

NEWSLETTER



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7th One Day Workshop on the Significance of Bioinformatics in Life Sciences

Department of Bioinformatics & Biosciences of C.U.S.T. organized 7th One Day Workshop on “The Significance of Bioinformatics in Life Sciences”, on May 07, 2016. This was an annual event of the department. The main objectives of the Workshop were to create awareness of Bioinformatics and to give basic training in Bioinformatics including hands on lab sessions to the students, faculty and researchers of Colleges, Institutes and Universities. This series of workshops has built a good image of the department and the University as a pioneer in the field of Bioinformatics. The department invited renowned resource persons to deliver lectures

in two technical sessions. 78 participants attended the event from 23 different Institutes including Quaid-i-Azam University, NUST, COMSATS, Hazara University, NIBGE, Shaheed Benazir Bhutto University Peshawar, University of Gujrat etc.

The inaugural session was chaired by Dr. Aamer Nadeem, HoD BI & BS, and Dr. Nayyer Masood, HoD CS. Dr. Zafar Iqbal Qadir, (Chairman Taleem Foundation) was the Chief Guest and Dr. A. K. Tanwani (FMDC-PIMS) was the Keynote Speaker in the inaugural session. The event ended with distribution of certificates and shields among the speakers, participants and organizers.



SEMINAR ON

Evolution and Transcriptional Regulation of Kindlins, A Novel Family of Focal Adhesion Proteins

A seminar on “Evolution and Transcriptional Regulation of Kindlins, A Novel Family of Focal Adhesion Proteins” was organized by Dr. Aamer Nadeem, Head of BI & BS Department and Genix Society. Dr. Ammad Aslam Khan was the guest speaker who is associated to Department of Zoology, Hazara University, Mansehra. He provided a detailed overview of Kindlin protein and their significance in humans. He discussed about the evolution as well as transcriptional regulation of Kindlins. Kindlins are relatively novel cell adhesion molecules. They perform their function mainly by activating Integrins, the major molecules in focal adhesions. He discussed in detail the evolution of domain

organization of Kindlins and other FERM domain containing proteins and how tinkering with the genetic toolkit have been involved in the origin and evolution of the complexity we observe in living world. He also discussed the transcriptional pattern and regulation of the molecules.



3rd Annual Alumni Brunch

An alumni brunch was organized by Genix Society under the supervision of Dr. Sahar on April 03, 2016 at Jacaranda Family Club. Aim for this gathering was to provide a chance to share memorable experiences and stories of good old days. All the alumni were invited and 15 made to the event. The graduated alumni shared the old and gold memories of their university life. It was one of many successful events of Genix. Everyone enjoyed themselves by reminiscing about the time they spent in the university. This alumni brunch gave everyone a great opportunity to network with each other.



DNA and Earth Day Poster Competition

DNA Day is celebrated on April 25 every year. It commemorates the day in 1953 when James Watson, Francis Crick, Maurice Wilkins, Rosalind Franklin and colleagues published papers in the journal Nature on the structure of DNA. Department of Bioinformatics & Biosciences organized a poster competition titled



“DNA and Earth Day” on June 01, 2016. The basic theme was to “Save the Earth, Save the DNA”. It was organized under the supervision of Dr, Sahar Fazal, Dr.

Marriam Bakhtiar, and members of Genix Society. Total 74 submissions were received from students. The Chief Guest was Dr. Amjad Ali from NUST. Both competitions were judged by Dr. Amjad and Dr. Shaukat Iqbal. Prizes were distributed among the student who secured first three positions in both competitions. Dr. Amjad Ali enlightened the students with the significance of saving earth and then ultimately saving our life molecule DNA. He also emphasized that without defining the role of DNA nothing can be achieved in the field of health sciences. Certificates were distributed among all participants.

Seminar on Applications of Industrial Biotechnology in Pakistan

Department of Bioinformatics & Biosciences organized a seminar on “Applications of Industrial Biotechnology in Pakistan” on March 31, 2016 under supervision of Mr. Shahid Hussain, Junior Lecturer, Department of Bioinformatics & Biosciences. Guest speaker was Dr. Bashir Ahmad Assistant Professor, Department of Bioinformatics and Biotechnology, International Islamic University, Islamabad Pakistan. Dr. Bashir Ahmad stressed upon the practices of using cells such as micro-organisms, or components of cells



like enzymes, to generate industrially useful products in sectors such as chemicals, food and feed, detergents, paper and pulp, textiles and bio-fuel. It was also emphasized on the Applications of Industrial Biotechnology research and market development of Pakistan. He also focused on the products being commercialized in Pakistan in last decades and mentioned his own contribution and products given to our society. After the lecture, Dr. Shaukat Iqbal Malik, Associate Professor, Dept. of BI & BS presented a souvenir to Dr. Bashir Ahmad and Hi-Tea was served to the guest speaker and faculty members.

Seminar on An Overview on Computational and Bioinformatics Projects on Going in LUMS

A seminar on “An overview on Computational and Bioinformatics Projects ongoing in LUMS” was organized by Genix Society under the supervision of Dr. Sahar Fazal. The guest speaker, Dr. Safee Ullah Chaudhary is associated with the Department of Biology at LUMS where he is involved in the development of a GPU-based cancer modeling and simulation pipeline by leveraging the CUDA Toolkit. He provided a detailed overview of different projects that are currently going on in LUMS and more specifically in his lab, Biomedical Informatics Research Laboratory (BIRL). The BIRL at LUMS aims to address complex bio-medical challenges by leveraging integrative approaches that cut across disciplines. The currently ongoing research themes at BIRL include (i) Cancer Systems Biology (ii) Computational Proteomics and (iii) BIGDATA Medical Informatics. He emphasized that an integrative analysis of biological and clinical data can help researchers to develop a deeper appreciation of the principles underpinning life. Towards this goal, his lab has constructed the integrative models of complex pathologies. The current research focuses include multi-

scale investigation of the human colon cancer, integrative modeling of cellular bioenergetics, development of a next-generation cancer modeling platform, top-down proteomics and remote e-health monitoring systems. He also provided the detailed introduction about a web-based



mass spectra search engine for protein identification in top-down proteomics and a MATLAB toolbox that are under development to test the analyzing novel algorithms and their performance.

