

Annual Report, 2012

The year 2012 at the IEEE, UET Taxila Chapter has been quite a busy one!

Keeping in view the current trends in research and the popular requests of our varsity students, we conducted 5 major events during the year. The **Workshop on Power Engineering** delivered by Prof. Dr. Saifur Rahman from Virginia Tech was for those with the serious, research-oriented flair, while the **Workshop on C++ Programming** conducted by Waseem Khan from NUST [National University of Science and Technology] was to introduce third semester students to the world of C++ programming.

With serious matter comes something fun too; toward that end, we arranged a **RoboBuster** contest, and two events during **DICE** [Distinguished Innovations, Collaborations and Entrepreneurships] '12: a Quiz Competition and Discover UET.

Workshop on Electrical Power Education: the Global Perspective



The IEEE, UET Taxila Chapter held a **workshop on Electrical Power Education** in the context of the global scenario on **10-October** in the varsity Conference Hall.

The lecture was the first of its kind in UET Taxila by the local IEEE Chapter.

Prof. Dr. Saifur Rahman

Prof. Dr. Saifur Rahman was the lead speaker of the workshop. Dr Saif is a PhD Joseph Loring Professor of Electrical and Computer Engineering, Director for Energy Advanced Research Institute, Director Centre for Energy and the Global Environment at Virginia Tech, as well as the Vice President for Publications at the IEEE Power and Energy Society.

The talk took students from all departments and faculty members through the latest happenings in the world of Power Engineering; from Renewable Resources to Smart Metering at homes, no major topic was left untouched. Dr. Saif presented authentic statistics to the audience on the recent trends in the type of energy generation resources used region-wise. This was done not just to emphasize how far ahead the developed countries are from the under-developed ones like Pakistan, but also to show us that no, all is not bleak - we can come up to the same mark too. All that is needed is a spark of genius and a few wisely chosen industry-academia collaborations.

The audience participated actively in the Q&A session towards the end.

The knowledge gained was priceless as the feedback at the end of the session suggested; not just in the broadening of perspective gained by us as a result, but also in giving students the hope that they can achieve, plan, and be an active part of the wider R&D plans to make a real difference in the country.

Workshop on C++ Programming

C++ has extensive use and application in today's world. It is used in systems software, embedded systems, and even in the development of video games we so love.

Keeping this in mind, the IEEE, UET Taxila Chp held a **1-day workshop on C++ programming** for varsity students on **19-Oct, 2012**. Students of the third semester were especially encouraged to participate since it was their first encounter with the environment yet.

An expert in C++ coding was invited from SEECS [School of Electrical Engineering and Computer Science] at NUST. **Waseem Khan**, former student of UET Taxila, expert programmer and currently enrolled in a Masters in Engineering program at SEECS came over to deliver the **3-hr lecture**.

Simplistic PowerPoint slides were used to convey the ideas in an effective way. Examples of codes were demonstrated step by step to ensure students followed the topic at hand in real-time.

'Object Oriented Programming in C++' by Robert Lafore was the recommended textbook to accompany the lecture.

Students at the workshop; Waseem Khan is explaining in his charismatic manner.



RoboBuster '12

17-May, 2012.

Wait, something is happening at the **Communications Lab**, you say?

And you're not wrong, since we're having our very own RoboBuster contest there! The joint venture of the IEEE UET Taxila Branch and the SIEP [Society of Innovative Electrical Professionals] saw the event pulled through successfully.



drawn against a blue background, as can be seen in the adjacent picture; robots were supposed to start at the **IN** point, and after roving around the lab floor exit at the **OUT** point. Junction crossing was wholly dependant upon the robot's MCU programming.

The event was presided over by Dr. Ahmed Chaudhry [Chairman Dept of Electronics Engineering], Dr. Gulistan Raja [Student Advisor IEEE UET Taxila], Sir Junaid Mir and Sir Adnan [lab teachers] and the IEEE UET Taxila Chairperson Syed Husnain Tanweer; SIEP cabinet members were present too.

8 teams participated in the first-ever event of it's kind in UET Taxila. The theme of the 'Buster was to build a **line-tracking robot** that could follow a white circuit

The participating teams had worked hard on their machines each, it was easy to tell. But as with all competitions one team steals the cup; **Team Electron** won the RoboBuster '12.

DICE Connect 2012 [Quiz Competition + Discover UET]



The DICE [Distinguished Innovations, Collaboration & Entrepreneurship] 2012 was hosted by UET Taxila this year. Varsity student organizations conducted various competitions for both UETians and visiting students from other institutions.

