

## **International Conference on Coastal and Inland water Systems, CIS 2019 held on 16.12.2019 at Bhubaneswar and on 17.12.2019 at Barkul-on-Chilika**

The conference was inaugurated at Hotel Sandy's tower at Bhubaneswar on 16<sup>th</sup> December 2019 and was attended by about 60 delegates. Shri Susanta Nanda, CEO of Chilika Development Authority, CDA welcomed the delegates, Professor S C Misra, President of FROST gave an overview of the conference. The conference was addressed by Dr M A Atmanand, Director, NIOT Chennai who was the guest of honour. Professor R P Gokarn blessed the conference as the Chief Guest by his address. Dr Purnendu Misra, Vice President of FROST, gave a vote of thanks to all concerned with the conference.

The conference was organised, both logistical and technical, largely by FROST. CDA was a very active participant for organising the conference by providing complete infrastructural support, providing food and accommodation and boats for Nalabana visit. IIT Bhubaneswar provided the student volunteers during the conference. The conference was financially supported by sponsorship from Naval Research Board, NRB and Inland Water Authority of India, IWAI. A Souvenir was brought out and released during the conference

There were 5 invited papers, one from USA, two from Singapore and two from within India. A total of 34 technical papers were presented during the conference. The presentations have been brought out as a printed Proceedings and released during the inaugurations

The conference was held over a period of two days, first day at Hotel Sandy's Tower at Bhubaneswar and second day at the Wetland Research Centre at Barkul-on Chilika. The papers were divided into seven technical sessions based on the conference themes declared earlier. These were Climate Issues, Coastal Shipping, Coastal processes, Inland Water Transport, Operation of Inland and Coastal Vessels, River and Lagoon Systems and Coastal Surveillance. One of the major highlights of the conference was student participation. The delegates and guests were entertained in the evenings by Odissi and Sambalpuri dances. One of the highlights of the conference was the visit of the delegates to the Nalabana migratory birds sanctuary on Chilika lake in the morning of 18<sup>th</sup> December.

The conference ended with a valedictory function in the evening of 17<sup>th</sup> December at the conference venue at Barkul-on-Chilika. The main recommendations of the conference were as follows:

- Study of river flow systems and lagoon systems should be conducted based on data collected on river and lagoon bathymetry, river morphology, water quality and hydrology. This study should be adequately supported by research projects funded by state and central government and CSR sources. Information thus generated should be disseminated through public domain to all relevant monitoring agencies.
- Based on information thus collected, further river system development plan should be undertaken such as protection against siltation, river bank and coastal erosion

protection, depth maintenance through dredging, barrage and water body development, interlinking of rivers.

- Inland Water Transport development should be undertaken indigenously through efficient vessel design, construction and operation of vessels made of steel, aluminium, FRP and wood with respect to sustainability and safety by bringing all stake holders together through the aegis of IWAI and IWT departments of state governments. Similar activity should be carried out for development of indigenous riverine and mini coastal ports, jetties, safe landing sites and smooth logistical overlap.
- Many cities in the country get flooded during monsoon and drainage of excess water does not take place soon enough causing hardships to residents. Taking the Gangua river and the drains associated with it in the city of Bhubaneswar, a case study can be conducted with the help of government departments to draw up a development plan with regard to proper drainage, clean and clear waterbody and tourism development.
- Shore based communities face fresh water shortage at many places in islands and coastal regions. Effort should be made to generate fresh water in such areas through rain water harvesting, controlling river water discharge into the sea and fresh water generation from sea water couples with other activities such as renewable energy generation.
- India has a huge coastline and many rivers. But shipbuilding is a low priority industry in this country. This scenario must change with active government support. It must be understood that shipbuilding industry has a long gestation period and so financial support for such industries is necessary. The government could encourage this activity starting with inland and coastal vessels where local skills can be utilised successfully and requiring relatively less financing.
- Students and the younger generation are exposed to many new developments and are generally well informed. This young generation should be encouraged to become entrepreneurs and contribute to water body development and also coastal surveillance.