

SDCEE-2024: Conference Schedule (Virtual)

Day 1: February 22, 2024	
8:30-9:30	Registration (Auditorium)
9:30-10:00	Inauguration (30 min)
10:05-10:40	Chief Guest: Prof. A. B. Pandit, ICT Mumbai, INDIA Title: <i>Progress and Nature</i>
10:40-11:10	High Tea break (30 min)
Virtual Parallel Technical Session-1 (Hall-C)	
Theme: <i>Advancements in Energy Engineering (AEE)</i>	
Session Chair	Dr. V.C.S. Palla, IIP Dehradun, INDIA
Session Co-Chair	Dr. Sudhir K. Singh, DCHED, TIET, Patiala, INDIA
11:10-13:30	Oral (Virtual) 1-11 (10 min each)
	Paper ID: 50; Phase Change Material Based Passive Cooling of a Single Pouch Li-Ion Cell Under Different Ambient Conditions; Authors: Rajesh Kumar, Anoop K. Gupta
	Paper ID: 54; Effects of Segmentation in Composite Phase Change Material/Solidification On Melting Performance Of Triplex-Tube Thermal Energy Storage Systems; Authors: Md Tabrez Alam, Anoop K. Gupta
	Paper ID: 81; Life Cycle Assessment of Biodiesel Produced from Cereal Byproducts; Authors: Mohd Faizullah, Gaurav Matiwari, Aman Kumar, Dr. Anil Kumar
	Paper ID: 204; Thermodynamic Analysis of SCO_2 Recompression Cycle for Critical Analysis Of Recompression Fraction And Pressure Ratio To Optimize Pressurized Water Reactor Plant Efficiency.; Authors: Garima Bharti, Manjunath K And Anil Kumar
	Paper ID: 210; Performance Evaluation of Single Slope Solar Still Augmented with Hanging Cotton Wick; Authors: Maneesh Kumar Shivhare, Samsher And Anil Kumar
	Paper ID: 197; An Experimental Study of The Deactivation of Supported Ni Catalyst Due To Sulfur Poisoning During Tri-Reforming of Biogas; Authors: Garima Bharti, Manjunath K And Anil Kumar
	Theme: <i>Bioprocess and Food Engineering (BFE)</i>
	Paper ID: 52; Application of Freeze Drying to Extend the Shelf Life Of Golden Delicious Apples; Authors: Asma Iqbal, Faiz Iqbal, Adnan Ali, Jibraan Asim
	Paper ID: 92; Optimizing Drying Parameters for Enhanced Nutritional Retention in Dried Apples: A Scientific Investigation Into Temperature, Humidity, and Pre-Treatment Methods; Authors: Tanushree Bhattacharjee, Sanchay More, Nikita Chaudhari, Maithili Chaware, Hitesh Mukunde, Diya Misal
	Paper ID: 130; Nutritional Enrichment of Salad Dressing with Flax Microgreens: Formulation and Sensory Evaluation; Authors: Dr. Soumya Rathore, Dr. Anand Kumar Pandey
	Paper ID: 168; Thermodynamic Evaluation of Calcium in Milk using Graphical Analysis; Authors: Tanushree Bhattacharjee, Subhadeep Chakrabarti, Shreyash Koyale, Sumit kumar Prasad, Pruthviraj Kadam, Mayuresh Naikwade
	Paper ID: 174; Biotransformation of Hexavalent Chromium from Wastewater Using Bacillus firmus; Authors: Pragatisheel, Abhishek Kumar, Leela Manohar Aeshala, Tapas Palai
13:25-14:25	Lunch break (60 min)
Virtual Parallel Technical Session-2 (Hall-C)	

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SDCEE-2024: Conference Schedule (Virtual)

