fault Tolerance Techniques for Optimality”, 11th International Conference on Emerging Technologies (ICET 2015), Dec. 19-20, 2015, Peshawar, Pakistan.
19. N. Noureen, M. Touseef, **S. Fazal**, **M. A. Qadir**, 2015. ChromClust, “A semi-supervised chromatin clustering toolkit for mining histone modifications interplay”. Genomics 106(6): 355-359. IF: 2.284
20. S.U. Rehman, **A. Nadeem**, “An Approach to Model Based Testing of Multiagent Systems”, The Scientific World Journal, vol. 2015, Article ID 925206, doi:10.1155/2015/925206, 2015. Amjad Ali, Anam Naz, Siomar C Soares, Bakhtiar SM, Sandeep T, Hassan S, Hanan F, Ramos R, Pereira U, Barh D, Figueiredo HP, Ussery DW, Miyoshi A, Silva A Vasco Azevedo, “Pangenome Analysis of Human Gastric Pathogen H. pylori, Comparative Genomics and Pathogenomics Approaches to Identify Regions Associated with Pathogenicity and Prediction of Potential Core Therapeutic Targets”. Biomed Res Int. 2015; 2015:139580. DOI: 10.1155/2015/139580.
21. Amjad Ali, **Marriam Bakhtiar** and Vasco Azevedo, “Autism Spectrum Disorders (ASD): From Diagnosis to Management” (invited article). J Mol Genet Med. 2015. 9:154. doi: 10.4172/1747-0862.1000154.
22. **Syeda Marriam Bakhtiar**, Amjad Ali, and Debmalya Barh (2015) “Epigenetics in Head and Neck Cancer”. Springer: Cancer Epigenetics Book ISBN 978-1-4939-1803-4.
- 23.2. A. Munir, S. Azam, **S. Fazal**, 2015, “Repositioning of Methotrexate to Cure Mutations of DYR, TYMS and PURA Gene, Bleomycin in the Treatment of Mutant DNA, TOPa, POLa, and RIR Genes”. Merit Res. J. Med. Med. Sci. 3 (7): 249-255
24. Haseeb M and **Hussain S** (2015), “Pharmacophore development for anti-lung cancer drugs”. Asian J Cancer Prev. Vol 16, 8307-8311 (IF=2.52)
25. **Muhammad Aleem**, “A Java-based Programming and Execution Environment for Many-core Parallel Computers”, 1st edition, published by: ProQuest LLC, Ann Arbor, Michigan, United States, Pages: 172 pages, ISBN/ISSN: 3730752 (UMI), 2015.

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