List of Abstract: First International Conference on Sustainable Technologies, ICST-2024, December 12-15, 2024.
ICST 2024 will be hosted in Physical Mode: 12-14th December, Virtual-mode: 15th December
Venue: National Institute of Technology-Durgapur, West Bengal 713209

ABSTRACT NO.	Email	Title	Name	Organization	Abstract Title	Mode of Attending	Themes	Desired Mode of
VIRTUAL								
					Technical Track I : Energy Conversion and Storage			
1	Big2497653@gmail.com	Mr.	Jian-Xiang ling	Energy Conversion and Storage	Synthesis and electrical analysis of silver sulfide	Online	Energy Conversion and Storage	Oral
2	banerjeeindia.10@gmail.com	Mr.	MUKUL BANERJEE	National Institute of Technology, Mizoram	Current Developments and Possible Future Prospects for Floating Photovoltaic (FPV)	Online	Energy Conversion and Storage	Oral
3	a0966532962@gmail.com	Mr.	Chen-Xian-Qi	National Changhua University of Education	Self-powered n-Ag2Se/p-Si heterojunction photodetector	Online	Energy Conversion and Storage	Oral
4	anshikha.nautiyal@gmail.com	Ms.	Anshikha Nautiyal	Amity university	Zinc oxide-based Nanomaterial for Sustainable Energy Applications	Online	Energy Conversion and Storage	Oral
5	rc.20me1107@phd.nitdgp.ac.in	Mr.	Ramit Choudhury	NIT Durgapur	Comparative study of simple and Semi Frustrum Type Solar Air Heater based on Thermo-	Online	Energy Conversion and Storage	Oral
6	piyali.chatterjee@uj.edu.pl	Dr.	Piyali Chatterjee	Jagiellonian University	Enhanced visible-light photoelectrochemical activity of anodized WO3 by hydrothermal	Online	Energy Conversion and Storage	Oral
7	simran50016@gmail.com	Ms	Simran kaur	lovely professional university	Advance Synthesis Techniques of spinel ferrites: A detail review of their structural,	Online	Energy Conversion and Storage	Oral
8	atul206@gmail.com	Mr.	Atul Kumar	Amity University	A Review of the Estimation of State of Charge and Remaining Useful Life of Lithium-Ion	Online	Energy Conversion and Storage	Oral
9	kashyap2003mansi@gmail.com	Ms	Mansi Kashyap	Amity University	Simulation of Nickel oxide	Online	Energy Conversion and Storage	Oral
10	rajpathak775@gmail.com	Mr.	Pathak Rajkumar Babunar	Indian Institute of Technology	Upcycling LDPE Plastic into Porous Sulfurized Carbon Anodes for High-Performance	Online	Energy Conversion and Storage	Oral
11	sachchidanand.a@srmap.edu.in	Dr.	Sachchidanand	SRM University AP	SCAPS-1D simulation on Charge Transport/ Absorber Interface of Lead-free Perovskite	Online	Energy Conversion and Storage	Oral
12	sourav.saha36@gmail.com	Mr.	Sourav Saha	National Institute of Technology, Mizoram	Current Approaches for Solar Cooling PV Modules & its Assessment Systems: An	Online	Energy Conversion and Storage	Oral
13	Wang04135629@gmail.com	Mr.	Chi-Chao Wang	National Changhua University of Education	Photoelectric properties of P-CuI/N-Si heterjunction	Online	Energy Conversion and Storage	Oral
14	amitmondal009@gmail.com	Dr.	AMIT MONDAL	BIDHAN CHANDRA COLLEGE	Effect of Joule heating on rotating electro-osmotic flow in a sinusoidally varying micro-	Online	Energy Conversion and Storage	Oral
15	anshikha.nautiyal@gmail.com	Ms.	Anshikha Nautiyal	Amity university Greater Noida	Recent advances in efficiency enhancement of solar cells through zinc oxide nanomaterials	Online	Energy Conversion and Storage	Oral
16	sunee.world@gmail.com	Mr.	SUNIL KUMAR CHOUDHARY	C ROY ENGINEERING COLLEGE, DURG	Performance Analysis of A DC Microgrid with Different Storage Management Schemes	Online	Energy Conversion and Storage	Oral
17	ayan@gkciet.ac.in	Mr.	Ayan Banik	GKCIET	Study and Optimal Sizing of a PV Microgrid for an Institute Campus with Demand Response	Online	Energy Conversion and Storage	Oral