Session Chair	Dr. Dhananjay Singh, IET Lucknow, INDIA
<i>Theme: Materials in Engineering (MAT)</i>	
Session Co-Chair	Dr. Bonamali Pal, DSCBC, TIET, Patiala, INDIA
14:30-16:00	Oral (Virtual) 12-19 (10 min each)
	Paper ID: 14; Effect of silicate units on optical and structural properties for various automotive windshield glasses; Authors: Santosh Kumar, K. singh, Devender Kumar
	Paper ID: 40; "Effect of Superplasticizer Dosage on Fresh and Mechanical Properties of Blended Self-Compacting Geopolymer Concrete"; Authors: NARESH
	Paper ID: 53; Experimental Investigation of Sustainable Lightweight Precast Structural Elements; Authors: Durga Chaitanya Kumar Jagarapu, Arunakanthi Eluru, Chiranjeevi Rahul Rollakanti And Shalin Prince
	Paper ID: 68; Study of Chemically Treated PET Fiber with Micro Silica in M25 Grade Concrete Mix; Authors: Rishabh Joshi, Anurag Singh, Anjali Singh, Rifat Resatoglu, Shaib Abdulazeez Shehu, Mohd Zain
	Paper ID: 85; Variation of chirality cause significant thermodynamic changes in multi walled carbon nanotubes: A computational study; Authors: Arvind K. Gautam, Nandlal Pingua, Udisha Pathak, Kumud Pandey, Avinash Chandra
	Paper ID: 165; "Corrosion inhibition of mild steel using Azadirachta indica leaf extract in an alkaline medium containing Cl ⁻ ions"; Authors: Payal K.Baitule, R. Manivannan
16:05-16:25	Paper ID: 214; Parametric Study, Optimization and Ranking Analysis of Grewia Optiva Fibre/Dolomite Based Hybrid Composites Using Hybrid MCDM Technique; Authors: Shashi Kant Verma, Ashutosh Gupta, Brijesh Gangil
	Tea break (20 min)
	Virtual Parallel Technical Session-3 (Hall-C)
	<i>Theme: Chemical & Process Engineering (CPE)</i>
	Session Chair
	Dr. Pradeep Kumar, IET Lucknow, INDIA
	Session Co-Chair
	Dr. Jyotsana Mehta, DBT, TIET, Patiala, INDIA
16:25-17:25	Oral (Virtual) 20-24 (10 min each)
	Paper ID: 22; Separation of azeotropic mixture of ethyl acetate and isopropyl alcohol by extractive distillation: entrainer selection, simulation, sensitivity analysis and experimental validation"; Authors: Ms. Pooja Pandurang Sanap, Dr. Yogesh. S. Mahajan
	Paper ID: 23; Transesterification as a means to produce esters: A critical review; Authors: Dr. Reshma R. Devale, Dr. Yogesh S. Mahajan
	Paper ID: 141; Catalytic Thermo Liquefaction (CTL) of Multilayer Plastic Waste into Liquid Hydrocarbon Oil; Authors: Amol T. Waghmode, Shehbaz M. Ansari, Yogesh J. Badgujar, Vishwanath H. Dalvi, Aniruddha B. Pandit, Hitesh S. Pawar .
	Paper ID: 144; Process for biodiesel production from used cooking oil using ultrasonic intensification; Authors: Aman Kumar Bhonsle, Neha Rawat, Tushar Aggarwal, Serges Bruno Lemoupi Ngomade, Ajay Kumar, Neeraj Atray
	Paper ID: 166; Adsorption of cobalt ion from aqueous metal ion solution by thermally activated punica granatum carbon -adsorption isotherm and kinetic study; Authors: Sushma,Amit keshav,R.Manivannan
19:00-22:00	Conference/Gala Dinner

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SDCEE-2024: Conference Schedule (Virtual)