Post Graduate College Mandian, Abbotabad

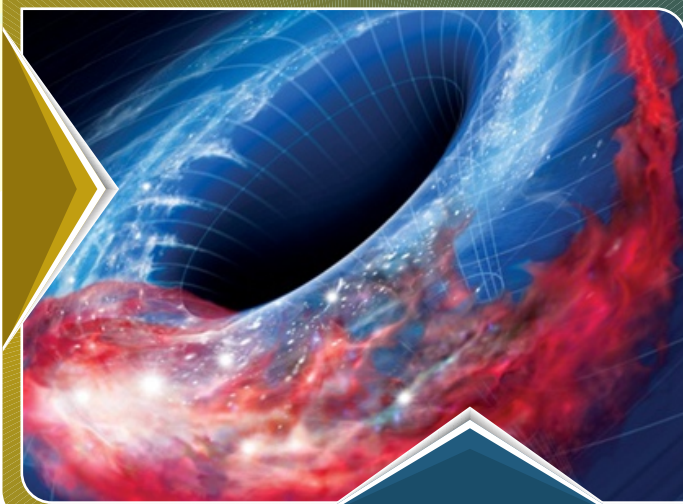
Department of Bioinformatics and Biosciences, Capital University of Science and Technology has a tradition of arranging events to increase awareness among students about Bioinformatics and related disciplines. In this regard Department hosted a visit from “Post Graduate College, Mandian, Abbotabad, on April 14, 2016. Post Graduate College is a co-education college affiliated with University of Haripur and offers BS degree programs in various disciplines. Under the Headship of Mr. Arshad, seventy students from BS Microbiology program

and five faculty members from Department of Microbiology visited the C.U.S.T. Islamabad. Visitors were welcomed by Mr. Ziauddin. An introductory session was arranged for the visitors in Auditorium where Dr. Aamer Nadeem welcomed the visitors. Dr. Marriam Bakhtiar Gave a presentation to provide visitors with the overview of university and department. Dr Shaukat Iqbal, Dr. Sahar Fazal, Mr. Haroon Khan and Mr, Ziauddin assisted the visitors to have a visit of University and lab. A Hi-tea was offered to visitors before departure.



Seminar on Our Universe

Dr. Aamer Nadeem, Head of Bioinformatics and Biosciences Department, Capital University of Science and Technology, Islamabad delivered a lecture on “Our Universe” on May 18, 2016. This seminar was conducted in the series of academic lectures held under the supervision of Dr. Sahar Fazal, the Genix Society patron. The lecture focused on the concepts related to our universe, the solar system, the sun and other stars and galaxies in the universe. Dr. Aamer enlightened the audience with the deep knowledge of cosmology and explained many phenomena related to the universe including birth and death of stars, black holes, neutron stars, theories related to the beginning and end of our universe.



Seminar on Yom-e-Pakistan

Genix Society of Bioinformatics & Biosciences organized a whole day event on March 16, 2016 in remembrance of Pakistan Resolution, 23rd March 1940. Large number of students attends the session. The guest speaker was Mr. Khuram Ilahi, who is a lecturer at PIEDs and also a motivational speaker. Many documentaries and national songs were played for the students to get a chance to know their history. Faculty members were also invited and their motivational talk inspired the students. Guest speaker gave a comprehensive lecture to define goals for the students in their lives and to make their country prosperous and successful. Souvenir was presented to the guest speaker by Dr. Sahar Fazal, Patron Genix Society.



Welcome Party-BI & BS Department

Genix is a society serving for the extra curricular activities for the students of department as well as university. In Spring Semester 2016, society organized a welcome party for the new arrivals with the help of the students of 2nd Semester. Students actively participated and welcomed their juniors. All the faculty members and students from 1st semester were the special guests of the event. They were

entertained by their seniors and also have an informative interaction with the teachers as well. They were guided for the future academic life and how to be a good student and what is the future perspectives related to their field. Overall environment was interactive and in the end lunch was served which was enjoyed and new students seem to be motivated and happy for such a warm welcome from the department.



Certificate Distribution Ceremony Sports Week 2016

“Certificate Distribution Ceremony – Sports Week 2016” of Civil Engineering Department, Capital University of Science and Technology, Islamabad was held on May 16, 2016. The event was organized under the supervision of Mr. Rashid Farooq and Mr. Muhammad Usman Farooqi of CE Department for the encouragement of participants of Sports Week - 2016. The program commenced with recitation of the Holy Quran followed by the distribution of certificates of appreciation among all the participants of sports week

from the Civil Engineering Department. The ceremony was concluded with an ending note to appreciate and motivate the students to participate in extra-curricular activities.



Short Site Visits of Civil Engineering Department

Department of Civil Engineering, Capital University of Science & Technology, Islamabad arranged following short Site Visits during Spring 2016 Semester for their students.

1. A brief site visit within university was held on May 18, 2016. Dr. Majid Ali took students to different locations within university. The purpose of the visit was to help students realize the importance of the knowledge of engineering mechanics and their practical applications in civil engineering domain.

2. A site visit of RCC Framed Structure under construction was held within campus on May 24, 2016. The site was “Hall for Servo-Hydraulic Testing Machine” behind Block H. Dr. Majid Ali arranged the visit. The purpose of the visit was to let students know the importance of accurate civil engineering drawing.
3. A site visit was arranged for students of CE2891 Construction Engineering Lab to Gulberg Green Housing Scheme.

Seminar by Engineers Forum – Civil Chapter

Civil Engineering Department arranged a seminar on June 01, 2016. The topic of his seminar was “Role of Civil Engineers in Production of Alternative and Renewable Energies in Pakistan”.



The guest speaker was Engr. Irfan Yousuf, Director, Alternate Energy Development Board, Islamabad. Engr IrfanYousuf made a very well-structured presentation which covered and highlighted not only the various aspects of civil engineering in energy sector but also developed interest of the audience by sharing his over one decade vast experience of civil engineering energy projects. The target audience was students of civil engineering currently studying in second and fourth semesters. Prof. Dr. Aamir Qayyum appreciated the presentation and declared it value-added for the audience students. At the end, the University

Souvenir was presented to Engr. IrfanYousuf by Dr. Aamir Qayyum who also extended vote of thanks to him.

Seminar by Engineer's Voice – Civil Chapter

Civil Engineering Department arranged a seminar on May 18, 2016. The aim of the seminar was to spread awareness to students regarding the community works to let students know about the compassion for the needy people. The guest speaker was Mr. Ammar Jaffri, ADG F.I.A (R). The topic of his presentation was “Engaged Community Works”. Mr. Ammar Jaffri gave an impressive presentation which covered and highlighted implementation of community projects based on the needs of the area. He developed interest of the audience by sharing his own personal experience of community works. Dr. Munir Ahmed presented university souvenir to the guest speaker and Hi-tea was served to guest speaker and the faculty members.



