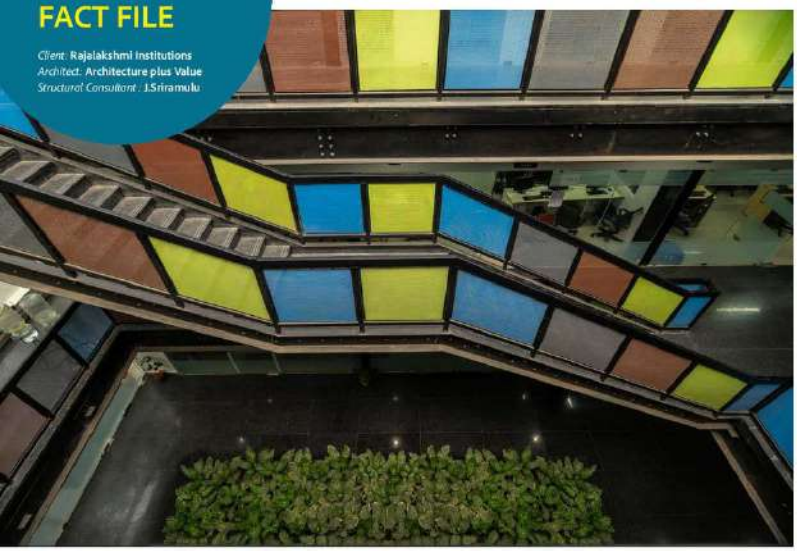
FACT FILE

Client: **Rajalakshmi Institutions**
Architect: **Architecture plus Value**
Structural Consultant : **J.Sriramulu**



ARCHITECT'S INTERPRETATION

In REC Tech-park we had the opportunity to explore Steel as material for Institution projects, which allows for Speed and Light -weight Construction. This project was completed on a record time of 180 days for an AICTE inspection. Overall REC Tech-Park is a successful prototype for using Steel as a construction material in Institution projects which has not been explored in India.

V S VIGNESWAR
Principal Architect, Architecture plus Value

DESIGN PROCESS

The site and climate influences most of the design decisions. The North side had the Admin Entrance. This side also had many trees and good green cover. The South side has the playground, and this acted as the student entrance. The atrium was conceived as a play-full space which bridges both these areas. The Atriums was designed to be naturally lit and ventilated. The roof of the atrium was made with Translucent polycarbonate sheets which allows the natural light into the atrium.

This in turn leads to reflected, glare free light inside the classrooms and programmatic spaces. The Natural ventilation is aided in the atrium through the operable façade on the north and south side of the atrium. The Vegetation on the north and the playground on the south lead to a pressure differential allowing for constant air movement in the atrium which creates a pleasant atmosphere.

FAÇADE DESIGN

The Construction system was an innovative system of Structural Steel skeleton with decking sheet floor system. The sides were cladded with Insulated boards and the roof of the building was designed with Puff Sheet. The Atrium façade was detailed with Operable Glass openings allowing natural ventilation and views. The North and South façade were detailed with Solar rated Mirror glass interspersed with Wooden HPL sheets. This reflects and mimics the natural surroundings and enhances the presence of the building, giving a futuristic feel to the project.

The classrooms and the programmatic spaces were organised on the East and West Sides. These Façades of the classroom has an external double skin which cuts the heat. The AAC wall with Openable Windows were covered with a M.S Structure mounted with Louvers to cut down the Heat & Glare .Also the Services were allocated between the two skins which provided an additional thermal buffer and provides a way to conceal the otherwise ugly and visible service lines in the Building.

Subtle varying colours were used extensively on the interior of the building. The Exterior

of the building was kept in such a manner as to reflect the natural surroundings and greenery. This appeals to the Phycology of young adults and creates an interest in their minds. This creates the sense of being in nature and also brings freshness of thought and action.

The Centre has maximum attendance and the Users thoroughly enjoy the Spaces and the Environment. The Climate friendly design and emphasis on Natural Light and Ventilation creates an Healthy and Positive feel for the entire project. The Identity provided for the Centre through the Architectural Design has helped make it a Landmark in the Context. ■

MIND BOGGLERS

REC-TECH PARK, CHENNAI

This special section covers the out-of-the-box design having steel as an essential element of the design. The main aim of this section is to showcase how steel can be innovatively used in today's world of architecture.

Here AR. V S VIGNESWAR, Principal Architect, Architecture plus Value that ought to turn the tables in the future…

the idea was developing a Tech-Park inside the REC Campus for the purpose of Training Computer Science Engineering students and to provide Incubation Centres which can host young Start-ups. The aim was to encourage the recent graduates to enter the start-up eco-system.

The Building needed to be completed in an express timeline of 180 days as the infra-structure was needed for the upcoming new batch. The site selected was an open land near the existing administration building. Being at the entrance of the Campus the building needed to be innovative and futuristic symbolising the willingness of the University to adapt to the next generation of computer technology.

CONCEPT

The main aim of the design was to provide a great space for the student community to train, socialise and start-up during their formative years. The spaces were designed in such a manner that the learning could continue out of the classrooms and extend into the non-program spaces. This where chance encounters between students and faculty leads to innovative ideas and can lead to start-ups in the future.

The Building was designed as Three Bays with the East and West Bay being the Classrooms and Incubation Centres and the Central Bay being a Day-light Atrium. The Atrium also houses the vertical circulation that enables the students to hang out post classes. The Atrium also functions as a space which allows only indirect natural light to enter the classrooms and computer spaces. The Atrium was naturally ventilated