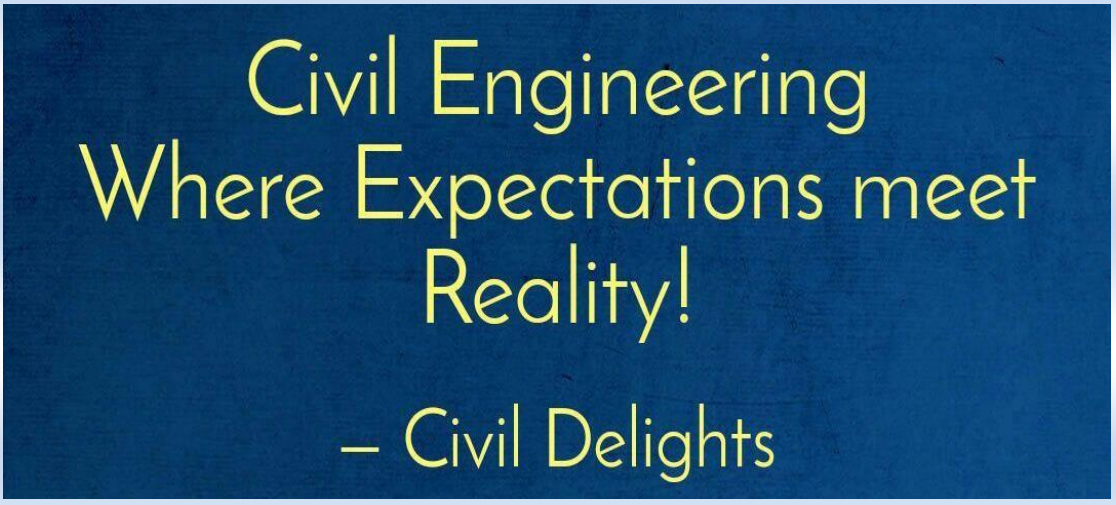
APRIL-JUNE 2019-20 VOLUME2ISSUE4

BHILAIINSTITUTEOFTECHNOLOGYRAIPUR
DEPARTMENTOFCIVILENGINEERING

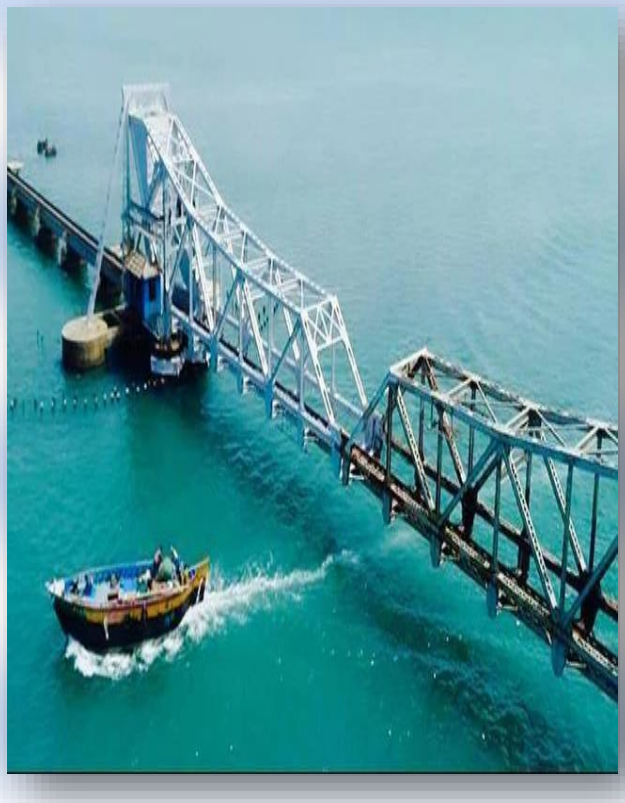
AAKAAR



Famous Civil Engineers

Sir Mahadeva Iyer Ganapati

Mahadeva Iyer Ganapati (known as M. Ganapati) (1903–1976) was an Indian engineer who was well known for his accomplishments in national projects. The Rourkela Steel Plant in Orissa, and many more projects he was associated with which including Churchgate railway station in Mumbai and Chittaranjan Locomotive Works (CLW), Kandla Port, Malaviya Bridge at Varanasi, Perambur Integral Coach factory, Vivekananda Setu, Kolkata and other Western Railway projects were completed under his leadership. The Indian government awarded him the inaugural Padma Bhushan in 1954. He was the president of the Institution of Engineers (India) for 1973-74.



Pamban Bridge

Pamban bridge is a railway bridge which connects the town the town of Mandapam in mainland India with Pamban Island and Rameswaram.

