

## TOURS AND EXCURSIONS

The participants took part in the following tours and excursions. The most popular tour was 4A and 4B covering Agra, Khajuraho, Varanasi, Kathmandu and Calcutta and the best attended excursions were X1 to Agra and X2 to School of Research and Training in Earthquake Engineering, Roorkee.

### **Preconference Tour No I A (8 days)**

BOMBAY-GOJA-KALINADI-TRIVANDRUM-PERiyAR-IDUKKI-COCHIN-DELHI

This tour provided for visits to two major multipurpose river valley projects in the western coastal parts of India. The Kalinadi Project, located in beautiful scenic area of the Western Ghats, west of Goa, envisages the construction of 97m high concrete gravity dam across the river Kali near Supa, a diversion weir across upper Kanari, a pick-up-weir across Kali 25 km downstream of Supa dam and a dam across Tattinalla, with two power houses, one below the Supa dam and the other underground at Nagjhari. The Idukki dam, situated across the river Periyar in Kerala State, is a non-over flow double curvature arch dam, 365m long at the crest, 171m high above the deepest level and 20m thick at the deepest foundation level and 7.62m at the crest level. The tour included sightseeing visits of Elephanta caves at Bombay, Goa, Periyar, Wild Life Sanctuary and boat excursion in backwaters at Cochin.

### **Preconference Tour No. 2A (7 days)**

BOMBAY-KOYNANAGAR-POONA-BOMBAY-AHMEDABAD-JAIPUR-AGRA-DELHI.

### **Post Conference Tour No. 2B (7 days)**

DELHI-AGRA-JAIPUR-AHMEDABAD-BOMBAY-POONA-KOYNANAGAR-BOMBAY

In these tours, the participants visited the 104m high straight gravity rubble concrete Koyna dam across the Koyna river in the scenic Western Ghats of India, which was subjected to very strong ground motion, during the 1967 Koyna Earthquake of Richter magnitude 6.5 with its epicentre very close to the dam. Pophali power house of the Koyna Hydel Project, with an installed capacity of 540 MW, is the first underground power house constructed in India. The tour included visits to the Central Water and Power Research Station at Khadakwasla, Poona, which is the premier hydraulic engineering research institution in India and also functions as the Regional Laboratory of the United Nations Economic Commission for Asia and Far East; and the Sabarmati Multipurpose River Valley Project in Gujarat. The Sabarmati project scheme comprises of a 45 m high composite dam across Sabarmati at Dharoi, and a pick-up-weir at the downstream. The participants had an opportunity to visit Jaipur and Agra during this tour. Jaipur, capital city of Rajasthan "the land of princes" provides a glimpse of the great and glorious past of the Rajputs. Surrounded by a city wall of the 18th century, Jaipur contains exquisite palaces built in red sand stone and is called the "Pink City". The city of Taj Mahal, symbol of a monarch's immortal love for his wife carved in virgin white marble, delicately latticed and inlaid, and perfectly proportioned, Agra has other splendours to offer like the massive red sandstone Agra Fort enclosing marble palaces and Akbar's mausoleum at Sikandra with its impressive archway and four slender minarets. An hour's drive from Agra takes you to the deserted city of Fatehpur Sikri, the glorious imperial capital of the Mughals which has become 'the silent witness of a vanished dream'.

**Preconference Tour No. 3 A (5 days)**

**MADRAS-BANGALORE-MYSORE-HYDERABAD-SRISALAM-DELHI**

The purpose of this tour was to provide an opportunity to visit the Krishnarajasagar dam, Nagarjunasagar dam and Srisaïlam hydro electric projects in South India. Krishnarajasagar dam near Mysore city, situated below the confluence of the river Cauvery with its two tributaries, is the first major multipurpose masonry dam built in India, with the World famous Brindavan Gardens laid out on its downstream side. Illuminated at night these gardens are transformed into a fairy land of dancing fountains. Nearby is the Chamundi hill with its ancient shrine and monolithic stone Nandi Bull, the guardian of the ancient ruling dynasty. Just outside Mysore city is the Fortress of Srirangapatna with its beautiful gilded chambers and 18th century murals.

Nagarjunasagar dam, 124.7m in height, is the first giant size dam built of stone masonry in cement sand mortar across river Krishna, with the biggest man made reservoir behind it in India, providing irrigation in an area of 3.4 million acres and 75 MW of power generation. An "island museum" in the reservoir houses the Buddhist monuments salvaged from the remains of Nagarjunakonda.

Srisaïlam hydro electric project, with an installed capacity of 770 MW of power generation, is located 113 km upstream of Nagarjunasagar dam, forming a part of the over all plan of the integrated development of the water resources of Krishna river. Srisaïlam dam is also a stone masonry gravity dam, with a maximum height of 143 m above deepest foundation level.

The tour also provided an opportunity to visit Hyderabad and Madras. The well laid out capital city of Andhra Pradesh, Hyderabad has a rich heritage of temples mosques and palaces. Madras the capital of Tamilnadu State is one of the four largest cities in India.

**Preconference Tour No. 4 A (7 days)**

**CALCUTTA-KATHMADU-VARANASI-KHAJURAHO-AGRA-DELHI**

**Postconference Tour No. 4 B (8 days)**

**DELHI-AGRA-KHAJURAHO-VARANASI-KATHMANDU-CALCUTTA**

These tours included a visit of Trisuli Hydro Electric Project in Nepal, which comprises of a concrete barrage 142m long with an overflow spillway 95m long, across the river Trisuli, with a power house under a head of 56.3m with installed capacity of 21 MW. The tour gave an opportunity to visit Kathmandu in Nepal and Calcutta, Varanasi, Khajuraho and Agra in India. Kathmandu, capital city of the Kingdom of Nepal situated in the lap of the mighty Himalaya, represents a fascinating co-existence between modernity and tradition. The temples of Kathmandu display intricate wood carvings. On a clear day, the snow capped peaks of Himalaya come out of their hiding to enrich an already picturesque place. Calcutta, the hub of Eastern India, is a hustling over-crowded, but intensely vital city with eight million people representing an interaction of races. Inhabited today by industrialists, revolutionaries and poets alike, it is a city much discussed much misunderstood, fiercely defended and ever loved. Varanasi (Banaras), the Holy city of Hindus, is situated on the bank of river Ganga and is famous for its temples. Six miles from Varanasi is the famous Buddhist centre at Sarnath. Khajuraho, the medieval capital of the Chandelas, is renowned for its magnificent temples of 10th and 11th centuries, with remarkable carvings, some of which are well preserved. Agra is famous all over the world as the city of Taj Mahal. This celebrated monument completed in 1653, is a memorial of the Moghul Emperor Shahjehan to his queen Mumtaz Mahal. Thirty seven km from Agra lies Fatehpur Sikri, once the glorious imperial capital of the Moghuls.