



Karunya INSTITUTE OF TECHNOLOGY AND SCIENCES

(Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)

MoE, UGC & AICTE Approved

NAAC A++ Accredited

SDG - 6 Clean Water and Sanitation

6.5.5 Cooperate with local, regional, national or global governments on water security

KITS has cooperation between universities and governments at different levels (local, regional, national, and global) on water security and in supporting policy level in addressing the challenges related to water availability, quality, and management. Such collaborations can lead to research advancements, policy development, and practical solutions for sustainable water resource management. KITS has MoU with following national and international level academic and industry partners. Here are ways in KITS cooperates with governments and universities on water security:

a. Research Partnership with SUEZ, India:

- ▶ KITS is an academic partner for SUEZ in India for implementation of 24 x7 water supply scheme. Research studies on chlorine decay studies have been carried out. Students have undergone B. Tech and M. Tech internship at SUEZ. Training programs on Smart Water Meter



System, Water GEM and Computational Optimization of water distribution system have been organized for students.

b. KITS is in collaboration with

- National Institute of Hydrology, Roorkee (MoWR)
- TamilNadu Agriculture University

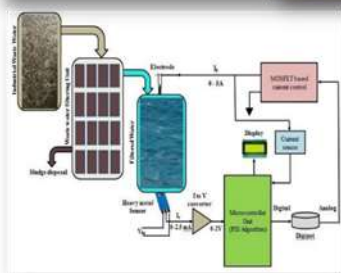
- Centre for Water Resources Development and Management
- National Environmental Engineering Research Institute , for joint research projects, publications, students internship, capacity building activities

c. Demonstration projects in the industries (Recovery of Water from electroplating effluent):

KITS in industrial partnership with ATM Chem Equipment Pvt Ltd, Hosur and Aruldas Electroplating Works, Coimbatore:

KITS has **research partnership with academic institution SSN, Chennai** in executing DST project under Technology Stream for the Demonstration to lab-scale project entitled “High Performance Integrated Two-Stage Electrochemical Technology for Recovery of Water from Electroplating effluent with Real Time Monitoring & Control System”. ATM Chem Equipment Pvt Ltd and Aruldas Electroplating work are the industrial collaborators in the DST project under Technology Stream for the Demonstration to lab-scale project entitled “High Performance Integrated Two-Stage Electrochemical Technology for Recovery of Water from Electroplating effluent with Real Time

**High Performance Integrated Two-stage Electro chemical Technology for Recovery of Water from Electroplating effluent with Real Time Monitoring and Control system
(Project Period - 2020-2023)**



Principal Investigator
Dr. P. Jegathambal

Principal Investigator
Dr. S. Radha

Co-Principal Investigator
Dr. Sabitha Janet

Co-Principal Investigator
Dr. Sreeja
Dr. Muthumeenakshi

KITS, Coimbatore

SSN, Chennai

Industry Collaborators

ATS CHEM Equipment's PVT LTD Nammakkal
ARULDAS Electroplating Works, Coimbatore

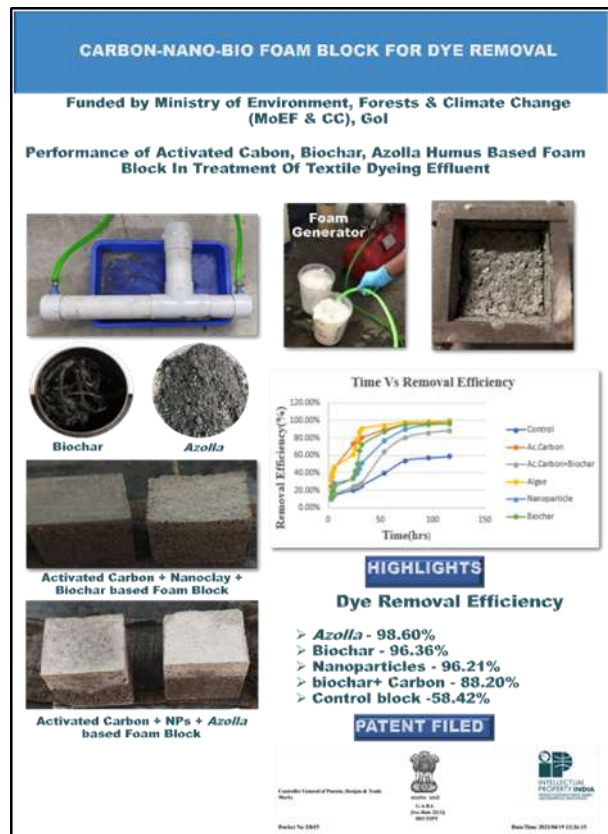
Monitoring & Control System”. The ATM Chem Equipment is involved in the fabrication of the Model and the performance evaluation of the model in treating electroplating effluent. Karunya has linked up with them in joint investigations.

- d. Collaborative research is in progress with **Devi Threads PVT Ltd** to evaluate the performance of multichannel baffle type electrocoagulation using TiO_2 /Al electrodes in treatment of textile dyeing effluent. A prototype model has been installed in the industry



and the performance of the reactor in removing dye has been evaluated for the effluent directly coming out of the process unit.

- The CEO of Ray Construction Company is one of the inventors of the patent on 'A Novel Foam Block for Treating Textile Effluent' which is one of the outcomes of the ongoing funded project of the Ministry of Environment, Forest & Climate Change. To transfer the technology to product form, Fellowships for two scholars are provided at KITS.



e. International Collaboration

Israel Universities
Establishment of Electrochemical Lab

Joint International Research, Publications, Workshops, Conferences and IPR

Australia
Enviro Group
Stormwater & Groundwater Management

USA
UniRem Tech
Bioremediation

Canada
Cape Breton University
Water Purification and Biochar Preparation

Germany, 2008
RWTH, Aachen
Groundwater Flow & Contaminant Transport

Dr. Allen Britten

Dr. Stephanie

Dr. Edwin MacLellan

Dr. Martin