

**2024 International Conference on  
Sustainable Technologies in Civil and Environmental Engineering  
(ICSTCE 2024)**

06 - 07, JUNE 2024 | Pune, Maharashtra, India

**Program Schedule**

<b>Date</b>	<b>Time</b>	<b>Event</b>
06.06.2024	10.30 am to 11.15 am	Inaugural Function
	11.30 am to 12.10 pm	<b>Keynote Address #1: Dr. Gopal Rai</b> <i>Chief Executive Officer Dhirendra Group of Company Mumbai.</i>
	11.40 am to 04.00 pm	Session 01: STCE #01(OFFLINE)
		Session 02: CE01(Online)
		Session 03: CE02 (Online)
		Session 04: ME01(Online)
Session 05: RE01(Online)		
07.06.2024	09.10 am to 09.50 am	<b>Keynote Address #2: Mohammad Faridun Naim Tajuddin</b> <i>Associate Professor, Faculty of Electrical Engineering Technology, Universiti Teknologi Malaysia</i>
	10.10 am to 10.50 am	<b>Keynote Address #3: Dr. Ashish Verma</b> <i>Professor, Sustainable Transportation Lab. (IST Lab.), Department of Civil Engineering Indian Institute of Science (IISc), Bangalore, India</i>
	11.40 am to 04.00 pm	Session 06: STCE #02(OFFLINE)
		Session 07: CE03(Online)
		Session 08: CE04 (Online)
	Session 09: EE01(Online)	

**Session Name Tracks**

CE - Civil Engineering  
 EE - Environmental Engineering  
 ME - Mechanical Engineering  
 RE - Renewable Energy Technology

**Note:**

1. Start time given above indicates Indian Standard Time (IST).
2. Presentation will be conducted using ZOOM platform.
3. Participants can join their respective sessions by clicking the meet link given or using passcode
4. Mode of presentation should be powerpoint presentation (ppt or pptx)
5. Duration of presentation: 10 minutes (presentation) + 5 minutes (Queries)
6. Participant SHOULD join the session at least 30 minutes prior to their scheduled time.
7. Participants are requested to follow the scheduled time; especially regarding the time for your talk.
8. Participants are requested to contact the respective session coordinators for presentation related queries.
9. If any problem connecting to session, please text to the respective session In-Charges (Or) ICSTCE Whatsapp group during presentation date(s).

## Session 01: STCE #01 - OFFLINE

Date: 06.06.2024

Time: 12.05 pm to 01.00 pm

**Venue: Seminar Hall**

Time	Paper ID	Paper Title
12.05 pm	CST 4075	Mechanical and hydraulic properties of pervious concrete In incorporating waste PET plastic
12.20 pm	CST 6050	Demand Study And Impact of Electric Vehicles on grid system in Delhi
12.45 pm	CST 5089	Assessment of Stress Condition of Old Barrages with Age due to Material Deterioration using Finite Element 3D Stress Analysis
01.00 pm	CST 3056	Development of Data-Driven Predictive Framework for Nano fluid-based Solar Thermal Collector: A Machine Learning Approach

## Session 02: CE01 - ONLINE

Date: 06.06.2024

Time: 11.40 am to 04.00 pm

Session Coordinator : Dr Yuvraj Bhirud

Session Link: <https://dpu-edu-in.zoom.us/j/91651199185?pwd=c1A0NWdwZTZCc9HTVocDAzWTJqZz09>

(or)

Meeting ID: 916 5119 9185; Passcode: 695547

Time	Paper ID	Paper Title
11.40 am	CST 3018	Bibliometric analysis on Characterization of Sustainable lightweight Self Compacting Concrete with Recycled Aggregate
11.55 am	CST 3043	Assessment of Engineering Characteristics for Black Cotton Soil with Addition of Layered Stone Dust
12.10 pm	CST 3046	Rice Husk Ash based Sodium Silicate as the Alkali Activator in slag based Geopolymer Concrete
12.25 pm	CST 3060	Utilization of Participatory Rural Appraisal Techniques for Housing Condition Evaluation for Sustainable Development: A Case Study of Earthen Dwelling
12.40 pm	CST 3072	ANN-Based Prediction of Compressive Strength in Glass Wool Reinforced Brick
02.15 pm	CST 3077	Engineering the Concrete to Achieve the Mechanical Properties by Replacing Demolished Concrete Wastes as Aggregates and adding Steel Fibers as Micro- Reinforcements
02.30 pm	CST 3079	Experimental Investigation On The Effect Of Different Types Of Fine Aggregates And Cement On Realtime Measurement Of Concrete Compressive Strength Using Maturity Functions
02.45 pm	CST 3088	Lifecycle Cost Analysis (LCC) in Ready-Mix Concrete Plant using SPSS tool (statistical package for the social sciences): A Case Study considering Just-in-Time (JIT) with a delivery radius of 60 km.
03.00 pm	CST 3089	Impact of Climate Fluctuations on Paddy Yield: A Case Study in Kollengode Village, India
03.15 pm	CST 4018	Optimizing truss members using Machine Learning
03.30 pm	CST 4021	Analysing the anomalous relationship between precipitation and PM 10 concentrations in Peninsular India
03.45 pm	CST 4025	The use of BIM and TRIZ in the development of organizational and technological models