Day 2: February 23, 2024	
8:30-9:00	Registration (LT-201)
Virtual Parallel Technical Session-4 (Hall-C)	
Session Chair	Dr. V.C.S. Palla, IIP Dehradun, INDIA
<i>Theme: Sustainable Environmental Solutions (SES)</i>	
Session Co-Chair	Dr. Bunushree Behera, DBT, TIET, Patiala, INDIA
9:00-11:05	Oral (Virtual) 25-34 (10 min each)
	Paper ID: 10; Thermodynamic Modeling of Binary Binders with Agricultural Residues for Hydration Analysis; Authors: Ajeesh kumar N S,Radhika K.L,Sunil
	Paper ID: 25; Synthesis and application of bio-adsorbent for the removal of Tetracycline (TTC) antibiotics from its aqueous solution: A Equilibrium kinetic and thermodynamic study; Authors: Ashutosh
	Paper ID: 36; Osmotic Computing: A Catalyst for Cloud-Edge-IoT Integration; Authors: Akashdeep Kaur, Sharad Saxena, Rajesh Kumar
	Paper ID: 39; Experimental studies on Sustainable concrete using oil palm industrial waste; Authors: MADDULA ANJALI, Durga Chaitanya Kumar Jagarapu, Sunil Nandipati
	Paper ID: 41; Experimental investigation of Sustainable Light Weight Concrete Made with Oil Palm Industrial Waste; Authors: Gurram Likitha, Durga Chaitanya Kumar Jagarapu, Sunil Nandipati
	Paper ID: 51; "Potential utilization of bambusa balcoa in cement mortar as a reinforcing filler to improve flexural and compressive strength; Authors: Hemlata*, Harnisha Rana
	Paper ID: 57; Sustainable Clothing: Analyzing the Need and Viability of This Greener Alternative; Authors: Nidhi Sharma, Mudita Nagpal, Tanuja Nautiyal
	Paper ID: 82; Low cost bio-adsorbent for Cr(VI) contaminated effluent discharge from leather Industry; Authors: Archana Kushwaha, Zeenat Arif
	Paper ID: 126; Fabrication and synthesis of biodegradable films from cellulose waste to be used as an alternative for Plastic; Authors: R. Lokesh, Amit Keshav
	Paper ID: 127; Degradation of Congo Red Dye by using Synthesized Photocatalysts of CdO, SnO2 and CdO-SnO2 Nanocomposites in the presence of Visible Light; Authors: L. Nawin, Chandrakant Thakur
11:05-11:25	Tea break (20 min)
Virtual Parallel Technical Session-5 (Hall-C)	
<i>Theme: Sustainable Environmental Solutions (SES)</i>	
Session Chair	Dr. Dhananjay Singh, IET Lucknow, INDIA
Session Co-Chair	Dr. Vivek Pawar, DCHED, TIET, Patiala, INDIA
11:25-13:25	Oral 35-44 (Virtual) (10 min each)
	Paper ID: 131; Sustainable Lead Removal from Produced Water Using Cassava Stem Biochar: An Eco-Friendly Approach"; Authors: Vasu Gajendiran, Prabu Deivasigamani, Selvaraju Sivamani
	Paper ID: 135; Revealing Urban Atmosphere Dynamics: Understanding New Particle Formation in the Kanpur Region through Analysis of Fresh Emissions and Long-Range Transport; Authors: Vaibhav Chaturvedi, Ravish Singh Rajput, Anubhav Kumar Dwivedi

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SDCEE-2024: Conference Schedule (Virtual)

