

PRAJWALAM We create the world

### A NEWSLETTER OF CIVIL ENGINEERING DEPARTMENT

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## SAFETY HANDBOOK FOR CONSTRUCTION SITE WORKERS

Most accidents can be prevented by taking simple measures or adopting proper working procedures. This handbook is intended to outline important issues on safety and health that should be paid attention to on construction sites for easy reference by the workers. If we work carefully and take appropriate safety measures, there will definitely be fewer work injury cases, and our sites will become a safe and secure place to work in. The Occupational Safety and Health Ordinance, which came into operation on 23 May 1997, covers most workplaces in order to protect the safety and health of employees at work. Other legislation applicable to construction sites includes the Factories and Industrial Undertakings Ordinance and its subsidiary legislation, particularly the Construction Sites (Safety) Regulations.

#### Employees' Responsibilities:

Employees should cooperate with their employers and other persons in complying with the safety legislation and guidelines, and should not do anything to endanger themselves and other persons.

Before you operate a machine, ensure that the dangerous part of the machine has been installed with a guard.

• Avoid going to any area with insufficient lighting as there may be some dangerous places which have not been provided with fencing.

- Keep vigilant all the time and watch out for moving cranes, hooks or other lifting equipment.
- Before you use any electrical installation or tool, check the condition of its electric cables.
- Avoid dragging electric cables on the ground or allowing the cables to come into contact with water.
- Use electrical tools installed with an earth leakage circuit breaker.
- Use and handle chemicals with care.

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### **ABOUT DEPARTMENT :**

Civil engineering is a professional engineering discipline that deals with the design, construction and maintenance of the physical and naturally built infrastructure for fulfillment of Basic Needs of human race including Transportation, Communication, Energy production, Religious, Cultural, Sports and Community and Social and Developmental activities like bridges, roads, canals, dams and buildings.Department is the foremost in imparting Civil Engineering education in KITS. Well qualified and experienced faculty is one of the salient feature of the department and acute care is taken to ensure that students acquire essential engineering concepts with indepth understanding In addition to, the civil department is well equipped with required departmental laboratories with tools and equipments.

#### **Vision of the Department:**

Create a congenial learning environment for imparting knowledge, skills and values.

#### **Mission of the Department:**

- DM1 Providing state of the art facilities for learning and practicing.
- DM2 Providing additional skills and training to meet the needs of the industry.
- DM3 Inculcating professional and ethical values and serve the industry, society and

environment.

## A GUEST LECTURE

#### A GUEST LECTURE ON INTER LINKING OF WATER CHANNELS

RESOURCE PERSON: Mr.N.Kondaiah, Deputy Executive Engineer.

The aim of this Guest Lecture is to tell the students the importance of "INTER LINKING OF WATER CHANNELS" and the role of civil engineers at different levels. The importance of river channels and their linking and its future scope was dealt to motivate the students towards upgrading trends in environmental sector at the execution level.

About Guest Lecture:

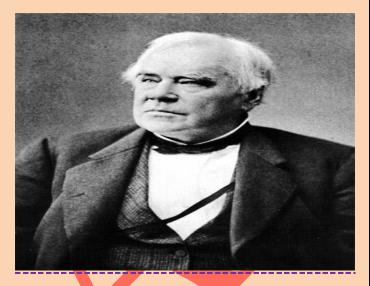
River Linking is a project of linking two or more rivers by creating a network of manually created reservoirs and canals, and providing land areas that otherwise does not have river water access and reducing the flow of water to sea using this means. It is based on the assumptions that surplus water in some rivers can be diverted to Deficit Rivers by creating a network of canals to interconnect the rivers

Details of Guest lecture session

The concept of interlinking of rivers evolved during 1950s. At that time, the UN promoted such projects as part of "Stability and Peace". That was the time when big projects and technology were seen as the answer to poverty. It was also the time when many countries, after gaining independence from colonial powers wanted to express their national confidence through such major projects. The interlinking of Indian rivers proposal originated at the same time as the world became fascinated with large water infrastructure projects.

Peninsular Components In this component, NWDA studied in depth water balance studies of various major river basins including Mahanadi, Godavari, Krishna, Pennar, Cauvery, Vaigai, West flowing rivers of Kerala, Karnataka, north of Bombay and south of Tapi and southern tributaries of Yamuna to establish water surplus and deficit regions. These studies indicate that while Mahanadi and Godavari basins are water surplus, other basins in Peninsular India such as Krishna, Pennar, Cauvery and Vaigai are water deficit.

## **Scientist of the Month:**



# **JAMES FRANCIS**

James Francis was born in South Leigh, near Witney, Oxfordshire in England, United Kingdom. He started his engineering career at the early age of 14 as he worked as his father's apprentice at the Port Craw Railway and Harbor Works in South Wales.[1] When he turned 18, he decided to emigrate to the United States, in 1833. His first job was in Stonington, Connecticut as an assistant to the railway engineer George Washington Whistler Jr., working on the New York and New Haven Railroad. A year later, James and his boss, Whistler, travelled north to Lowell, Massachusetts,[2] where at the age of 19, he got a draftsman job with the Locks and Canal Company, and Whistler became chief engineer. A few years later, in 1837, G.W. Whistler resigned, and went to work on Russia's major railroads. Before departing, Whistler appointed Francis to Chief Engineer, and sold him his house on Worthen street.

That same year, James married Sarah W. Brownell in Lowell on July 12, 1837.[3] Their first son, James Jr. was born March 30, 1840, and then they had five more children In 1845, James Francis developed the first sprinkler systems ever devised in the United States.[5] However, any use of the system would flood the entire structure and all its contents. It was not until 1875 that Henry Parmelee invented a sprinkler head that activated only one head at a time In 1850, he also ordered the construction of the Great Gate over the Pawtucket Canal to protect the downtown mills from any devastating floods. This project quickly became known as "Francis's Folly", given that no one believed it would work, let alone ever be needed. But less than two years later, in 1852, the gates saved the city of Lowell from the devastating floods of 1852, and again in 1936, 1938, 2006, and 2007 by preventing the Merrimack River from entering the canal system. However, arson damage to the wooden gate in the 1970s, and the difficult method of dropping it (by breaking a large chain link) prompted the city to use a more modern steel-beam bulkhead in its place in 2006. For his efforts in saving the city from great disaster Mr. Francis was awarded a massive silver pitcher and a salver by the City of Lowel