

Details of MTech Theses Guided

Sl. No.	Title of the Project	Duration (Month and Year)	
		Starting	Ending
1	Urban Flood Modelling of Thiruvananthapuram City	July 2021	July 2022
2	Impact of Climate Change on Groundwater Recharge in the Noyyal River Basin	July 2021	July 2022
3	Flood Hazard Mapping of Chaliyar Basin using MIKE FLOOD	August 2020	August 2021
4	Assessment of Climate Change Impact on Hydropower Production	August 2020	August 2021
5	Development of Hybrid Wavelet SVM Model for Hourly Flood Forecasting	August 2019	September 2020
6	A Blue/ Green Water Based Accounting Framework for the Assessment of Water Security in Chaliyar River Basin	August 2019	September 2020
7	Integrated SurfaceWater-Ground Water Modelling using MIKE HYDRO River and MIKE SHE	August 2019	September 2020
8	Sediment Transport Modelling and Sand Auditing of the Chaliyar River Basin	July 2018	May 2019
9	Hydraulic Analysis of the Inland Navigation Canals in Alappuzha Town	July 2018	May 2019
10	Integrated Surface Water- Groundwater Modelling using Coupled MIKE HYDRO RIVER and MIKESHE	July 2018	May 2019
11	CFD Analysis of Flow over the Ogee Spillway and Energy Dissipators of the Kuttiyadi Dam	July 2018	May 2019
12	Transient Analysis of Water Distribution Systems	July 2018	May 2019
13	Analysis of flexible mutibody dynamics of hybrid offshore wind-wave energy capture system	July 2018	May 2019
14	Comparison of ANN and M5 model Tree for overtopping prediction of berm breakwater	July 2018	May 2019
15	Hydraulic Modelling Studies for Rejuvenation of the Inland Navigation Canals in Alappuzha Town	July 2017	May 2018
16	Performance Evaluation of Constructed Wetlands in Wastewater Treatment	July 2017	May 2018
17	Hydrological Modelling and Water Quality Assessment using SWAT for the Bharathapuzha River Basin	July 2017	May 2018
18	Numerical Simulation of Cylindrical Floating Breakwater	July 2017	May 2018
19	Design and Analysis of Spar Platform with Wind Turbine	July 2017	May 2018
20	Impact of Climate Change on Catchment Hydrology and Sediment Yield	July 2016	May 2017
21	Development of Hybrid Wavelet-ANN Model for Hourly Flood Forecasting	July 2016	May 2017
22	Modelling and CFD Analysis of House Boats of Kerala	July 2016	May 2017
23	Response Analysis of Tension Based Tension Leg Platform	July 2016	May 2017
24	In-Place Analysis of an Offshore Jacket Platform	July 2016	May 2017
25	Assessment of the Response of an Offshore Platform under Extreme Waves by Modified Endurance Wave Analysis	July 2015	May 2016
26	Estimation of Soil Erosion and Sediment Yield of Killi Watershed	July 2015	May 2016
27	Experimental and Analytical Investigation of Soil Moisture Distribution and Solute Transport in a Drip Irrigated Field	July 2015	May 2016
28	Impact of Climate Change on Streamflow, Water Quality, and Sediment Yield in the Chaliyar River Basin	July 2015	May 2016
29	Flow Interference Effects on Catamaran	July 2014	May 2015
30	Flow Characteristics of Trimaran in Sea	July 2014	May 2015
31	Dynamic Analysis of Coupled Moored FPSO with Risers	July 2014	May 2015
32	Investigations on Littoral Drift in the Calicut Coast	July 2014	May 2015
33	Hydrodynamic Performance of Floating Pipe Breakwater	July 2013	May 2014
34	Numerical Simulation of Extreme Wave Impact on Cylindrical Offshore Support Structures	July 2013	May 2014
35	Performance of Pile Restrained Floating Breakwater	July 2013	May 2014
36	Numerical Modelling of a Point Absorber Type Wave Energy Convertor	July 2013	May 2014