	Paper ID: 155; Quantification of Urban Growth Dynamics using Spatial Metrics and Relative Entropy in Roorkee Planning Area; Authors: Anjali Singh, Rishabh Joshi, Akash Srivastava, Shaib Abdulazeez Shehu
	Paper ID: 158; Sonochemical CuS Synthesis: Unveiling Its Importance in the Remediation of Malachite green; Authors: Akashdeep Dey, S. Noyel Victoria, Mahendra S.Gaikwad
	Paper ID: 161; 'Unravelling Arsenic Contamination in the Ganga-Ghaghara Basin, India: Reconnaissance using Geographical Information System"; Authors: Namrata Pandey, Abhishek Saxena, Geetgovind Sinam, Ravi Kumar Tiwari
	Paper ID: 167; Water Footprint Assessment of Paddy based Cropping System in High Altitude Temperate Zone of Kashmir, India; Authors: Shafaq Hassan and Aditya Rana
	Paper ID: 171; Green synthesis of Copper oxide nanoparticles using Solanum tuberosum extract to mediate photocatalytic degradation of Methylene blue; Authors: Dr. Lata Sheo Bachan Upadhyay, Pratistha Bhagat
	Paper ID: 182; Facile Synthesis of Nickel Oxide Nanoparticles and Its Application Photocatalytic Remediation of Crystal Violet Dye; Authors: Anita Tirkey, Lata Sheo Bachan Upadhyay
	Paper ID: 186; Hydrothermally treated Tea Waste: A Novel Approach for Methylene Blue Photodegradation and Antimicrobial Treatment of Wastewater; Authors: Manish Pant*, Jaya Sethi, Prayas Singh, Samta Manori, Ravi Shukla, Jabrinder Singh
	Paper ID: 223; Use of spent ballast as a column material for enhancing load carrying capacity of soft clay bed: Numerical Analysis; Authors: Srijan, Pooja Kharra, Kevin Somra, Gautam Narula, Aditi Sharma
13:30-14:30	Lunch break
Virtual Parallel Technical Session-6 (Hall-C)	
<i>Theme: Sustainable Environmental Solutions (SES)</i>	
Session Chair	Dr. Pradeep Kumar, IET Lucknow, INDIA
Session Co-Chair	Dr. D. Choudhury, DSCBC, TIET, Patiala, INDIA
14:30-16:15	Oral 45-54 (10 min each)
	Paper ID: 195; Experimental Investigation of Bi-Component Particle Segregation Studies in a Spiral Concentrator; Authors: Prudhvinath Reddy, Narasimha Mangadoddy
	Paper ID: 173; Environmentally friendly remediation of hazardous malachite green dye by utilizing cashew nut shell powder as bio-adsorbent: a sustainable approach; Authors: Poonam Mandale, Kavita Kulkarni, Kishor Jadhav, Anand Kulkarni,
	Paper ID: 192; Evaluating the effectiveness of eggshells in remediation of lead metal ions from aqueous solution; Isotherms and Kinetics Study; Authors: Vinay Raj, Mrityunjay Singh Chauhan, Sunder Lal Pal, Shubham Tomar
	Paper ID: 216; Optimization of microwave pyrolysis parameters to enhance yield and BET surface area of MSH char using RSM methodology; Authors: Akanksha Verma, Manoj Tripathi
	Paper ID: 201; Effect of cerium oxide as additive in biodiesel on the performance and emission characteristics of biodiesel fueled engine; Authors: Anil Kumar Yadav, Saurabh Sharma, Anil Kumar, Shailendra Sinha
	Paper ID: 202; Highly economical and efficient polyethylene separator for redox flow battery; Authors: Utsav Dalal, Anil Verma
	Paper ID: 211; Comparative study of wireless sensor networks for sustainable environmental surveillance; Authors: Upasna Joshi, Dr Rajiv Kumar

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SDCEE-2024: Conference Schedule (Virtual)