Seminar on Responsibilities of Students as Pakistani Citizens

Department of Computer Science, Capital University of Science and Technology, Islamabad organized a seminar on “Responsibilities of Students as Pakistani Citizens,” on May 26, 2016. Guest speakers were Mr. Aftab Zia, Mr. Zaid Gull Khattak, and Col. (Rtd) Murtaza Ali Shah. The speakers emphasized that as a first step we must own Pakistan. Instead of looking at others or blaming other, we must put efforts at individual level to improve the present condition of Pakistan. For that we must understand our role and responsibilities. Teachers should play a vital role in character building of students along with teaching them modern scientific knowledge. Universities should

concentrate to develop professionals who have great character and personality traits. Islam should be the foundation of the character building of students. Western culture and traditions which are being promoted through media should be discouraged. Students should be made aware who they are, what their values are and what are their responsibilities. In this regard teachers and parents should play an active role. The seminar ended with an interactive round. Discussion of speakers awakened the enthusiasm and patriotism in new generation. In the end, souvenirs were given to the speakers and Hi-tea was served to the guest speakers and faculty.



C.U.S.T. ACM Chapter

C.U.S.T.-ACM Chapter got registered in the International ACM Society. C.U.S.T. ACM Chapter is aimed to conduct different activities related to the computing society and provide information technology trends and many more that is very useful for the students. Students will interact with the wide variety of businesses and organizations. They will also develop contacts with Islamabad or C.U.S.T. based business leaders and entrepreneur and learn to recognize entrepreneurial opportunities in daily life. The world's leading computing professionals choose the world's leading computing society because it helps them to keep abreast of emerging trends and technologies, stay connected to their colleagues and make a positive impact on the profession and the world at large. When you become a member, you become a part of the dynamic changes that are transforming our world by helping to shape the future of computing. ACM provides the tools and resources to help get you there by advancing your career and enriching your knowledge with life-long learning resources.

Participation in ASCII-16 at IIUI

The event entitled “ASCII - 16” was held at International Islamic University, Islamabad on April 30 to 01, 2016. The event offered different competition. A

team from Computer Science Department of C.U.S.T. Islamabad participated in gaming competition and secured 3rd position in “Call of Duty Modern Warfare”.

A Session on Stress & Introduction to INDUCTIN

A session entitled “Stress and Introduction to INDUCTIN” was held on April 28, 2016. The guest speakers of this session were Mr. Muhammad Haris and Mr. Junaid Chaudhary. Mr. Haris is currently serving as Marketing & communication executive at INDUCTIN while Mr. Junaid Chaudhary is currently serving as



Counselor & Psychologist at INDUCTIN. Mr. Haris presented a brief view of the core functionalities of INDUCTIN. Mr. Junaid expressed his valuable insights and inspirations on stress. At the end of this session souvenirs were awarded to the guest speakers and the refreshment was also served. The event was organized by the JSPark Society of Computer Science Department, C.U.S.T. Islamabad.

ACM Workshop on Freelancing

Computer Science Department, Capital University of Science and Technology, Islamabad ACM Student Chapter organized a workshop on "Freelancing" under the supervision of Mr. Ansar Javed on May 11, 2016. The resource person was Mr. Arslan Yaqoob who is the CEO of "AMFAH Soft" and "Elegant Korner". Around 150 students attended the workshop. The speaker fully motivated the participants of this session to set their grip in the field of freelancing, as freelancing is nowadays getting very familiar and popular around the globe. In the end, souvenir was awarded to the guest and the lavish refreshment was also served.

Participation in Nascon 2016 at FAST Islamabad

The event entitled "Nascon 2016" was held on April 08 to 10, 2016 at FAST-NU, Islamabad. The event offered many social & technical competitions. All Competitions offered an opportunity to students to exhibit their field related skills and prove their metal. Participants from more than 50 universities participated in this mega event. A team from Computer Science Department of C.U.S.T. Islamabad also participated in Gaming Competition and secured 3rd position in "Counter Strike Go".

Seminar on Information Retrieval & Ranking Models

A seminar on "Information Retrieval & Ranking Model" was arranged on April 08, 2016 by JSPark Society of Computer Science Department, C.U.S.T. Islamabad. The guest speaker of this session was Dr. Akmal Saeed Khattak. He is a permanent faculty member of Quaid-i-Azam

University, Islamabad. He expressed his views on the said topic and provided information to the students. The session was interactive and the speaker satisfied the queries of the



students on the given topic. At the end, Dr. Muhammad Tanvir Afzal presented the shield to the guest speaker and the refreshment was also served.

Emerging Programming Competition

A quiz competition on "Emerging Programming" was held on June 02, 2016 at C.U.S.T. Islamabad. Several teams from the Department of Computer Science participated in this event. The participants of this event were given a set of problems and the participants had to answer these problems within the given time. The contents of quiz were from the core subjects of computer science. At the end, shields and certificates were awarded to the participants. The event was organized by the JSPark Society of Computer Science Department.

Naat and Qirrat Competition

In spring semester 2016, a competition of Naat and Qirrat was organized by JSPark society of Computer Science Department, Capital University of Science and Technology, Islamabad. Students showed great interest in this activity and a large number of students participated in the event. They showed spirit and great enthusiasm

that made the task of judging challenging. The judges performed their task in a thorough fashion and declared first, second and third positions of both the competitions. Prizes and certificates were awarded to the winners. In the end tea and refreshment was served to the winners, judges and the organizing teams.



Speech Competition

A Bilingual Speech Competition was held on March 29, 2016. The event was organized by the JSPark Society of Computer Science Department, C.U.S.T. Islamabad. The competition was organized to commemorate the Resolution of Pakistan, 23 March 1940. The topic of English speech was “Pakistan – A Peaceful Nation” and the topic for Urdu speech was “Istehkaam-e-Pakistan”. The event was started

with the recitation of Holy Quran. Then the orators came to express their views on the said topics. This exciting event also had some national songs to make the environment of the competition lively and pleasant. All participants and the audience were quite energetic and enthusiastic. In the end of this event, certificates were awarded to all the participants; prizes and certificate were also awarded to the first, second and third position holders of both English and Urdu speech competition. The refreshment was served to the successful orators of this event, judges and to the organizers as well.