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37	Assessment of an Offshore Structure under Extreme Waves by Endurance Wave Analysis	July 2013	May 2014
38	Wave Interaction with Porous Wall Breakwaters	July 2012	May 2013
39	Estimating Current Loading on a TLP with CFD	July 2012	May 2013
40	Optimisation of Ship Appendages	July 2012	May 2013
41	Hydrodynamic Performance Simulation of Surface Ships	July 2012	May 2013
42	Settlement Analysis of Landfills	July 2012	May 2013
43	Electrokinetic Remediation of Chromium Contaminated Soils	July 2012	May 2013
44	Design of Filter Media for Earth Dams – A Case Study of Karapuzha Dam, Wayanad	July 2011	May 2012
45	A Prediction Model for the Settlement of Municipal Solid Waste Landfills	July 2011	May 2012
46	Response of a Free Spanning Pipeline Subjected to Ocean Currents	July 2011	May 2012
47	Overall Stability Analysis of Alternative Hull Forms	July 2011	May 2012
48	Influence of Bilge Radius on the Roll Motion	July 2011	May 2012
49	Numerical Simulation of Flow around Four Legged Offshore Structures Using CFD	July 2011	May 2012
50	Prediction of Groundwater Pollution Vulnerability using DRASTIC and Soft Computing Techniques	July 2010	May 2011
51	Water Purification using Carbon Nanotubes	July 2010	May 2011
52	Influence of Marine Growth on Forces and Fatigue Life of Offshore Platforms	July 2010	May 2011
53	Numerical Modelling of Oscillating Water Column Wave Energy Converter	July 2010	May 2011
54	Numerical Simulation of Flow Over a Circular Cylinder	July 2010	May 2011
55	The Influence of Terrain and Subsoil Conditions on Drainage from an Urban Catchment – A Case Study of Calicut City	July 2009	May 2010
56	Colloid Transport in Sets of Parallel Fractures with Fracture Skin	July 2009	May 2010
57	Studies on Resistance Characteristics of Ocean Vessels	July 2009	May 2010
58	Vortex Induced Vibration on Marine Risers	July 2009	May 2010
59	Simulation of Slamming and Green Water Effects	July 2009	May 2010
60	Influence of Hydrodynamic Coefficients in the Response Behaviour of Triangular TLP in Random Sea Wave Loads	July 2009	May 2010
61	Watershed Based Modelling for Nutrient Transport	July 2008	May 2009
62	Contaminant Transport Modelling at Underground Storage Tank Sites	July 2008	May 2009
63	Analysis of Pesticide Transport in Groundwater	July 2008	May 2009
64	Stability and Seepage Analysis of an Earthen Dam – A Case Study of Banasura Sagar Dam	July 2008	May 2009
65	Studies on Transport and Sorption of Lead	July 2008	May 2009
66	Response of Multi-Leg Articulated Tower	July 2008	May 2009
67	Numerical Modelling of Overtopping Performance of OWEC	July 2008	May 2009
68	Modelling and Experimental Evaluation of Nutrient Removal in an Attached Media Biofilter	July 2007	May 2008
69	Septage Contamination of Dug Well – Risks and Remedy	July 2007	May 2008
70	Studies on Sorption and Transport of Solutes in Soil	July 2007	May 2008
71	Immobilisation of Lead in Cement-Clay-Quarry Dust Mix	July 2007	May 2008
72	Evaluation of the Groundwater Vulnerability of Calicut Corporation using DRASTIC Method, GIS and MODFLOW	July 2007	May 2008
73	Tsunami Effects on the Local Hydrodynamics and its Influence on Design of Offshore Structures	July 2007	May 2008
74	Influence of Hydrodynamic Coefficients on the Response of Tension Leg Platforms in Regular Waves	July 2007	May 2008
75	Flow Interference between Two Bluff Bodies	July 2007	May 2008
76	Determination of Drag Coefficients for Bluff Bodies Placed in Turbulent Flow using CFD	June 2005	June 2006