Opened on 24 february 1914, it was India's first sea bridge, and was the longest sea bridge in India until the opening of the Bandra-Worli Sea Link in 2010.

The rail bridge is, for the most part, a conventional bridge resting on concrete piers, but has a double- leaf bascule section midway, which can be raised to let ships and barges pass through.
Until 1988, the Pamban bridge was the only surface transport that connected Tamil Nadu's island of Rameswaram to the mainland. This 2.345 km long bridge took close to 14 years to be completed.
Location- Rameswaram, TamilNadu, India.

- **No. of track – 1.**
- **Track gauge – Broad guage**
- **No. of spans -144.**

Concrete Pavers

Concrete pavers encompass a range of types, including form-riding paving machines, curb-and-gutter machines, and slip form machines. Form-riding pavers ride on metal forms that set the boundaries of the paved surface; a typical application for these machines is bridge-deck paving, and the machine typically employs rollers that move transversely over the surface to finish the concrete. The most widely used machine for paving concrete roadways is the mainline slip form paver, which extrudes a paved surface without the use of forms. Curb-and-gutter machines are a type of slip form paver that can use variously shaped molds to place other than flat surfaces, such as curbs, roadway median barriers, and bridge parapets.

Alumni Section

Civil Engineering 2009-13Batch

Mr Rahul Kashyap of civil engineering 2009-13 batch got selected as Executive Engineer in Department of Panchayat and Rural development, Jashpur, India, in a govt sector of civil engineering. He shared his experience telling us that concepts studied and continuous learning during his B.E helped him immensely to get selected in the Govt Sector.

Faculty Section

- **Prof. Vaibhav Deshpande presented a paper in International conference ICRTRESD-2020 on Topic "Sustainability in groundwater management using GIS: a case study of groundwater potential zone mapping" held at BIT Raipur.**
- **Prof. Manoj pandey presented a paper in International conference ICRTRESD-2020 on Topic "Effects of Cement Industries on Environment: A Case Study in Chhattisgarh" held at BIT Raipur**

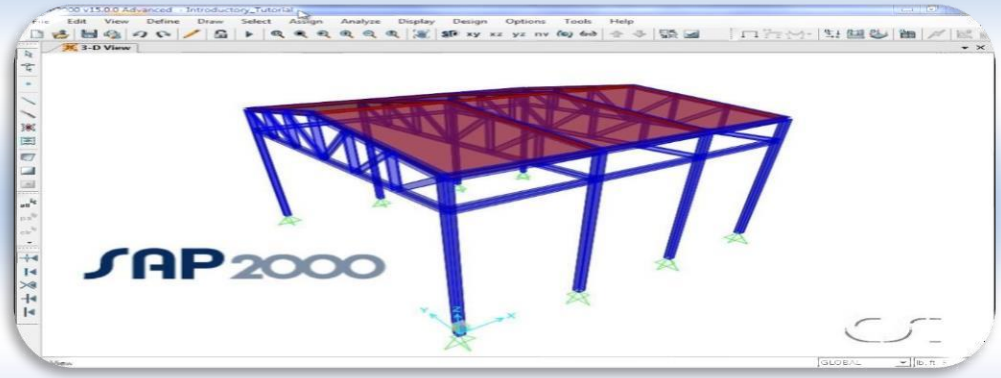
Students Acheivement

- **Mr. Vikram Singh student of civil engineering department represented college at inter zonal basketball championship as captain and won the competition.**
- **Total 24 students got placed from civil engineering department in various companies at an average package of 1.89 lakhs per annum**

SAP 2020

Computers and Structures, Inc. (CSI) is structural and earthquake engineering software company founded in 1975 and based in Walnut Creek, California with additional office location in New York. The structural analysis and design software CSI produce include SAP2000, CSi Bridge, ETABS, SAFE, PERFORM-3D, and CSi COL.

One of Computer and Structure, Inc.'s software, ETABS, was used to create the mathematical model of the Burj Khalifa, currently the world's tallest building, designed by Chicago, Illinois-based Skidmore, Owings & Merrill LLP (SOM). In the Structural analysis section of their December 2009 Structural Engineer magazine article entitled Design and construction of the world's tallest building: The Burj Dubai, since renamed to Burj Khalifa, William F. Baker, S.E. and James J. Pawlikowski, S.E. mention that gravity, wind, and seismic response were all characterized using ETABS. Further, ETABS' geometric nonlinear capability provided for P-Delta Effect consideration



Precast Concrete

Precast members are made at construction sites or casting yards located at some distance or in precast factories, then transported to the site. After transported to the site they are held in position by cranes or other equipment if they are heavy like beam or slab units. The simplest form is hollow block and solid concrete block used to construct external and internal load-bearing walls, non-load-bearing walls, or composite walls.