Welcome Party of CS Department

A welcome party was arranged on April 06, 2016. This party was arranged by the students of 2nd Semester for the new students of 1st semester of Computer Science Department of C.U.S.T. Islamabad. The students of 2nd semester performed different plays and other items to entertain their juniors. The Chief Guest of this event

was Dr. Nayyer Masood, Head of Computer Science Department. He appreciated the efforts of all the organizers. He took the promise from the 1st semester students that they will continue such kind of tradition in the next semester as well. The event was supervised by Ms. Raabia Asif. At the end Dr. M. Tanvir Afzal distributed the certificates among the organizers and the high tea was served to all the guests, organizers and faculty members.

Pakistan Student Computer Society Congress-2016

This year, IEEE C.U.S.T. Islamabad Student Branch was the proud organizer of the IEEE's prestigious event “Pakistan Student Computer Society Congress-2016” (IEEE PSCSC-2016) in collaboration with IEEE Computer Society Islamabad & IEEE WIE Islamabad affinity groups. This was the 2nd edition of the Student Congress organized by IEEE Pakistan. The two-days event united around 230 students, young professionals and women in engineering, computer sciences and allied fields to share and explore ideas, develop skills and discuss issues related to their profession. They capitalized on the opportunity to interact with fellow like-minded individuals from across the country. The theme of this year's PSCSC was “Cyber Secure Pakistan”. 20 guest speakers

namely Mr. Ameen Sharif, Mr. Munsab Chaudhary, Mr. Babar Zahoor, Mr. Kamran Saifullah, Mr. Tahir Chaudhry, Mr. M.Yaseen, Mr. Saqib Shabbir, Mr. Prasanth Mohan, Ms. Asma Sajid, Dr. Naveed Bin Raees, Mr. Mubashir Sargana, Mr. Khurram Javed, Mr. Aftab ur Rehman, Dr. Saad Zafar, and Mr. Shameer were present to deliver their respective sessions and workshops. The event was covered by the media in different manners such as local news network and in articles for newspapers and magazines. Entities such as Forbes, Duniya TV, Nawa-e-Waqt and SAMA TV among others provided coverage on their assigned days. The organizing team consisted of almost 100 members. The overall feedback of the PSCSC-2016 was phenomenal. As a result of this mega event hosted by IEEE C.U.S.T Student Branch created a lot of awareness and hype among the students as a result the international memberships have increased.



Engineers' Forum Seminar on Professional Ethics

Engineers' Forum organized a seminar on "Professional Ethics" on July 15, 2015. The guest speaker Dr. Sharif Bhatti (Ex Vice Chancellor, University of Engineering and Technology, Taxila) delivered a talk on the topic which was followed by a question and answer session. Dr. Bhatti spoke about the types of moral dilemmas and unethical practices that Engineering and IT professionals face. He discussed about the code of ethics that professionals need to adhere to when faced with such situations. Dr. Bhatti concluded the talk by inviting the audience to discuss a couple of sample problems in professional ethics with him. The students and the faculty members showed keen interest and gained an insight into the topic through the experience of distinguished guest.



The Rubik Cube Competition-2016 2nd Edition

The Rubik Cube Competition-2016 was organized by students of Electrical Engineering Department on May 05, 2016. It was the second edition of this competition. The initiative was taken by Mr. Umar Adeel of Electrical Engineering Department. More than 80 students of electrical engineering participated in that event. The basic purpose of that event was to enhance the skill set of students regarding logic development and algorithms of different codes. It takes a mixture of skill and determination for anyone to solve the cube on their own. The whole event was met with an overwhelming response and the energy among students was exemplary.



ASME Egg Drop Competition - 2016

American Society of Mechanical Engineers (ASME) Student Section at Capital University of Science and Technology, Islamabad organized "ASME Egg Drop Competition - 2016" on March 9, 2016. This competition offered an opportunity to the students to show their skills and apply technical knowledge learned in the classroom. The students use basic materials like, paper, plastic, sticks and

threads for designing a parachute and safe free-fall of an egg. The contest was open to all students of Capital University of Science and Technology. Students were allowed to register individually or in teams of two. Altogether sixty-seven students registered for this contest. Each team was given two chances to drop the given eggs from a height of thirty feet using their designed and prepared parachute to land the egg smoothly and safely. At the end, shields were distributed among the winners by Engr. Saif Ullah, Mr. Mehmood Minhas and Mr. Muhammad Asad of ME Department.



ASME CAD Competition - 2016

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.

C.U.S.T. is Honored to Become the First Pakistani University to Win ESWC Competition

Mr. Riaz Ahmad from Department of Computer Science, Capital University of Science and Technology, Islamabad

participated in the world renowned competition organized in the top rated A-category Semantic Web conference (ESWC).

This competition was held from May 29 to June 02, 2016 at Greece. ESWC challenges the World to propose, develop and evaluate innovative algorithms for applied nature Computer Science problems. One such competition is known as "Semantic Publishing" in which Mr. Riaz was selected in the top 5 researchers of the World, in the first



round. Subsequently, on the competition day, the research project developed by Mr. Riaz was declared as the winner of 2016 episode. The developed tool was tested on unseen data by the event organizers. The F-score achieved by his tool remained 0.771 while the second position holder could make it to 0.632. He is PhD scholar working under the supervision of Dr. Muhammad Tanvir Afzal in Centre for Distributed and Semantic Computing at C.U.S.T. The effort of the student was appreciated by the Vice Chancellor, Prof. Dr. Muhammad Mansoor Ahmed, Dean Faculty of Computing, Prof. Dr. Muhammad Abdul Qadir, and head of the department, Dr. Nayyer Masood. The results of the event are available at the following link:

<https://github.com/ceurws/lod/wiki/SemPub2016>.

PEC Reaccreditation Visit to Mechanical Engineering Department

A team of experts from Pakistan Engineering Council (PEC) visited Capital University of Science and Technology, Islamabad on June 15-16, 2016 for reaccreditation of BS Mechanical Engineering Program. The visit was conducted on PEC Manual accreditation-2014 (OBE guidelines). The evaluation team comprised around four members headed by Dr. Muhammad Babar Saeed (CAE, NUST Risalpur) and Dr. S Kamran Afaq (HITEC University, Taxila) as program evaluator expert.

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 Dr. Amir Qayyum, Dean Faculty of Engineering, regarding academic programs, teaching methodology, faculty, students, R & D activities, quality assurance, and student support program which are all in accordance with

the Outcome Based Education (OBE) system guidelines provided by PEC.