	Paper ID: 222; Groundwater quality assessment and management strategies in Mathura: Insights and Implications; Authors: Vinod Kumar Kushwah and Kunwar Raghvendra Singh
	Paper ID: 224; Application of demolished construction waste as a column infill to improve soft soil's strength: Numerical Analysis; Authors: Srijan, Gautam Narula, Abhivik Singh, Mansi Thakur, Sagar Singh, Aditi Sharma, Khawaish Gupta
	Paper ID: 225; Utilisation of fly ash as a top layer of foundation under embankment loading: Numerical Study; Authors: Gautam Narula, Srijan, Abhijeet Gupta, Shashwat Singh, Rishikesh Kanitker, Aditi Sharma
16:15-16:35	Tea break (20 min)
Virtual Parallel Technical Session-7 (Hall-C)	
<i>Theme: Modeling and Simulation of Processes (MSP)</i>	
Session Chair	Dr. Ravi Kumar Arun, IIT Jammu, INDIA
Session Co-Chair	Dr. Shilpi Verma, DEE, TIET, Patiala, INDIA
16:35-17:35	Oral (Virtual) 55-60 (10 min each)
	Paper ID: 26; Polygeneration process for recovering waste cold energy in LNG regasification terminal; Authors: Hrithika G, Om Rajesh Gunjal, Satakshi Agarwal, Arnab Dutta
	Paper ID: 87; Simulation on propanol reforming for hydrogen production: A thermodynamic analysis; Authors: Brajesh Kumar, Pradeep Kumar, Arun Rai, Abhimanyu Kumar, Anuj Kumar
	Paper ID: 90; Comparative analysis of fluid flow behavior in helical coil, cylindrical pipe, and porous media through CFD simulations; Authors: Krishna Srihari Bonasi, Sehaj Anand
	Paper ID: 184; An Experimental and Computational Study of Indian Sub-Bituminous Coal for Pyrolysis of Vitrinite; Authors: Dharmendra Pandey
	Paper ID: 188; Modified Fractional Order PID Controller Design for Mixing Tank Process; Authors: Parmanand Maurya, Ram Saran Singh
	Paper ID: 207; CFD Modelling of Liquid-Liquid Batch Stirred Tank; Authors: Ms. Prafulli Mahakal, Prof. Ashwin W Patwardhan
Day 3: February 24, 2024	
8:30-9:00	Registration (LT-201)
Virtual Parallel Technical Session-7 (Hall-C)	
<i>Theme: AI, Machine Learning, and Data Analytics in Process Design/Optimization (AML)</i>	
Session Chair	Manish K. Dhiman, NIT Hamirpur, INDIA
Session Co-Chair	Dr. Sharad Saxena, DCSSED, TIET, Patiala, INDIA
9:00-11:50	Oral 61-68 (10 min each)
	Paper ID: 9; Comparison of machine learning models to predict the phase equilibrium of N ₂ -CO ₂ system for cryogenic carbon capture; Authors: Emel V Kurian, Pavitra Sandilya
	Paper ID: 27; Machine learning framework for predicting ignition properties of pure and fuel mixtures; Authors: Aditya Ravi Swami, Yashi Khandelwal, Shashank Sistla, Arnab Dutta, Iyman Abrar

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SDCEE-2024: Conference Schedule (Virtual)

	Paper ID: 37; Enhancing Osmotic Computing using Machine Learning for Dynamic Resource Optimization in Cloud Environments; Authors: Akashdeep Kaur, Sharad Saxena, Rajesh Kumar
	Paper ID: 47; Application of Opposite Point-based Differential Evolution (OPDE) algorithm for modeling VLE data; Authors: Swati Yadav, Rakesh Angira
	Paper ID: 60; Development of new correlation for the prediction of power number for closed clearance impellers using machine learning methods trained on literature data; Authors: Sumit S. Joshi, Vishwanath H. Dalvi, Vivek S. Vitankar, Jyeshtharaj B. Joshi, Aniruddha J. Joshi
	Paper ID: 71; Selection of an alternate cementitious mortar using ceramic tile dust waste: a hybrid MCDM approach; Authors: Sunil Nandipati, Srinivasa Rao GVR, Nikhil Kumar Degloorkar
	Paper ID: 102; Prediction of reactant concentration in batch reactor through soft sensor using electrochemical parameters; Authors: Ashutosh Kumar Pathak; Madhusree Kundu
	Paper ID: 136; A new integrated color balance technique for underwater image Enhancement; Authors: Dr. Meenu
	Paper ID: 133; Emerging trends in the design of Non-bioaccumulable fluorinated surfactants and its application; Authors: Versha Joshi, Dr. Durgesh Nandini and Prof. Roli Purwar
	Paper ID: 128; Optimal design of coolant jacket for cryogen transfer pipelines; Authors: S.Sivasree; B.Nitin
	Paper ID: 86; Molecular dynamics study on TiO ₂ to investigate the thermal and mechanical behavior for selected energy conversion applications: Pratibha Sharma, Arvind Kumar Gautam, Mamta Awasthi
	Paper ID: 88; Comparative study on supercooled silicon by using different force field model; Authors: Udisha Pathak, Arvind K. Gautam, Avinash Chandra
11:50-12:10	Tea break (20 min)
12:10-13:00	Valedictory Session (Hall-A)
13:00-14:00	Lunch break

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