### Session 03: CE02 - ONLINE

Date: 06.06.2024

Time: 11.40 am to 04.00 pm

Session Coordinator : Dr. Shobha Rani Arangi

Session Link: <https://dpu-edu-in.zoom.us/j/92131000422?pwd=QUI4ekNGSi82VEdjNTVZMTZ0bF0Zz09>

Meeting ID: 921 3100 0422; Passcode: 026218

Time	Paper ID	Paper Title
11.40 am	CST 4028	Investigate the influence of Aspect Ratio of Copper Fiber on the improvement of pure Gypsum's compressive strength
11.55 am	CST 4029	Evaluating the Characteristics of Fibrous Pure Gypsum Containing Chopped Carbon Fiber (CCF)
12.10 pm	CST 4033	Influence of GGBS and Mono Steel Fiber on Strength Characteristics of Self-Compacting Concrete
12.25 pm	CST 4045	Performance of Self Curing Concrete with addition of Polyethylene Glycol 400 and Super Absorbent Polymer
12.40 pm	CST 4054	Experimental analysis of moisture protection of buildings
02.15 pm	CST 4064	Novel Mechanical Strength Prediction Models of Fibre Reinforced Concrete Using Statistical Analysis
02.30 pm	CST 4067	Assessing the carbon emission in concrete production in Ready-Mix Concrete (RMC) Plants
02.45 pm	CST 4071	Embracing Sustainability - A Journey with Municipal Solid Waste Ash in Brick Production
03.00 pm	CST 4090	The environmental aspect as an important part of the digital transformation in metallurgy
03.15 pm	CST 4095	The Urgency of Implementing Carbon Tax on Jakarta's Air Quality (Tax Incentives as Moderation Variable)
03.30 pm	CST 5011	Enhancing Soil Bioremediation: Microbial Composting Strategies for the Degradation of Chlorpyrifos Ethyl in Agricultural Soils
03.45 pm	CST 5050	Evaluation of Mechanical Characteristics of concrete incorporating Fly Ash and Rice Husk Ash as sustainable alternatives

## Session 04: ME01 - ONLINE

Date: 06.06.2024

Time: 11.40 am to 04.00 pm

Session Coordinator : Dr. Shruti Wadalkar

**Session Link:** <https://dpu-edu-in.zoom.us/j/99545476193?pwd=MIJHQkRtWFJFNFRFOVRFYWRVa1p2dz09>

**Meeting ID: 995 4547 6193; Passcode: 769217**

Time	Paper ID	Paper Title
11.40 am	CST 3016	Design Optimization of Manifold Microchannel Heat Sink using Evolutionary Algorithms
11.55 am	CST 3055	The Development Of Production Materials Of Bioenergy From Coconut Trees To Reduce Petroleum Energy Dependence And Environmental Protection
12.10 pm	CST 6086	Comparative study between buildings of different heights with and without Shear wall.
12.25 pm	CST 4023	Corrosion in a sugar mill
12.40 pm	CST 4024	Strategy to optimize the galvanising process for products in small batches in a galvanising plant
02.15 pm	CST 4034	Identification of optimal numerical simulation of LBW process parameters on Ti-6Al-4V alloy
02.30 pm	CST 4035	Numerical simulations on LBW of thin sheets of Ti-6Al-4V alloy using the Taguchi method to determine ideal processing parameters
02.45 pm	CST 5034	An inhibitory prospect of leaf extracts of floss flower and yam for rebar steel corrosion in concrete aggregates
03.00 pm	CST 6071	Enhancement of Mechanical Properties in Hybrid Polymer Composites through Titanium Nanoparticles and Kenaf Fiber Integration
03.15 pm	CST 6072	Mechanical Characterization and Predictive Analysis of Flax Fiber/PLA Honeycomb Sandwich Structures in FDM Additive Manufacturing
03.30 pm	CST 6073	Enhancing Mechanical Properties of Hybrid Natural Fiber Reinforced Epoxy Composites with Acacia Mangium Fiber and Teak Wood Powder
03.45 pm	CST 6079	Productivity Improvement Techniques of Metal casting Industry of Maharashtra

