

BIOGRAPHY:

Prof. Ranganathan SUNDARAVADIVELU



Prof. R. Sundaravadivelu has about 40 Years of Teaching, Research and Consultancy experience in IIT Madras in the field of Offshore, Coastal, Ship and Ports & Harbor Structures.

Modernized the campus as the Chairman Engineering Unit from 2003-2006 and developed new post graduate programs as the Head Dept. of Ocean engineering, IIT Madras from 2006-2009. He has successfully completed about 1000 consultancy projects worth Rs. 1000million.

He is the Fellow of the Indian national Academy of Engineering, Member of the Bureau of Indian Standards on Port & Harbor structures. Organizing committee member of the ASME conference on Offshore Mechanics and Arctic Engineering. Organizer of the International conference on Drilling Technology ICDT and Petroleum Science and Technology.

He has good publications in reputed journals like ASCE, ASME, ASTM, Ocean Engineering, Applied Ocean Research, Institution of Mechanical Engineers, UK, Marine Structures, Constructional steel research etc. He has guided 21 PhD, 15 M.S and 30 M. Tech thesis.

His contributions are in the field of modernization of existing ports and development of green field ports and shipyards. Rehabilitation of berthing structures after BHUJ earthquake in Gujarat state, India and Indian Ocean Tsunami in Andaman and Tamil Nadu. Environmental management plan implemented in the largest wet land Chilika Lake has been awarded Ramseur award. Artificial nourishment using dredged material is being carried out to open the river mouths and harbour entrance.

As a part of decongesting road and rail network, inland water transport terminals are designed and built in Varanasi, Sahibkunj, Chilika and Damara.

His area of current research are non-ship shaped FPSO, mobile offshore base MOB and Dry-Tree semisubmersible DTSP, Classic SPAR for offshore wind energy and JACKET SPAR for OTEC desalination, Berm Breakwater, Port infrastructure for VLCC and 18000TEU vessels, Ship lift system and Slipway.

A new type of dredger is being developed which can be used in surf zone. As a green initiative 900T steel submerged reef is installed at Pondichery and geo tube embankment at Pentha in Orissa for coastal protection. Special techniques for dredging in rock and monitoring vibration in near by structures are developed.