

## Call for Papers:

- Students are invited to the technical paper presentation event on the second day of the symposium. Papers on the specified topics complying with IEEE format are required to be submitted through email (techconsmr2025@gmail.com) before the specified date.

## Instructions:

- Engineering Students - Final Year UG / PG / PhD students are eligible to participate.
- Students are requested to complete the registration in the link given below to participate in the event and there is no registration fee.
- Number of participants is limited and hence registration is mandatory. Selected participants will be informed by e-mail regarding the confirmation of their participation based on the content of the technical paper submitted in the prescribed format as called for.
- Students can also participate as a team comprising a maximum of three members.
- Presentations should adhere to a time limit of 10 minutes followed by Q&A session of 5 minutes.
- Decision of Award Committee will be final.
- All the participants will be issued certificate of participation.

[CLICK TO REGISTER :](https://forms.gle/31uCHdYKgSLLz6eFA)

<https://forms.gle/31uCHdYKgSLLz6eFA>

**Last date for Registration: 03.03.2025**

**Last date for sending paper: 05.03.2025**

**Date of Presentation : 13.03.2025**

**Venue**



### Contact Details:

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<https://wrd.tn.gov.in/>



குளம் தொட்டு, கோடு பதித்து,  
வழி சீத்து, உளம் தொட்டு, உழு  
வயல் ஆக்கி, வளம்தொட்டுப்  
பாகுபடும் கிணற்றோடு என்று  
இவை பாற்படுத்தான் ஏகும்  
சுவர்க்கம் இனிது.

- சிறுபஞ்சமூலம்



விசும்பின் துளிவீழின் அல்லால்மற் றாங்கே  
பசும்புல் தலைகாண்பது அரிது.

GOVERNMENT OF TAMIL NADU  
WATER RESOURCES DEPARTMENT



“மாமழை போற்றுதும்”

“EDUCATE ENLIGHTEN EMPOWER - WATER RESOURCES ENGINEERING”

Technical Conference on

**Role of Geotechnical Investigations,  
Construction Materials and Climate resilient  
measures - Challenges ahead**

conducted by

**Soil Mechanics & Research Division,WRD  
of  
Design Research & Construction Support Wing**

DATE: 12<sup>th</sup> and 13<sup>th</sup> March 2025

VENUE: SPMU - DRIP Conference Hall,  
Tharamani, Chennai-113.

"நிலன் நெளியருங்கின் நீர்நிலை பெருகத் தட்டோரம்ம இவன் தட்டோரே  
தள்ளாதோர் இவண் தள்ளாதோரே" (புறம்-18,28-30)

## ABOUT US

### DRCS

- Design Research and Construction Support is a specialized functional wing of WRD with main focus on design of various types of irrigation structures constructed and maintained by WRD.
- Design Divisions, Soil Mechanics & Research Division, Institute of Hydraulics and Hydrology, Poondi, Water Shed Management Board, Pollachi are the specialized offices functioning under the control of this wing involved in Structural design, Geo technical and construction materials testing, Conducting Hydraulic and Coastal Model studies, shore line oscillation monitoring, Reservoir capacity survey, etc.,
- Apart from this, DRCS is also the nodal agency for works related to RRR scheme, Desilting of reservoirs, third party quality audit for TNIAM works, etc.,

### DESIGNS CIRCLE

- Designs Circle is the backbone of WRD spearheading the hydraulic and structural design of various types of irrigation structures constructed and maintained by WRD. Further, Designs circle is also involved in conducting distress analysis and offer viable technical solutions for the various field problems.

### SM&R

- Soil Mechanics & Research Division (SM&R), Tharamani, has been functioning since 1953, involved in Geo technical investigation, construction material testing, concrete mix design and applied research.
- SM&R has state-of-the-art laboratory facilities with reliable technologies for conducting lab and field tests as per BIS and other stipulated procedures.
- Other Departments like GCC, TWAD, TNUHDB, PWD, etc., and private agencies also utilize the services of SM&R on chargeable basis.
- Students from various Engineering colleges and Universities pursuing UG, PG & Ph.D., regularly utilize the internship training and lab facilities.

## ABOUT THE EVENT

**A Two day conference on the theme – “ Role of Geotechnical Investigations, Construction Materials and Climate resilient measures - Challenges ahead”**

### Day 1: Technical conference on the theme.

Academicians from reputed Universities and Technical Experts from various wings of WRD and from other Institutions will deliver a technical presentation to share their experience and insights in their respective areas of expertise under the following topics.

- Application of Geosynthetics in Earthen Dam
- Engineering Problems associated with soft clay, Dispersive clay and Expansive clays- Case Studies
- Impact of Climate Change on Water Resources
- Urban Hydrology : Flood and Inundation mapping through Modelling
- Use of M-sand for Hydraulic structures – challenges ahead.
- An overview of Chennai real time flood forecasting system and spatial decision support system
- Sea Water Intrusion study using TEM technology - An overview.
- Reinforced Soil wall.
- Coastal Reservoir - An Overview
- Formation of Four Instream Reservoir across Kosasthalaiyar River - An Overview
- Mettur Sarabanga Basin Lift Irrigation Project - An Overview
- Application of Instrumentation in the field of Geotechnical Engineering and Concrete Technology
- Decarbonation of Water bodies

**Day 2: Technical Paper presentation by engineering students.**

Students from various Engineering colleges pursuing UG/PG/Doctorate degrees will present their innovative thoughts & ideas under the below specified topics.

### GEOTECHNICAL ENGINEERING & CONSTRUCTION MATERIAL

- Mathematical modelling of geo technical and Hydraulic problems and analysis.
- Experimental analysis of Geo technical and Hydraulic problems and remedial measures.
- Utilization of new technology – smart materials & nano materials in construction.
- Finding wealth in waste – recycling and reuse of materials suitable for construction, an experimental approach.

### DATA ENGINEERING & ARTIFICIAL INTELLIGENCE

- Application of Artificial Intelligence tools for civil engineering problems – Geo technical, structural and Hydraulic issues.
- Data engineering application – Utilization of Hydrological and meteorological data for creating a Decision support system.

### CLIMATE RESILIENCE & WATER SMART SOCIETY

- Climate change resilience and adaptation techniques
- Role of Civil Engineers in developing and transforming a community into water smart society.
- Ways to mitigate pollution in water bodies.
- Water Quality Assessment using advanced techniques

**Best papers under each theme will be awarded**



**1st Prize – ₹ 7000**

**2nd Prize - ₹ 5000**

**3rd Prize - ₹ 3000**

“வாழ்க்கை நிறைந்த நீர் மழை பொழியவும் மழைப் பொழிந்த நீர் கடல் பரப்பவும் மாரி பெய்யும் பருவம் போல் நீரின்றும் நிலத்து ஏற்றவும் நிலத்தினின்று நீர்ப் பரப்பவும் அளந்து அறியாப் பல பண்டம்.”  
-பட்டினப்பாலை, 126-131