## Session 05: RE01 - ONLINE

Date: 06.06.2024

Time: 11.40 am to 04.00 pm

Session Coordinator : Dr. Amar Chipde

Session Link: <https://dpu-edu-in.zoom.us/j/93028375539?pwd=d3RZY3hGSVRJTHhrdkViQ0dPYVBFZz09>

Meeting ID: 930 2837 5539; Passcode: 387785

Time	Paper ID	Paper Title
11.40 am	CST 3012	Investigation on the Effect of Fatty Acids Composition on the Fuel Properties of Biodiesel
11.55 am	CST 3057	Providing energy efficiency and ecological compatibility in organising special cargo delivery
12.10 pm	CST 3064	Short Review Fuel Efficiency for The Ship Energy Management Plan
12.25 pm	CST 3074	Reliability Analysis of Micro Hydro Power Plants to Ensure Generation Availability
12.40 pm	CST 4084	Water Treatment Using Atmospheric Pressure Plasma: Dielectric Barrier Discharge and Corona Discharge Method, and Reactive Species Analysis
02.15 pm	CST 4085	LNG Transportation for Gas Power Plants with Small LNG Ships
02.30 pm	CST 4088	Analyzing the Performance of Solar Photovoltaic Systems with the Capability of Sun Tracking
02.45 pm	CST 4091	Digital Transformation and Its Impact on Environmental Awareness and Green Consumption Among Students
03.00 pm	CST 5044	Battery Energy Storage System Allocation in the IEEE 33 Bus Test System for enhanced system performance
03.15 pm	CST 6010	Barriers for adoption of green hydrogen in Indian transportation sector: A fuzzy ISM approach
03.30 pm	CST 6016	Exploring the Potential of Floating Architecture & its Energy Challenges in the UAE
03.45 pm	CST 6070	Optimizing Environmental and Economic Performance of Grid-Connected PV Charging Stations with Battery Energy Storage Systems (BESS) and an Advanced Energy Management System (EMS)

## Session 06: STCE #02 – OFFLINE

Date: 07.06.2024

Time: 12.05 pm to 01.00 pm

**Venue: Seminar Hall**

Time	Paper ID	Paper Title
12.05 pm	CST 3048	Analysis and Optimization of Transportation Logistics for Supply Chain Management of Perishable Goods using Monte Carlo Simulation
12.20 pm	CST 4027	Investigation and comparison of sustainable cooling techniques for solar (PV) panel
12.45 pm	CST 4041	Need and Awareness of Leakages and waterproofing in High rise Building



## Session 07: CE03 - ONLINE

Date: 07.06.2024

Time: 11.40 am to 04.00 pm

**Session Coordinator** : Dr. Shobha Rani Arangi

**Session Link:** <https://dpu-edu-in.zoom.us/j/91651199185?pwd=c1A0NWdwZTZCcC9HTVVocDAzWTJqZz09>

(or)

**Meeting ID: 916 5119 9185; Passcode: 695547**

Time	Paper ID	Paper Title
11.40 am	CST 5051	Assessment of Mechanical Properties of Concrete with Substitution of River Sand by Robo Sand and Incorporation of Glass Powder
11.55 am	CST 5074	Technical reserves for increasing productivity through digital transformation of construction production
12.10 pm	CST 5079	Optimization of Electrocoagulation-Flocculation for Chlorella Vulgaris Biomass Recovery Using Response Surface Methodology
12.25 pm	CST 5086	Information modeling of construction project management processes at the design stage
12.40 pm	CST 5087	Investigating the Impact of Fly ash and Copper Slag on Concrete
02.15 pm	CST 5098	Identification of Significant Attributes for the Development of an Assessment Tool Applicable to Green Campuses in India
02.30 pm	CST 6000	Enhancing Concrete Strength: The Impact of Silica Admixture
02.45 pm	CST 6006	Spatial interpolation of intermediate strength properties of soil to determine the bearing capacity of the foundation
03.00 pm	CST 6027	Kriging interpolation to determine intermediate mechanical properties of soils
03.15 pm	CST 6048	Performance evaluation of mechanical and durability properties of self-compacting concrete replaced with nano-mineral additives
03.30 pm	CST 6062	Evaluating the Effectiveness of Titanium Dioxide Based Grouting Blended with Epoxy Coating for Retrofitting of Damaged Concrete Structures
03.45 pm	CST 4072	Interpretation of Flood Zone Mapping using HEC-RAS Hydraulic Model for the Bennihalla Stream through 1D Flow Analysis

