Tribute to Prof. Pervaiz Vandel
By
Prof Shahnawaz Zaidi

News Flash:
Visit to Ejaz Galleries
Exhibition of Works by Faculty of Architecture and Design CIIT Lahore
Music Workshop for Faculty
Juries of Hospital Project (Third Year)

Building of the Month
Sears Tower by Ar. Shazia Hanif

Software of the Month
Autodesk Revit by Ar. Mansoor Ahmed

Assignment and Workshop:
Puppet Making, Face Painting, Oil Pastels, Short Films by Miss Zamania and Shahzaib

Students Work
“Khwab hey Zindagi” by S.H. Naqvi
“Silent” by Areeba Arshad
Visit to Ejaz Gallery by Faculty and Students:

Seeing the work of Master Enriches your Aesthetic vocabulary and elevate ones understanding of the Art

Keeping the same objective in mind students and teachers with the kind presence of Prof Shahnawaz Zaidi have visited Ejaz Galleries, to see the Exhibition by various Artist including Saeed Akhtar, RM Naeem. Students really enjoyed and appreciated the work of great masters.
“EXHIBITION OF WORK”
Faculty of Department of Architecture & Design CIIT Lahore

Ar Sana Taimur presenting her work to the Dr Sahukat Ali Hayat Director CIIT

Ar Saba Samee presenting her work
Teachers work exhibition

Ar. Amna Jahangir presenting her work done during her masters
In continuation with exhibition of Faculty works, Artist including Miss Zamania, Miss Shahzaib, Miss Sadia Farooq have displayed their work at the Residence of Mr. VandeL (Advisor Architecture Department).

The Exhibition was very well appreciated by the professional and Students. A lot of visitors have visited the exhibition among which the prominent visitors were Dr. Shaukat Ali Hayat, Mr. Sheikh Hanif, Mr. Saeed Akhtar, Mrs. Colin David, Faculty and students of Punjab University.

Group Photo of Exhibiting Artist (L to R Miss Sadia Farooq, Miss Zamania, Miss Shahzaib,) with Mr & Mrs Vandel after the exhibition.
Special Music workshop was organized by Prof Shahnawaz Zaidi at his residence accompanied by a lunch. During the workshop Tutor Mr. Israr Chishti (Head of musicology Department, University of Punjab) has briefly explained the Structure of Music and Ragaz.

Mr. Israr Chishti Teaching the Ragaz during the Workshop

Architecture Faculty is enjoying the Music Classes
Juries of Project “Hospital”

A project designed by third year architecture students.

The juries of Hospital project designed by Students of Third Year Architecture were held at the Department of Architecture, Mr. Umer Farooq Khan Kakar and Mr. Khalid Bajwa were invited as the external jurors, who really appreciated the quality of student’s work and highlighted the problems in their work.

Renowned Architect including Mr. Shaukat Nawaz Raja, Mr. Umer Farooq Kakar, Mr Asim, Mr Wasim Khan while the juries of Third Year
In our Building of the Month Section Arch Shazia Hanif explores the Structural System of the Sears Tower Chicago.
The Sears Tower is an example of the revolutionary **bundled-tube structural design**.

Tube buildings gain most of their structural support from a rigid network of beams and columns in their outer walls. Which act like the walls of a hollow tube. The Sears Tower is actually a bundle of nine tubes, and is considered one of the most efficient structures designed to withstand wind. This is a great design for a skyscraper in Chicago, the "Windy City," where the average wind speed is 16 miles per hour. As the building climbs upward, the tubes begin to drop off, reducing the wind forces on the building. The nine tubes all reach forty-nine stories. At that point, two tubes end. The other rise up to the sixty-fifth floor. From the sixty-sixth to the ninetieth floor, the tower has the shape of a crucifix. Two tubes, creating a rectangular, reach the full height of 443 meter (1457ft). The Tower's heavy weight -- more than 440 million pounds -- is also supported by 114 piles sunk deep into the earth so that they stand firmly on hard, solid bedrock.

**Wind Load:**
To provide stability against high winds, architect Bruce Graham and Fazlur Khan used a new form of tubular construction for Sears Tower. Two hundred sets of bundled tubes were laid into the bedrock. Then, 76,000 tons of prefabricated steel in 15' by 25'sections were put into place. Four derrick cranes moved higher with each floor to lift these steel "Christmas Trees" into position.

**What is bundled-tube structural design:**
In structural engineering, the **tube** is the name given to the systems where in order to resist lateral loads (wind, seismic, etc.) A building is designed to act like a three-dimensional hollow tube, hence the name, cantilevered perpendicular to the ground. The system was introduced by Fazlur Rahman Khan. The perimeter of the exterior consists of closely spaced columns that are tied together with deep spandrel beams through moment connections. This assembly of columns and beams forms a rigid frame that amounts to a dense and strong structural wall along the exterior of the building which resist all lateral loads. Interior columns are comparatively few and located at the core. The distance between the exterior and the core frames is spanned with beams or trusses and intentionally left column-free. This maximizes the effectiveness of the perimeter tube by transferring some of the gravity loads within the structure to it and increases its ability to resist overturning due to lateral loads. A significant advantage of the Bundled Tube system is the enormous torsional resistance which is helpful in absorbing torsional lateral forces due to asymmetry. In this case, the torsional loads were generated both by wind and seismic forces. In the Sears Tower, the Bundled Tube is composed of 22,86m square modules, and nine modules are lumped together to form the total system.
These tubes rise to different heights and are terminated when they are no longer needed architecturally and structurally. The walls of the tube are formed by columns at 4.57m centres and deep frame beams at each floor. The introduction of Framed Tube lines on the interior greatly reduced the influence of the "shear lag" effect that is present in exterior tubes of large side dimensions. The intent of the system was not only to create a powerful structural system, but also to create vertical modulation in a logical fashion. The development of a variety of floor sizes and shapes in the same building is considered a positive asset from the point of view of marketing real estate.