The accreditation team also visited labs, class rooms, libraries, Cafeteria, and other facilities available in the university. The evaluators highly appreciated the state of art infrastructure and quality of education being maintained by the University.

Consequently, PEC granted reaccreditation for two years to Mechanical Engineering Department i.e. for intake of batches 2012 and 2013, in its 78th EA & QEC/EAB meeting held on July 13, 2016.





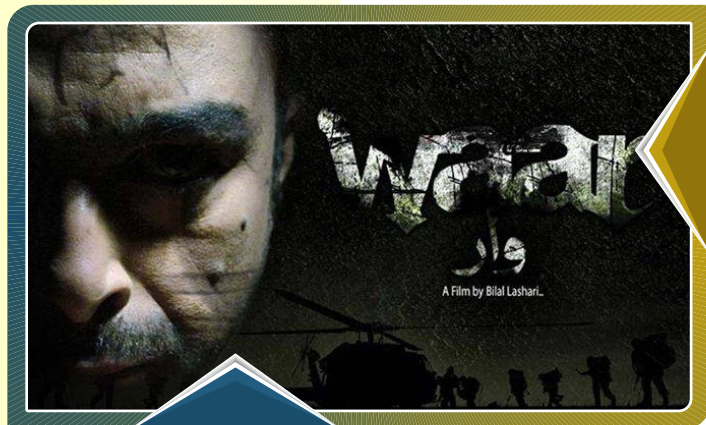
Crescendo Events-Spring 2016

Climate Change Awareness

A seminar in February, 2016 was organized on "Climate Change Awareness". Ms. Nadia and Mr. Khurram were the guest speakers. They discussed how an individual can play an important role in climate change.

Crescendo Theater

A movie screening of "Waar" was arranged in April 2016. Waar is a stylized depiction of events surrounding the war on terror in Pakistan. It was a welcome opportunity for the students to enjoy themselves with light entertainment in a relaxed environment.



The Role of Youth in Nation Building

A seminar was organized on May 23, 2016 on "The Role of Youth in Nation Building". Mr. Talha Azhar was the guest speaker. He discussed how an individual can play an important role in nation building.

Let's Redefine

Crescendo organized a seminar on May 23, 2016 on the topic "Let's Redefine". The main purpose of this seminar was to talk about our wrong perceptions in life which hamper our personal growth. The speaker was Mr. Zubair.

Events Conducted by Office of Corporate Linkages-Spring 2016

Pepsi Recruits C.U.S.T. Alumni

Office of Corporate Linkages invited and facilitated the recruitment drive of Pepsi for the positions of MROs & HR Interns. The Office of Corporate Linkages and Admission Office ran the sms and telephonic invitation campaign and invited 300 Alumni of C.U.S.T. from the disciplines of BBA and MBA to appear in test and interview.

Road Safety is our Responsibility

Crescendo organized a motivational seminar on May 24, 2016 on "Road Safety is our Responsibility". The Guest Speaker was Dr. Mehmood Ali Khokar from ITP and national Highway authority. He discussed how an individual can play an important role in road safety.

Music Event

A soft musical event was arranged on May 24, 2016. Three singers entertained the students. It was also an opportunity for the organizing students to work as a team and to practice their interpersonal skills.

Custians' Talent Show

A Talent Show was organized on May 25, 2016. Students from Different Departments participated in the Event and performed in singing, Parody, poetry etc.

Leadership and Self-Motivation

Crescendo organized a seminar on May 28, 2016 on "Leadership and Self-Motivation". Mr. Hannan Ali Abbasi was the guest speaker. He discussed how a person can become a leader and what role a leader plays in the development of a nation.

C.U.S.T. Studio

A singing Talent Show was organized on May 31, 2016. This singing Talent Show provided the Students of C.U.S.T. a proper platform where they could show their talent and test their abilities. C.U.S.T. studio aimed at identifying singers and musicians and named them as C.U.S.T. stars.

Girls' Gala

An exclusive event for girls was arranged on June 06, 2016. It was a welcome opportunity for the girls to enjoy themselves in an exclusively female environment.



C.U.S.T. Participates in Rozee.Pk Employment Expo

Office of Corporate Linkages collaborated with Rozee.pk to make C.U.S.T. students participate in Employment Expo, PARVAAZ on May 8, 2016 held in Pak-China Trade Center. Office of Corporate Linkages promoted the event and managed to register 192 students from all departments.



Dawn Exhibits at C.U.S.T.

Office of Corporate Linkage Facilitated to bring DAWN team to set up a stall to promote prestigious DAWN magazines: the monthly Herald and bimonthly Aurora. Both magazines offered subscription on discounted rates.

C.U.S.T. Participates Change Management Workshop

CDA training academy arranged a 3 days workshop on change Management. Dr. Ansir Ali Rajput attended the workshop held on May 10, 2016, at Convention Center, Islamabad. Head of diplomatic mission of U.A.E. was the guest of the honor at occasion.

Dawn Expo, Feb 13-14, 2016

C.U.S.T. participated in the DAWN Expo. 25+ local and international universities exhibited in the event. A database of queries was prepared and 100+ contacts were recorded. University brand bags, cups and university prospectus were presented to the visitors.



C.U.S.T. Participates in THE NEWS Education Expo, Peshawar

A three member team represented Capital University of Science and Technology, Islamabad at THE NEWS Expo-2016 held at Peshawar on May 17, 2016. The chief guest for the day was Mr. Mushtaq Ahmad Ghani, Minister Higher Education & Information KPK.



Participation in Social Sciences Expo by JANG

C.U.S.T. participated in the Social Sciences Expo organized by JANG Group on February 24-25, 2016 at Islamabad. C.U.S.T. had prospectuses, flyers, JBR Copies to



highlight research culture at the campus, videos of C.U.S.T. convocations, on campus student life and student projects were showcased on the LCD.

C.U.S.T. Participates in THE NEWS Expo, Islamabad

On May 25-26, 2016 THE NEWS group arranged an Educational Expo. The Capital University of Science and Technology, Islamabad participated as one of the prime sponsor of the event. Student and parents who visited C.U.S.T. booth were interested to know about engineering programs and MS, PhD programs. Some of the giveaways at booth were prospectus, flyers, brochures, programs list card, admission advertisement, scholarship scheme, candies, cold drinks etc.

