INTERNATIONAL SWAT CONFERENCE 2027

04-08, JANUARY 2027

ORGANIZERS

Pre-Conference Workshop : 04-05, January 2027
Conference Date : 06-08, January 2027
Venue: National Institute of Technology Warangal, India
Website: https://cms.nitw.ac.in/conference/swat2027/
Email : swat2027@nitw.ac.in

ABOUT THE CONFERENCE

The International SWAT Conference serves as a premier global platform for advancing science, collaboration, and innovation around the Soil and Water Assessment Tool (SWAT), one of the most widely used process-based ecosystem models. The international SWAT conference series began in 2001 in Giessen, Germany. Since then, the SWAT conferences have been hosted across 5 continents and 20+ countries, bringing together researchers, practitioners, and policymakers with an average of 200-250 participants in each conference. The last conference was held in Thessaloniki, Greece in June 2026. The 38th international SWAT conference is to be held in National Institute of Technology Warangal, Warangal India. The conference is returning to India after 8 years, last was in 2018 at IIT Madras, and aims to bring together leading researchers, practitioners, and policymakers working in hydrology, watershed management, and environmental modeling. The conference will highlight innovative methodologies, real-world applications, and emerging technologies for sustainable water resources management. The event will feature expert talks, technical sessions, and collaborative discussions aimed at addressing pressing challenges such as climate change impacts, water security, land-use dynamics, and ecosystem conservation through science-based and data-driven solutions. The conference will also host pre-conference workshops on hands-on application of SWAT+ for beginners and advanced users.

ABOUT NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL

The National Institute of Technology Warangal, formerly known as Regional Engineering College Warangal was established in 1959. Over the years it has developed into a premier institute of higher learning and is ranked among the top technical education institutions in India. There are 15 Departments offering undergraduate and post graduate programs besides doctoral programs. About 7000 students across the country and about 500 international students study in the campus. The institute emphasizes high-quality education, cutting-edge research, innovation, and industry collaboration. It houses state-of-the-art laboratories, advanced research centers, and modern computational facilities that support research in areas such as artificial intelligence, sustainable infrastructure, water resources, renewable energy, advanced materials, and data science The institute maintains active collaborations with leading national and international universities, research organizations, and industries, fostering interdisciplinary research and technology transfer. With a vibrant campus spanning approximately 250 acres, NIT Warangal provides an excellent academic environment supported by modern infrastructure, residential facilities, libraries, sports complexes, and incubation centers.

About Department of Civil Engineering

The Department of Civil Engineering was established in 1959. The department aspires to be a knowledge nerve center in Civil Engineering Education, Research, Entrepreneurship and Industry outreach for creating sustainable infrastructure. The department is well known for quality education and training with International standards in teaching, research and consultancy. The Department has several ongoing projects funded through government funding agencies. The Department has a good placement record along with a strong and active global Alumni network. The department offers one undergraduate program in Civil Engineering, seven post graduate programs in Construction Technology & Management, Environmental Engineering, Engineering Structures, Geotechnical Engineering, Geoinformatics, Transportation Engineering, and Water Resources Engineering, and offering Doctoral Programs in all specializations. The Department has well established and well-equipped laboratories. The Department has experienced faculty engaged in teaching, research, capacity building activities and industry extension services. Faculty members represent several policy making and professional bodies. The Department has liaison with reputed industries and R&D organizations.

Call for Abstract

Authors should submit an abstract of their original, unpublished work in the template given on the website. The abstract must be submitted in the link provided in the website. Abstracts will be reviewed initially by the technical committee. The submitted papers will be sent to a double blinded peer review committee before accepting the final version.

Abstract Submission link: https://swatconference.tamu.edu/#/submit-abstract/2027-india

Thematic Areas

- Large Scale Applications
- Climate Change Applications
- Sensitivity, Calibration and Uncertainty
- Biofuel and Plant Growth
- Environmental Applications
- Watershed Management
- Hydrology
- Sediments, Nutrients and Carbon
- Surface water-Groundwater Interactions
- Sensor systems for field hydrology applications
- Pesticides and Bacteria Transport
- AI/ML applications for water resources systems
- Database and GIS Application & Development
- Urban Processes and Management
- Landscape Processes and Landscape/River Continum
- InStream Sediment and Pollutant Transport
- Groundwater Hydrology

Important Dates	Date
Abstract Submission Starting Date	15-Aug-26
Abstract Acceptance by	21-Nov-26
Abstract Submission Deadline	1-Nov-26
Early Bird Registration	25-Nov-26
Regular	5-Dec-26

Registration: For registration, please send the filled-in registration form along with payment to the Organizing Secretary. The registration fee details are given below. At least one author should register per paper. Conference registration fee includes, proceedings and admission to all technical sessions.

Category	Early bird registration			Regular registration		
	India	*L/LMI	Others	India	*L/LMI	Others
	(INR)	(USD)	(USD)	(INR)	(USD)	(USD)
PG & Research scholars	4130	100	125	4720	125	150
Academia and R&D centers	10620	200	300	11800	250	350
Industry delegates	11800	300	500	14160	350	550

BANK DETAILS

Account Name	International SWAT Conference 2027
Account No.	45383420887
Bank	State Bank of India
Branch	NITW Branch
IFSC Code	SBIN0020149
MICR Code	506002030
SWIFT code	SBININBBH14

*Source: Please find the link for Low & lower-middle income (L/LMI) economic countries https://blogs.worldbank.org/en/opendata/understanding-country-income--world-bank-group-income-classifica

Registration fee **(GST included)** may be sent in favor of International SWAT Conference 2027 through On-line / NEFT to the below mentioned Bank Account.