**Framed tube:**

This is the simplest incarnation of the tube. It can take a variety of floor plan shapes from square and rectangular, circular, and free form. The most notable examples are the Aon Center and the destroyed World Trade Center towers. The Framed-Tube buildings that have hitherto been adopted in wind controlled environments are now being adapted to seismic designs, such as the Crocker Centre.

**Trussed tube:**

Also known as the *braced tube* it is similar to the simple tube, but with comparatively fewer and farther-spaced exterior columns. Bracing is introduced along the exterior walls to compensate for the fewer columns by tying them together. The most notable examples are the John Hancock Center, the Citigroup Center, and the Bank of China Tower.

**Bundled tube:**

Instead of one tube, a building consists of several tubes tied together to resist the lateral forces. Such buildings have interior columns along the perimeters of the tubes when they fall within the building envelop. Notable examples include Sears Tower and One Magnificent Mile.

**Hybrid tube:**

A varied category of structures were the basic concept of the tube is used, but supplemented by other structural support methods. One example is 780 Third Avenue on Manhattan, a 50-story concrete frame office building. Its plan and height-to-width ratios as well as column spacing exceeded the criteria necessary to create an effective tube structure. A concrete braced tube (created by infilling window openings with concrete panels) supplemented with shear walls within an off-center core laterally stabilize the building.
Revit Architecture

Revit Architecture, from Autodesk, is building design software that is optimized for Building Information Modeling (BIM) and is ideal for sustainable design. Users of Revit Architecture gain insight into their projects with the ability to work in any view and see 3-D designs in fully rendered screens. All changes made throughout a project are automatically updated across all plans, schedules and construction documents, helping to eliminate errors. Additionally, users of this building design software can receive timely feedback on project design, scope, schedule and budget, allowing them to make late-stage changes without getting off track, according to Autodesk.

Revit Architecture features bi-directional associatively. This stores all project data in one place so that, when a change is made to one part of a model, all information is changed correspondingly throughout the model. This building design software also comes with parametric components, which offer graphical systems for design thinking and form making, as well as a detail library and detailing tools, material takeoff, design visualization, interference check.

Finally, the Revit Building Maker enables users to import conceptual massing from a variety of applications -- including Form-Z, Rhino, Google Sketchup, AutoCAD 2007 and other ACIS and NURBS-based applications -- and turn them into mass objects for design, according to Autodesk.
Assignments and Workshop
By Miss Zamania and Miss Shahzaib

PUPPETS: A project was assigned to the students to create puppets. In order for them to be able to depict their imagination of a character as they thought best. Many great ideas came forth, thus giving them a feeling of freedom of presentation of their own thinking. And eventually giving them a broader thinking capacity while maturing their minds.
Assignments and Workshop
By Miss Zamania and Miss Shahzaib

FACE PAINTING/MOTIF:

Face painting and motif was a combination of two ideas. As each student had to think of and develop a motif, they were told to paint it on themselves. Hence giving them a sense of harmony between a design or painting and the canvas or environment. Again the confidence to portray what they are feeling and to feel confident with themselves.
Assignments and Workshop
By Miss Zamania and Miss Shahzaib

OIL / PASTELS:

The concept behind letting the students to work in new mediums was intended to let them grow in their capabilities. For them to have a broader range in techniques and concepts. Since one can strive more in this market when having broader concepts in more mediums.
Assignments and workshop
By Miss Zamania and Miss Shahzaib

SHORT FILMS:
Short films were thought of in order to develop the imaginative and productive mindsets of students. To help them learn from their own imagination, and hence share it with their fellow students. In a way a story telling scenario where everyone was a teacher and everyone learnt. Many un-talked-of thoughts and concepts were portrayed and discussed thoroughly, with great interest being developed amongst the students.
Lamps made by the Student of First Year
Khawab hey Zindage

Khushi o ghame ka hisab hey zindage
Ik mahtaab hy zindage
Khawab hey zindage

Byhta Aab hey Zindage
Aik namukamal kitab hey zindage
Khawab hey zindage

Har tarha ki rangene lapytey huy
Ik damakta shabab hy zindage
Khawab hey zindage

Tamam masti ko khud main
Samay huy,
Ik chalakta sharab hy zindage
Khawab hey zindage

Hakekat ka ruup dhaarey huy
Aik sarab hey zindage
Khawab hey zindage

S.H.Naqvi
Silent
By Miss Areeba Arshad

Her eyes painting the perfect picture
Her white porcalien face emotionless
The emerald green eyes with hold
Darkness, despair torment,
Learning
Manipulating,
She uses that to her benefit,
Observing
Trying to feel something
Anything at all.