Social Events of Management & Social Sciences-Spring 2016

- On February 18, 2016 a Seminar on “Educational & Cultural Exchange Programs” by The United States Educational Foundation of Pakistan (USEFP) was arranged. Ms. Shanza guided the students regarding the Fulbright Scholarship Program and the Global Undergraduate Exchange Program - Pakistan (Global UGRAD-Pakistan).
- On April 05, 2016 a seminar was conducted on “The Importance of Building a Professional CV, Resume, Interview and Communication Skills”. The guest speaker was Mr. Tariq Mehmood, Director Academia, Chenab Group of Colleges.
- On April 05, 2016 a workshop on “The Importance of Self Esteem and Opportunity Utilization” was held. Mr. Talha Azhar, Entrepreneur, Coach and Mentor, British Council was the trainer.
- On April 13, 2016 a seminar on “Islamic Etiquettes in Personal Grooming” was organized. The guest speaker was Mr. Saeed Anwar.
- A seminar was held on April 14, 2016 on “Climate Change & Effects of Deforestation on Glacier Receding across HKH (Hindukush Karakoram & Himalayas)”.
- On April 17, 2016 a seminar was organized on “Muslim Entrepreneurship”. The guest speaker was Mr. Junaid Jamshed.
- On May 02, 2016 a seminar on “Barriers of Communication Skills” was held. The guest speaker was Mr. Khurram Elahi (Lecturer, PIED, Islamabad).
- On May 03, 2016 a seminar on “The Power of Negotiation and Convincing Skills” was organized. The guest speaker was Mr. Ghazanfar Gul, GM Commercials, e2e Logistics.
- On May 10, 2016 a seminar on “Why Me” was held. The Guest speaker was Dr. Yousuf Raza, Post Graduate Training Institute of Psychiatry, Benazir Bhutto Hospital, Rawalpindi.
- On May 10, 2016 a seminar on “International ECO Internship Programme by WWF” was held. The guest speaker was Ms. Maham Tanveer, Senior Programme Officer -IEIP.
- A seminar on “Gallup Pakistan Socio-Economic Research Projects” was conducted on May 11, 2016. The guest speaker was Mr. Umer Taj, Chief Innovation Officer, Gallup Pakistan.
- A high-profile policy seminar was held on the topic of “Re-visiting Budgetary Priorities in Pakistan” on May 11, 2016. The distinguished speakers included Mr. Qaiser Sheikh, MNA, and Chairman Standing Committee on Finance at the National Assembly; Mr. Faheem Sardar, CEO Askari Securities; Mr. Naeem Siddiqui, CEO Computer Super Market; and Mr. Mian Ramzan, a Chartered Accountant and an eminent speaker on indirect taxation.



- On April 28, 2016, a workshop on “The Use of SPSS and Excel for Graph-making” was held. The guest speaker was Dr. Ayesha Noor, Assistant Professor, Szabist.
- On May 02, 2016, a seminar on “Importance of Body Image and Self-Esteem” was held. The guest speaker was Dr. M. Nadeem Umar (Wellbeing Medical Centre, Dubai, U.A.E.).



- On May 12, 2016 a seminar on “Presentation Skills” was held. The guest speaker was Mr. Muhammad Faisal, Head of Training and Development, Touchstone Communications.

- A seminar was conducted on the topic “International Business Management in Islam” on May 12, 2016. The guest speaker was Raja Zia-ul-Haq who is a media person and a well-known Islamic scholar.
- On May 12, 2016 a seminar on “Economic Systems of Islam in Comparison With other Systems” was held. The guest speaker was Mr. Mirza Rizwan, Assistant Director, State Bank.
- A seminar was held on May 13, 2013 with Mr. Waqas Sheikh as a guest speaker; Managing Head of HP Islamabad. The objective was to make the students familiar with HP printing devices especially the ones that could help them along the way of academic front.
- A workshop on “Analysis of Pakistan Stock Exchange (PSX)” was conducted on May 17, 2016. The guest speaker was Mr. Ayaz-ul-Haq, Lecturer at Center for Professional Studies, Rawalpindi Campus.



- A seminar on “Securities & Exchange Commission of Pakistan and Career Counseling” was organized on May 23, 2016. The guest speaker was Additional Director of Securities & Exchange Commission of Pakistan (SECP), Mr. Mubbasher Hassan.
- On May 23, 2016 a seminar on “Psychology of Islam, Sufism and Personal Grooming” was held. The guest speaker was Dr. Zeeshan Qadir, PhD Marketing (IAE Aix Graduate School of Management, Aix-en-Provence, France).
- A seminar on “Globalization, International Business and Transfer of Technology” was held on May 25, 2016. The guest speaker was Mr. Ali Bin Nadeem, Director Communication at Bin Nadeem Associates.
- A welcome and farewell party was held on May 26, 2016. This event was organized for the graduating students and newly admitted students.

- On May 26, 2016 a seminar on “Pak China Economic Corridor (CPEC)” was held. The guest speakers were Mr. M. Usman Kemal, Assistant Professor, Iqra University; and Mr. Mustafa Hyder Syed, Executive Director, Pakistan China Institute.



- A seminar on “Corporations & Corporate Governance” was conducted on May 31, 2016. The guest speaker was Mr. Mohsin Ali Chaudhry, Corporate Governance Officer, IFC, World Bank Group.
- On June 01, 2016 a seminar on “Safety Measures during Critical Situation-Rescue 1122” was held. Mr. Raheel Sabir, Emergency Medical Technician, Rescue 1122 was the guest speaker.
- On June 2, 2016 a seminar on “Grooming for Success” was held. The guest speaker was Mr. Imran Nabi, Manager Training and Development, Shifa International Hospital.
- A seminar was held on June 02, 2016 with Ms. Shaiza Shahid as a guest speaker. Theme was “Dive into Life”.
- A farewell party for BBA 123 batch was held on June 04, 2016.
- On June 6, 2016 a seminar on “Dressing Etiquettes” was organized. CEO of Monarchy, Mr. Aleeh Qureshi was the guest speaker. He guided students regarding various dressing styles.
- A “Career Counseling Session” was arranged for the last semester BBA batch 123. Ms. Mehvish Ali, CEO of Light House Consultancy was the guest speaker.
- On June 09, 2016 a workshop on “Entrepreneurial Ventures and International Business” was organized. Mr. Hasham Bin Aamir, Corporate Training Executive, The iDeas Club was the guest speaker.

