

Dr. R. MANIVANAN

Executive Professional Profile

PROFESSIONAL PROFILE

Senior Project Advisor (IIT Chennai), Consultant to RITES (Ports & Waterways) and former Scientist, Central Water & Power Research Station (CWPRS), with more than three decades of experience in coastal engineering, hydrodynamic and water quality modelling, environmental engineering, shoreline processes, sediment transport, ports & harbours and climate-resilient infrastructure. Recognized for delivering strategic consultancy to Central and State Government agencies, academic institutions and major infrastructure developers.

CURRENT & KEY POSITIONS

- Senior Project Advisor – IIT Chennai
- Consultant – Ports & Waterways Division, RITES
- Accredited EIA Coordinator (Ports & Harbour Sector)
- Retired Scientist – Central Water & Power Research Station (CWPRS), Pune

CAREER HIGHLIGHTS

- More than 30 years of research, consultancy and government service.
- Successfully completed over 50 client-sponsored engineering and environmental projects.
- Worked with IIT Chennai, RITES, Ministry of Jal Shakti, NCCR, Port Trusts and national agencies.
- Extensive experience in mathematical modelling for coastal, estuarine, riverine and reservoir systems.

CORE EXPERTISE

Ports & Harbour Engineering • Coastal Infrastructure • Hydrodynamic Modelling • Water Quality Modelling • Sediment Transport • Shoreline Change Analysis • Environmental Impact Assessment • Climate Change • Coastal Zone Management • Numerical Simulation • Marine Outfalls • Reservoir Studies.

MAJOR CONSULTANCY ASSIGNMENTS

Led or contributed to strategic studies for Chennai Port, Paradip Port, Cochin Port, Pipav Port, Chilika Lake, Kerala Fishing Harbours, Tata Shipyard, Rohini Shipyard, desalination plants, thermal power projects and shoreline management initiatives across India.

RESEARCH & ACADEMIC CONTRIBUTIONS

Guided M.Tech., M.S. (Research) and Ph.D. scholars; served as doctoral committee member and thesis examiner for leading universities including IITs and state universities. Delivered invited lectures at national and international conferences and contributed to faculty development programmes.

PUBLICATIONS & PROFESSIONAL LEADERSHIP

Author of books on environmental engineering and water quality modelling, contributor to Springer publications, reviewer for Elsevier and Springer journals, editor/reviewer for international journals and active member of leading professional engineering societies.

SOFTWARE & TECHNICAL SKILLS

MIKE 21, MIKE 3D, Hydrodynamic Models, Salinity Models, Water Quality Models, QGIS, Remote Sensing, Numerical Modelling, Environmental Laboratory Investigations, Coastal Data Analysis.

PROFESSIONAL VISION

To provide high-quality scientific and engineering consultancy for sustainable coastal infrastructure, ports, waterways, environmental management and climate-resilient development through innovation, research and evidence-based decision making.