



BHILAI INSTITUTE OF TECHNOLOGY RAIPUR  
DEPARTMENT OF CIVIL ENGINEERING

# AAKAAR

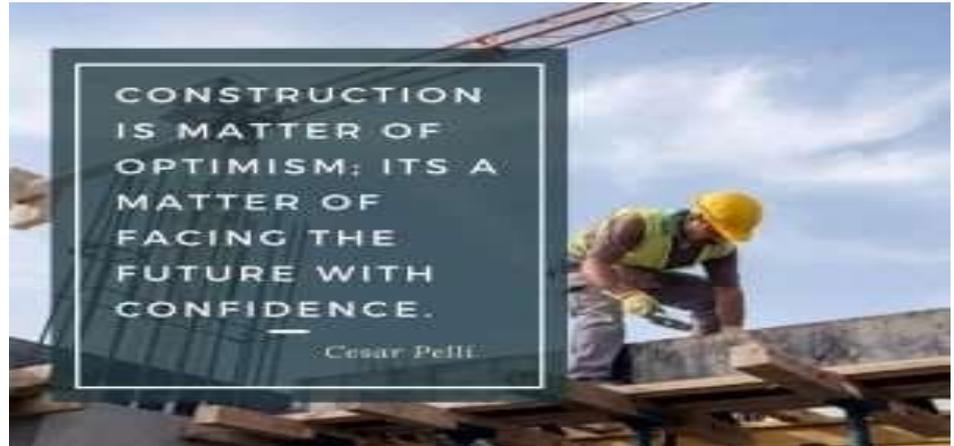
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## Famous Civil Engineers

### H. R. Janardhana Iyengar

Haradanahalli Ramaswamy Janardhana Iyengar (8 September 1908 – 6 February 1991) was an eminent engineer in Mysore, India. He made valuable contributions to the engineering profession during the 1940s and 1950s through his innovative methods and original designs. As an engineering designer, Janardhana Iyengar made various innovations. For example, for Indian Telephone Industries (ITI), he planned large factories using RCC structures, such as arches supported on cantilevered column support: he designed columns safe from arch reaction by using specially designed column footing that would neutralise soil reaction. In 1958, he designed a shell roof for ITI as part of a large factory construction. Between 1950 and 1956, his firm designed and constructed three cinema theatres with RCC trusses in lieu of the standard structural steel frame, given a shortage of structural steel in India. During this period, Iyengar formed an additional engineering company, the United Engineering Corporation. As director, he designed aircraft hangars made of RCC girders, and not of steel, as was common practice. In the 1950s, Iyengar would become a founding partner of an additional company Mysore Chip Boards.

## Zoji-la Tunnel

Zoji La Tunnel is a 14.2 km long road tunnel under Zoji La pass in the Himalayas between Sonmarg and Drass town in Kargil district of the Indian Union Territory of Ladakh, currently under construction, with completion expected about 5–7 years after commencement of construction in 2018. The tunnel along with 6.5 km long Z-Morh Tunnel, (which is 22 km before Zoji La tunnel towards Srinagar) will ensure year-long road connectivity between Srinagar and Kargil which currently remains closed for about seven months due to heavy snowfall on the Zoji La pass which is situated at an altitude of 3,528 m (11,578 feet) on Srinagar-Kargil-Leh highway. Zoji La is 15 km from Sonamarg and provides a vital link with Drass and Kargil in Ladakh but remains closed for 6 –7 months (from November to May) during winter due to heavy snow fall & snow avalanches.



## Building Information Modeling (BIM)

More civil engineering projects this year are likely to see large-scale utilization of the Cloud technology and Big Data. Also, latest in the list of innovation is the Building Information Modeling (BIM). Engineers can now create virtual models of their designs with the help of intelligent 3D modelling. This futuristic technology can speed up the time taken to turn building drawings into reality. Construction of new bridges, and superstructures can gain momentum with workable virtual models of the designs. As BIM and 3D modeling provide engineers a chance to visualize completed designs at the onset, the design process is poised to be cost-efficient and more streamlined in the future.

## Alumini Section



Civil Engineering  
2009-13 Batch

Mr Maharishi Upadhyay of civil engineering 2009-13 batch works at Associate Vice President at Earnest Young a multinational company. He says professors here are all experts in their respective fields and as such are able to provide excellent technical knowledge to the students. The classes are very interactive and faculties to ensure that every student understands what is being taught before proceeding. The technical knowledge gained during studies helped him in his interview process and he suggests that lectures taught in classrooms should be thoroughly followed by all students.

## Departmental Activities

- Students of civil engineering department attended one day workshop held at Pt Ravishankar Shukla university on topic "Ground water management and its issues in Chhattisgarh.
- Day workshop was organized by department on topic Foundation analysis using SAFE software in collaboration with SKY FI lab Bangalore in.
- Mr. Vikram Singh student of civil engineering department represented college at inter zonal basketball championship as captain and won the competition

## Palais Royale, Mumbai

It is the tallest building of India, It is on land previously owned by Shree Ram Mills Ltd. Permits for construction were granted in 2005, and construction began in 2008. The project's progress has been stalled due to multiple public interest litigation lawsuits filed by NGOs Janhit Manch and UHRF, Delhi. These litigations were disposed off by Supreme Court of India in October 2019. In its judgement the Court observed that the lawsuits lacked consistency and bonafides. The promoters of the project have contended the lawsuits to be motivated and sponsored by private interests of rival builder Mufatraj Munot of Kalpataru Builders. The site was put up for auction in May 2019 without any buyers. Another auction was held in mid 2019, and the incomplete site was bought by a company named Honest Shelters for ₹ 705 crore. The Building's height is 320 meters.

### Silent Features

Floor count	88
Floor area	310,000 m <sup>2</sup> (3.3×10 <sup>6</sup> sq ft)
Lifts/elevators	12
Architect	Talati Panthaky Associates
Structural engineer	Sterling Engineering Consultancy Services Pvt. Ltd., Mumbai
Main contractor	Raghuveer Urban Constructions
Opened:	30 June 2009



## Green Roofs

A green roof system is an extension of the existing roof which involves, at a minimum, high quality waterproofing, root repellent system, drainage system, filter cloth, a lightweight growing medium, and plants. Green roof systems may be modular, with drainage layers, filter cloth, growing media, and plants already prepared in movable, often interlocking grids, or loose laid/built-up whereby each component of the system may be installed separately. Green roofs can be defined as "contained" green space on top of a human-made structure. This green space could be below, at, or above grade, but in all cases it exists separate from the ground.