Orientation Semester Spring-2016

Student Affairs Office organized Orientation for the students of semester Spring-2016 on February 13, 2016. The main objective of orientation is to make new students familiar with the system, Faculty, different offices, cafes and library etc. so that students may not encounter any problem

in these areas in the beginning of semester. Deans, Head of the departments and faculty member played an active role that day. Students were also taken on the round of the campus. In the end there was a group photo of new students with the faculty and lavish Hi-Tea was served to them all.



Participation in the HEC Intervarsity Sports Session 2015-16

Capital University of Science and Technology, Islamabad Hockey Team participated in the HEC Intervarsity Sports Session 2015-16 and managed to reach the finals of the HEC Hockey Championship, Zone C. Then the team visited Sargodha for the participation in "All Pakistan Hockey Championship 2016".

Sports Fixture by EME

The event entitled "Sports Fixture" was held on April 02 to 03, 2016 at EME College, Rawalpindi among teams from C.U.S.T, LUMS, FAST and NUST. The event offered Cricket, Hockey, Table Tennis, Badminton and Squash tournaments. Teams from C.U.S.T. Islamabad brought laurels to their university by bagging the first position in Cricket, Hockey, Table Tennis, and Badminton. In squash C.U.S.T. team remained runner-up.

Blood Camp Spring 2016

Student Affairs Office in collaboration with Jamila Sultana Foundation organized blood camp at C.U.S.T.

Islamabad on April 27 to 27, 2016 for Thalassemia Cause. A large number of student and faculty members donated the blood for this very Nobel cause. Jamila Sultana Foundation has been so thankful to the students for blood donations and the University administration as well.



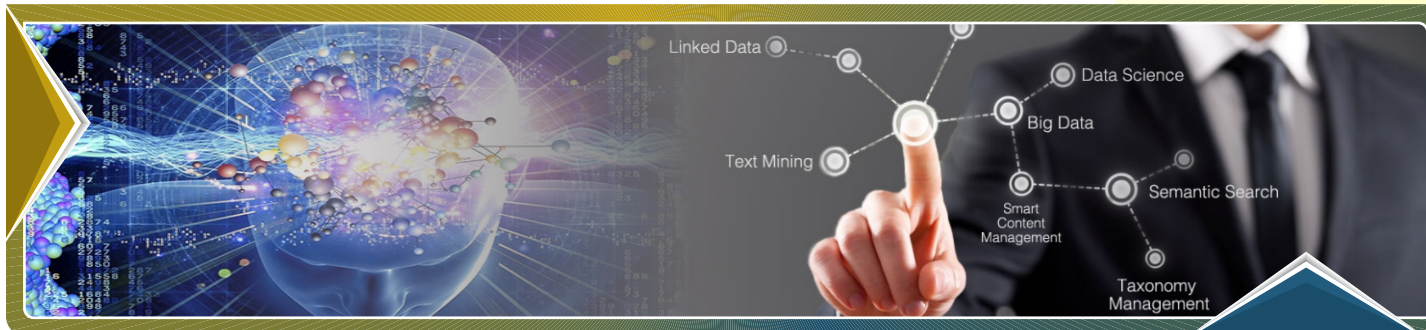
Research Corner - Centre for Distributed and Semantic Computing

Capital University of Science and Technology, Islamabad is known for its research activities. Right now, there are more than 20 research groups of different departments, actively involved in research activities. Among them is, "Centre for Distributed and Semantic Computing" of Computer Science Department which has made great progress in the last one decade. The group leaders are Prof. Dr. Muhammad Abdul Qadir, Dean Faculty of Computing and Dr. Muhammad Tanvir Afzal, Associate Professor. This group was founded in 2004 by Prof. Dr. Muhammad Abdul Qadir and led by Prof. Dr. Muhammad Abdul Qadir and Dr. Muhammad

- Information Visualization

This is an active research group which focuses on real world problems and their applications.

The group has produced two PhD's so far and 10 PhDs are pursuing their PhDs in this research group including 4 scholars who are near to complete their PhDs. It offers specialization stream, "Web Information Systems" for MS students and more than 50 MS theses have been supervised. More than 100 research publications, in international journals and conferences, have been produced by the



Tanvir Afzal since 2010. The group focuses on following research areas:

- Semantic Web, Social Web, Web Mining
- Semantic Query Processing
- Algorithms
- Sentiment Analysis
- eLearning, Knowledge Management
- Knowledge Diffusion

active researchers of this group. Moreover, the group has Published/edited 4 books with leading international publishers.

Dr. Tanvir Afzal is also serving as Editor-in-chief of ISI impact factor journal (Journal of Universal Computer Science). The group has successfully completed a research project of worth 15 million and another research project of worth more than 26 million is currently going on under the supervision of prof. Dr. Muhammad Abdul Qadir.

Graduate Seminars- Spring 2016

Department of Computer Science, Capital University of Science and Technology, Islamabad conducted two sessions of Graduate Seminars in spring 2016. First session was conducted on March 03, 2016. Two presenters presented their research work. Mr. Tariq Hussain of Department of Mathematics presented, "Radioactive Hydro Magnetic Flow of Jeffery Nanofluid by an Exponentially Stretching Sheet". This research is supervised by Dr. M. Sagheer. Ms. Sadaf Yasmin of Computer Science Department presented, 'Efficient Routing Framework for Opportunistic Networks', supervised by Dr. Aamir Qayyum. Second session was conducted On April 07, 2016. Two presenters presented their research work. Mr. Riaz Ahmed of Computer Science Department presented, 'Information Extraction from PDF Sources on Rule-based System Using Integrate Formats', Supervised by Dr. Tanvir Afzal. Mr. Zohaib Hassan of Computer Science department presented, "Modified MinG Algorithm to Find Top-k shortest paths from large RDF Graphs", supervised by Prof. Dr. Muhammad Abdul Qadir.



Dr. Engr. M. Atiq Ur Rehman Tariq

HoD Civil Engineering

Q1. We would like to know about your academic background.

Dr. Atiq: I received a PhD degree in Civil Engineering with specialization in Water Resources from the TU Delft the Netherlands. I obtained a BSc degree as well as an MSc degree in Civil Engineering from the University of Engineering and Technology (U.E.T.) Lahore.

Q2. What are your research areas?

Dr. Atiq: My broader research area is Water Resources



Engineering and if being more specific I have been developing my expertise in flood management. To be more precise, my research aims particularly to the risk-based flood management in the developing countries like Pakistan.

Q3. What is the importance of the field of Civil Engineering and how our young Civil Engineers can contribute to the development of the country?