Details of MSc (Environmental Science) theses guided

Sl. No.	Title of the Project	Year
1	Performance evaluation of sub surface biofilters in domestic wastewater treatment	2017
2	Application of manganese dioxide nanoparticles for the oxidative degradation of industrial dyes from aqueous solutions	2017
3	Performance Evaluation of Vertical Flow Constructed Wetlands with Shells in Wastewater Treatment	2018
4	Performance Evaluation of Vertical Flow Constructed Wetland with Sea Shells and Red Spinach in Domestic Waste Water Treatment	2019

Details of BTech Projects Guided

Sl. No.	Title of the Project	Duration (Month and Year)	
		Starting	Ending
1	Influence of Cohesion on Erosion and Bed Load Transport	July 2017	May 2018
2	Applications of Lean Principles in the Construction Industry	July 2016	May 2017
3	Planning and Structural Designing of an Auditorium and Commercial Building	July 2016	May 2017
4	Analysis of an Offshore Platform	July 2014	May 2015
5	Investigations on Improvement of Dredged Material for Use in Embankments and for Land Reclamation	July 2014	May 2015
6	Life Cycle Assessment of Municipal Waste Management Techniques	July 2011	May 2012
7	Analysis of Post Dam Break Scenario – Idukki Dam	July 2010	May 2011
8	Analysis of Offshore Platforms under Different Wave Conditions	July 2010	May 2011
9	Superstructure Design of a Light Motor Vehicle Bridge at Areekod-Mookot Kadavu	July 2010	May 2011
10	Alternate Waste Management Strategy for the Indian Railways	July 2010	May 2011
11	Influence of Hull Design on Vessel Hydrodynamics	July 2009	May 2010
12	Coir Geotextile Biofilters for the Treatment of Low Volume Organic Rich Industrial Wastewater	July 2008	May 2009
13	Development of Software for Pipe Network Analysis	July 2008	May 2009
14	Design of an Effective Wastewater Treatment System in NITC Campus	July 2008	May 2009
15	Wave Tranquility Study and Design of Port at Beypore	July 2007	May 2008
16	Performance Evaluation of Coir Geotextile Based Biofilter for Treatment of Domestic Wastewater	July 2006	May 2007
17	GIS Based Hydrological Study of Mahe River Basin	July 2006	May 2007
18	Analysis and Design of a Water Supply System for the Calicut Airport	June 2004	June 2005
19	Precipitation-Runoff Model for Pamba River Basin	June 2004	June 2005
20	Study of Proposed Water Distribution System at Koovapady Panchayat, Ernakulam district	June 2004	June 2005
21	Planning, Analysis, And Design of an Apartment Building	June 2004	June 2005
22	Water Storage and Supply to NITC Campus	June 2003	June 2004
23	Hydrological Study of a Watershed using GIS	June 2003	June 2004
24	A Master Plan for The Department of Civil Engineering in NIT, Calicut	June 2002	June 2003
25	Study of Calicut Water Distribution System and Application of EPANET to a Network in Mananchira Region	June 2002	June 2003
26	Application of GIS in the Hydrological Studies in a River Basin	June 2002	June 2003
27	Hydraulic and Structural Design of a Water Treatment Plant	June 1997	June 1998
28	Design of Weir cum Aqueduct with a Road Bridge	June 1996	June 1997
29	Planning, Analysis, and Design of an Apartment Block	June 1995	June 1996
30	Studies on Pipe Network Analysis Based on Badagara Water Supply System	June 1994	June 1995
31	Analysis of Water Distribution System and Design of Water Treatment Plant	June 1993	June 1994
32	Design of Irrigation Structures for Chaliyar River Valley Project	June 1992	June 1993