Pre - Conference Workshop Information

Workshop 1: SWAT+ model setup & calibration

Overview: Designed for beginners and those looking to build a rock-solid foundation, this workshop provides a step-by-step path from zero setup to model calibration. This interactive, hands-on workshop bridges the gap between fundamental SWAT+ setup and advanced model refinement. Participants will walk through the complete modeling workflow—starting from initial project setup in QGIS to model execution and soft calibration using the SWAT+ Editor. The workshop also offers introduction to advanced concepts, including the SWAT+ Toolbox for hard calibration and the powerful logic behind Decision Tables.

Key Takeaways & Modules

- **Model Setup in QGIS:** Master GIS data preparation, watershed delineation, and HRU definition using the QGIS SWAT+ interface.
- **SWAT+ Editor & Soft Calibration:** Learn how to write input files, execute model runs, and apply soft calibration techniques to ensure baseline realistic hydrology.
- **Basics of hard calibration using SWAT+ Toolbox:** Get a head start on advanced calibration techniques, parameter optimization, and hard calibration workflows'
- **Introduction to Decision Tables:** Understand how to represent complex management practices and conditional rules within SWAT+.

Workshop 2: SWAT+ gwflow

Overview: Surface water and groundwater are deeply interconnected, yet standard modeling often simplifies subsurface dynamics. This specialized workshop provides comprehensive theoretical and hands-on training on gwflow module - the dedicated, physically-based groundwater flow module integrated into SWAT+. Participants will learn the governing principles behind gwflow and gain practical experience setting up, parameterizing, and running coupled surface-groundwater simulations.

Key Takeaways & Modules

- **Theoretical Foundations:** Understand the core hydrogeological concepts, mathematical governing equations, and conceptual framework of the gwflow module.
- **Data Preparation & Module Setup:** Learn how to define aquifer boundaries, grid discretization, hydraulic conductivity, and initial heads within the SWAT+ framework.
- **Hands-On Model Coupling:** Practice running SWAT+ coupled with gwflow to simulate realistic surface-groundwater interactions, baseflow discharge, and water table dynamics.
- **Output Interpretation:** Learn how to extract, visualize, and interpret groundwater spatial and temporal outputs.

Registration Fees:

Category	India (INR)	Other countries (USD)
Students	3000	75
Industry/Researchers	5000	100

Note: Both workshops will be conducted in parallel.

Who should attend ?

We warmly welcome the participation of students, research scholars, academicians, scientists, technical officers and industry professional working in the field of water resources engineering for this international conference.

Publications:

Selected abstracts will be invited to submit full papers to the international journals. The paper will go through the normal review process of the journal but they will be acknowledged as papers presented at SWAT-2027. The journals will be updated soon.

ORGANIZING COMMITTEE

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NIT Warangal, India

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Sponsorship Opportunities

The International SWAT Conference 2027, to be hosted at the National Institute of Technology Warangal, India, would provide a unique opportunity for sponsoring organizations to promote their products/services to the focusses international and national audiences and stakeholders. They will also have an excellent opportunity to interact with scientists, academicians, managers and engineers.

Platinum	Diamond	Gold	Silver
Rs. 5,00,000	Rs. 4,00,000	Rs. 2,00,000	Rs. 1,00,000
Full registration for 6 delegates	Full registration for 4 delegates	Full registration for 3 delegates	Full registration for 2 delegates
Company name and logo on conference web page, promotion material like proceedings volume, banner stationary items etc	Company name and logo on conference web page, promotion material like proceedings volume, banner stationary items etc	Company name and logo on conference web page, promotion material like proceedings volume, banner stationary items etc	Company name and logo on conference proceedings volume
Establishment of standard stall	Establishment of standard stall	Establishment of standard stall	Establishment of standard stall
10 minute time slot for technical presentation	10 minute time slot for technical presentation	10 minute time slot for technical presentation	
A full page	A full page	A full page	
advertisement in post sessions proceedings	advertisement in post sessions proceedings	advertisement in post sessions proceedings	

Note: GST @ 18% extra on total amount.

Travel Information

By Air

Rajiv Gandhi International Airport (HYD), Hyderabad is the nearest airport, located approximately 168 km from NIT Warangal. Taxis, airport buses, and private cabs are readily available to reach the campus.

By Train

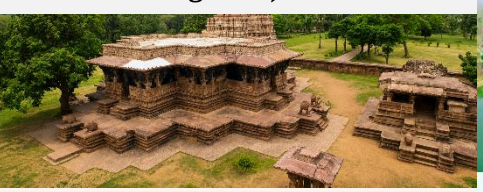
Kazipet Junction Railway Station – 3.6 km from NIT Warangal (nearest station).Warangal Railway Station – 10.3 km from NIT Warangal. Auto-rickshaws and taxis are available from both stations.

By Road

NIT Warangal is well connected by national and state highways. Regular TSRTC buses, private buses, taxis, and app-based cab services operate from Hyderabad (≈150 km) and other major cities.

Places to Visit Around NIT Warangal

Ramappa Temple (UNESCO World Heritage Site)



Thousand Pillar Temple

Kakatiya Rock Garden

Laknavaram Lake

Warangal Fort

Bhadrakali Temple & Lake

Address for Correspondence

Organizing Secretary

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