Dr. Atiq: Civil Engineering is one of the oldest existing professions; relatively broader field as compared to other engineering disciplines. Additionally, the stream itself has many specializations. It is playing a critical role in the development of societies; universities, hospitals, roads, bridges, railways, airports, water supply schemes are just a few examples. In short, the civil engineer is playing its role

MEET THE FACULTY

to increase our standard of living.

Q4. Tell us about your professional achievement.

Dr. Atiq: Recently I have been training faculty members of different universities, for instance, IIUI; City University, Peshawar; COMSATS, Abbottabad etc. about Outcome Based Education (OBE) system along with my faculty member Engr. M. Abu Bakar Tariq. Being PEC approved accreditation expert, I visit different universities for PEC accreditation. I am also HEC approved supervisor for MS and PhD thesis. Furthermore, I have developed Civil Engineering Department of C.U.S.T. Islamabad and COMSATS Abbottabad. I am a member of selection board of IIUI and Mirpur University, Azad Kashmir. I am a reviewer of international journals. One of my conference papers was awarded as best conference paper in an International conference. Additionally, another research article was recognised as best Journal Article declared by Science Direct ranking for the year 2012. I am also among the pioneer trainers of HEC RAS 2D software in region that is lately introduced by United Army Corps of Engineers.

Q5. Is Civil Engineering suitable for females?

Dr. Atiq: Let me share a story. A shoe company sent their two employees to Africa for selling shoes. Both contacted their parent organisation on the first evening. First employee asked for a return ticket because according to him there was no trend of wearing shoes in Africa. While the second employee inquired about the present manufacturing capacity of the factory. According to him, everyone needed



a pair of shoe in Africa. The point that I want to highlight is that although it is a male dominating profession by virtue, yet there is prospect for females to get into the profession and fill the gap.

Q6. As compared to other departments, Civil Engineering is new in C.U.S.T., how do you see the future of Civil Engineering in C.U.S.T. and at national level?

Dr. Atiq: It is a bit expensive and resource consuming to set up labs of Civil Engineering. At the national level, there are only a few universities, which are offering Civil Engineering. On the other hand, we have much more demand of Civil Engineers. If we consider the demand or we continue with the pace of progress with which we should continue, then we should have even more

institutes to produce civil engineers. I cannot predict for a longer, but if we consider further 10 years then of course Civil Engineering is still booming; considering Pak-China Economic Corridor and other opportunities even there are other new agreements with which we can expand our infrastructure. Therefore, I do not see Civil Engineering is going to have any kind of decline in near future.

Q7. Your message you would like to give to the students.

Dr. Atiq: I would like to give my message to the youth of my nation in general and to the students in particular. Rather to be a pessimist and just point fingers towards shortcomings of the system, it would be fruitful to play your role in a positive way to improve the system.

PUBLICATIONS SPRING-2016

1. **Raabia Asif, M. Arshad Islam**, "Finding most Collaborating Mathematicians: A Co-author Network Analysis of Mathematics Domain", International conference on Computing, Electronic and Electrical Engineering (ICE Cube). March 2016
 2. Jafar Hussain, **M. Arshad Islam**, "Evaluation of Graph Centrality Measure for Tweet Topic Classification", International conference on Computing, Electronic and Electrical Engineering (ICE Cube). March 2016
 3. Zohaib Hassan, **Muhammad Abdul Qadir, Muhammad Arshad Islam**, Umer Shahzad, Nadeem Akhtar, "Modified MinG Algorithm to Find Top-K Shortest Paths from large RDF Graphs", European Semantic Web Conference 2016-Challenges, June 2016
 4. **Muhammad Afzal**, Rab Nawaz, Asim Ullah, "Attenuation of Dissipative Device Involving Coupled Wave Scattering and Change in Material Properties, Applied Mathematics and Computations", 290 (2016), 154-163.
 5. **Ishtiaq Hassan**; Abdul Razzaq Ghuman, Hashim Nisar Hashmi, "Global warming and temperature changes for Saudi Arabia", Journal of Biodiversity and Environmental Sciences (JBES), ISSN: 2220-6663 (Print) 2222-3045 (Online), No: 1, Pages: 179-191, 2016
 6. **Tariq, M.A.U.R.**, "Pakistan's Flood Management and Safety Standards in Context of Water Resources Pricing. Soil and Water Resources: Utilization, Allocation and Pricing", Department of Irrigation and Drainage, FAE & T and Water Management Research Centre, Faisalabad, Pakistan, 2016.
 7. **Azfar Khalid**, Pierre Kirisci, Zeid Ghrairi, Jurgen Pannek, KD Thoben, "Safety Requirements in Collaborative Human-Robot Cyber Physical System", 5th International Conference on Dynamics in Logistics (LDIC), , Bremen, Germany, 2016
 8. **M. M. Khan**, J. Helie, M. Gorokhovski, "Large Eddy Simulation of a Turbulent Spray Jet Generated by High-pressure Injection: Impact of the in-nozzle Flow", Journal of Turbulence, No: 9, Pages: 823-846, 2016
 9. **M. M. Khan, N. A. Sheikh**, "Identification and Characterization of Coherent Structures in Gasoline Injector nozzle Flow Using Proper Orthogonal Decomposition", Journal of Mechanical Science and Technology- Springer, No: 8, Pages: 3673~3680, 2016
 10. **N. A. Sheikh**, S Manzoor, M. M. Khan and M. Ali, "Hydrodynamic Description of a Vibrofluidized Granular Bed Driven at High frequency ", European Journal of Applied Physics, No: 3, 2016
 11. M. Imran, **M. T. Afzal, M. A. Qadir**, "Malware Classification Using Dynamic Features and Hidden Markov Model", Journal of Intelligent and Fuzzy Systems (JIFS), vol. 31, no. 2, pp. 837-847, 2016 (**IF: 1.004**)
 12. N. A. Sajid, **M. T. Afzal, M. A. Qadir**, Multi-label Classification of Computer Science Documents Using Fuzzy Logic, 44(2), pp.155-165. DOI: <http://doi.org/10.4038/jnsfsr.v44i2.7996> (IF: 0.203) March 2016
 13. Book Chapter: "Imaging, Multi-scale and High Contrast Partial Differential Equations" **Muhammad Afzal** Muhammad Ayub, Rab Nawaz, Abdul Wahab, Mod-matching solution of a scattering problem in flexible waveguide with abrupt geometric changes, American Mathematical Society, Contemporary Mathematics, **660(2016), 113-129**
- (This list includes only a part of the total publications due to shortage of space)

NEWS IN PICTURES



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