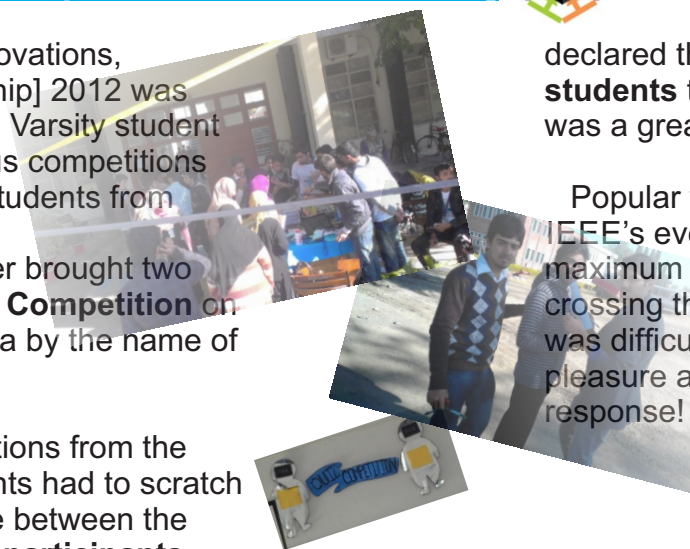
The IEEE UET Taxila Chapter brought two events for the students: a **Quiz Competition** on **19-Dec**, and a fun extravaganza by the name of **Discover UET** on **20-Dec**.

The quiz was based on questions from the analytical domain where students had to scratch their heads (literally!) to choose between the apparently similar options. **135 participants** took the challenge - quite a brain-teaser it was!

Discover UET was an interactive way to get students extra-UET Taxila familiar with the campus. Clues were posted around and the team to clock earliest with most clues was

declared the winner. **Over 90 students** took part and the event was a great success.

Popular word had it that the IEEE's events were the best with maximum participation. Without crossing the threshold of vanity, it was difficult to contain our pleasure at the wonderful response!



Who knew September could be so full of activity; those lazy days, time of university reopening?

But the Pakistan Student Gold and WIE Conference [PSGWC '12] organized by the IEEE GIKI Chapter saw the campus buzzing with activity.

Over 23 engineering institutions from all over the country attended the conference and participated in the various events during the 3-day duration. NUST, PIEAS, UET Lahore were just a few of the top names present.

And UET Taxila was not far behind!

We won our **first ever** Ambassadorial Award for the 2nd best Ambassador to the event.



The PSGWC brought something to the table this time with the introduction of new events in addition to the standard three, along with a practical theme focusing on the immediate needs of our country: **Practical Solutions to the Power Shortage Problems faced by Pakistan and Green Electronics**.

Besides the win UET Taxila was an active part of the conference. Syed Tanweer Kazmi's exhibit at the project exhibition received a lot of appreciation. His theme was: Voltage **Stabilization by PID control on Servo Motor**.



Another student competed in the **Poster Designing Competition** with the theme: Education for All; Talha Yasin, Vice-Chairperson IEEE UET Taxila presented his views fluently in the **Social Innovation Contest**.

A contingent of reporters from **Revolution Flame** were present for minute-by-minute reporting. Their report on the PSGWC '12 has a column dedicated especially to the initiative and activity shown by UET Taxila

during the conference.

You can read it at the following link:

<http://revolutionflame.com/2012/10/pakistan-student-congress-2012/>



Punjab Youth Festival: the first of its kind seen by the youngsters of Pakistan. It provided students of all educational levels and diverse cultural backgrounds from all

over the province to participate in a mind-bogglingly large array of competitions and record-making attempts. The festival started from the lower levels of the 'tehsil' and district and gradually moved up to the varsity level, then finally leveling off with the national championships.

UET Taxila participated actively and we got over 700 registrations for the events.

And not just that, we got out very first win in a NATIONAL robotics challenge too! **ElectroWarrior**, the robot fabricated by the joint effort of IEEE UET Taxila Chairperson Syed Tanweer Husnain and Sir Adil Farooq [lab engineer], won the top slot.

Elector Warrior, abbreviated simply to Electro in university-speak was a force to be reckoned

with in the arena. Charlie Foxtrot from the PAF-KIET and K-Series from the Islamic International University were no match for the 'Warrior' which duly lived up to its name. Weighing over 50kg and painted in your traditional 'Al-Khair' tank-style, Electro pushed and shoved its way against the other two robots. The contest was broadcast live on **Geo Super**.



Bravo, ElectroWarrior!

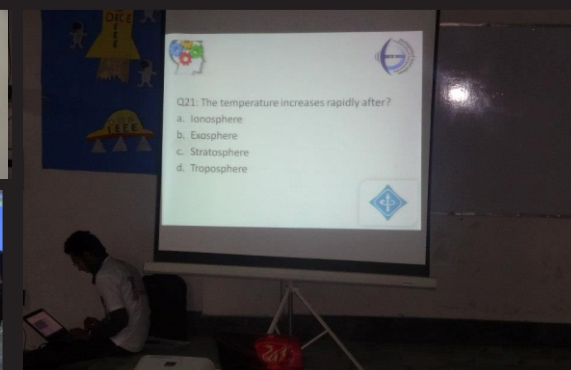
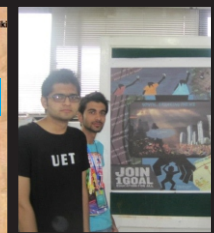
Branch Counselor:
Prof. Dr. Gulistan Raja

Branch Chairperson:
Syed Husnain Tanweer;
Vice-Chairperson:
Talha Yasin;

***SIEP [Society of Innovative Electrical Professionals] is a native technical society based in the Dept. of Electrical Engineering, UET Taxila**
***3-member teams for DICE events**



2ND BEST
AMBASSADOR@PAKISTAN
YOUTH CONFERENCE, GIKI



20 12 2012