## Session 08: CE04 - ONLINE

Date: 07.06.2024

Time: 11.40 am to 04.00 pm

**Session Coordinator** : Dr. Shruti Wadalkar

**Session Link:** <https://dpu-edu-in.zoom.us/j/92131000422?pwd=QUI4ekNGSi82VEdjNTVZMTZ0bIF0Zz09>

**Meeting ID: 921 3100 0422; Passcode: 026218**

Time	Paper ID	Paper Title
11.40 am	CST 6065	Assessment of PM10 in Colombo, Sri Lanka and Its Potential Source Regions
11.55 am	CST 6074	Strength And Durability Properties of Sustainable Concrete Utilising Rice Husk Ash and Silica Fume
12.10 pm	CST 6084	Experimental Investigations on Nano Silica Concrete
12.25 pm	CST 6085	Comparing Ease of Living parameters & Urban Greening Index
12.40 pm	CST 6087	Development of Small-Scale Model House Using Cupola Slag
02.15 pm	CST 6089	Probable Intersection Layouts and Effects on Traffic Flow at Ring Road upon the Operation of Multi Level Car Park at Tribhuvan International Airport
02.30 pm	CST 6091	Mechanical Performance of Natural Fiber- Reinforced Concrete using Banana Stem and Sugarcane Fibers
02.45 pm	CST 6057	Analyzing Delayed Road Project Using Topsis Method
03.00 pm	CST 6058	Analysis and of Multistorey Steel Building with Shear Thickening Fluid Dampers in Joints
03.15 pm	CST 5082	Seismic Retrofitting of RCC Exterior Beam-Column Joints Using ECC and AFRP: A Numerical and Experimental Study
03.30 pm	CST 6017	waste Fire Pollution Mapping
03.45 pm	CST 5043	Evaluation of the addition of coconut fiber variations in corroded concrete mechanical properties

## Session 09: EE01 - ONLINE

Date: 07.06.2024

Time: 11.40 am to 04.00 pm

Session Coordinator : Dr. Amar Chipde

**Session Link:** <https://dpu-edu-in.zoom.us/j/99545476193?pwd=MIJHQkRtWFJFNFRFOVRFYWRVa1p2dz09>

**Meeting ID: 995 4547 6193; Passcode: 769217**

Time	Paper ID	Paper Title
11.40 am	CST 3071	Environmental management of modern international corporations in the context of sustainable development
11.55 am	CST 3094	Effect of coconut oil in water vapor permeation property of pigeon pea starch based packaging film
12.10 pm	CST 4019	Interactions between Land Use practices and Climate change on Water quality in India: A comprehensive review
12.25 pm	CST 4061	WQI Assessment for Swarnamukhi River water at Chandragiri, Andhra Pradesh, India
12.40 pm	CST 4076	Comparative Evaluation Of Satellite- Based Merra-2 Against Ground-Based Data For Pm2.5 And Tc Concentrations In Ghaziabad, India
02.15 pm	CST 5090	Placement of trade and household service complexes in regions of Uzbekistan according to climatic conditions
02.30 pm	CST 5099	Analysis and mapping of the indoor acoustic environment in university study spaces
02.45 pm	CST 6026	Toward the use of an intermediate value of the modulus of deformation of soils in geotechnical design
03.00 pm	CST 6028	Approximation of strength and deformation properties of soils by ArcGIS Topo to Raste tool
03.15 pm	CST 6060	Comprehensive assessment of air quality dynamics in Delhi: a tri-phased analysis spanning pre, during, and post-lockdown Periods
03.30 pm	CST 6063	Utilization of Industrial Wastes in Production of Eco-friendly Bricks
03.45 pm	CST 6020	A comparative study of machine learning algorithms for weather prediction in India
04.00 pm	CST 9048	Natural Waste Recovery and Preservation Technologies Toward Sustainability.