					Technical Track II : Solid State Devices and Materials			
18	sowmyakb@rvce.edu.in	Dr.	Sowmya K B	RV College of Engineering, Bengaluru	Resourceful Shallow Clock Tree Synthesis with Lightweight Optimization Methods	Online	Solid State Devices and Materials	Oral
19	ajay@bccollegeasansol.ac.in	Dr.	AJAY KUMAR SHARMA	Bidhan Chandra College, Asansol	Thermal and Electronic Properties of AgInX2 (X=S,Se,Te) Ternary Chalcopyrites: A First-	Online	Solid State Devices and Materials	Oral
20	94rahulmandal@gmail.com	Mr.	Rahul Mandal	The University of Burdwan	Structural and Mechanical Studies on Cubic Zirconium Oxide (c-ZrO2) by DFT+GGA	Online	Solid State Devices and Materials	Oral
21	dt232c001@nitmz.ac.in	Ms	Sneha Singh	National Institute of Technology Mizoram	Exploration of Underlap with High-K Spacers in GS GAAFET for Enriched DC	Online	Solid State Devices and Materials	Oral
22	bhattacharya.ipshita153@gmail.com	Ms.	Ipshita Bhattacharjee	Jadavpur University	Electrochemical Detection of Cinnamic Acid in Green Tea using Graphite Paste Electrode	Online	Solid State Devices and Materials	Oral
23	write2joymukherjee@gmail.com	Dr	Joy Mukherjee	IIT Kanpur	Yellow to deep red sub-emissive band formation on optically porous nano-structured	Online	Solid State Devices and Materials	Oral
24	sowmyakb@rvce.edu.in	Dr.	Sowmya K B	RV College of Engineering	Layered Verification Environment for Cache Controller using Transaction-Level Modeling	Online	Solid State Devices and Materials	Oral
25	apurbasarkar954@gmail.com	Mr.	APURBA SARKAR	Kazi Nazrul University	Comprehensive Analysis of CuAlO2 Synthesized via Ball-Milling: Structural and Optical	Online	Solid State Devices and Materials	Oral
26	subhashis.samanta@makautwb.ac.in	Dr.	Subhashis Samanta	Maulana Abul Kalam Azad University of	Detection of Latent Fingerprints on Various Surfaces Using ZnO	Online	Solid State Devices and Materials	Oral
27	surajitchem11@gmail.com	Dr.	Surajit Saha	Bidhan Chandra College	A Brief Review on The Impact of Gaussian White Noise on the Oscillator Strength of	Online	Solid State Devices and Materials	Oral
28	sowmyakb@rvce.edu.in	Dr.	Sowmya K B	RV College of Engineering, Bengaluru	Analysis of Dot product using Floating point system and Posit Dot Product Unit	Online	Solid State Devices and Materials	Oral
29	singhs150898@gmail.com	Ms	Sneha Singh	National Institute of technology Mizoram	Impact on DC and Analog/RF Performance of Gate Underlap Induced High-K Spacer with	Online	Solid State Devices and Materials	Oral
30	sowmyakb@rvce.edu.in	Dr.	Sowmya K B	RV College of Engineering, Bengaluru	SPI Communication System with Integrated Clock Gating in SystemVerilog	Online	Solid State devices and Materials	Oral
31	sowmyakb@rvce.edu.in	Dr.	Sowmya K B	RV College of Engineering	Dual port RAM Verification with Multiplier Functionality using SystemVerilog	Online	Solid State Devices and Materials	Oral
32	sm7361@srmist.edu.in	Mr	Saptarshi Mukherjee	Kazi Nazrul University	Synthesis, characterization of Calcium Copper Titanate by modified solid state process: An	Online	Solid State Devices and Materials	Oral
33	abhishek.ece.phd@nitmz.ac.in	Mr.	Abhishek Saha	NIT,Mizoram	Development of Dielectrically Influenced TG-FinFET for Biosensing applications	Online	Solid State Devices and Materials	Oral
34	jrmohanty2007@gmail.com	Mr.	Jyoti Ranjan Mohanty	V PUBLIC SCHOOL, CHANDRASEKHAR	rmation of self-organized nanostructures on semi-insulating InP by 100 keV Ar+-ion irradia	Online	Solid State Devices and Materials	Oral
					Technical Track III: Quantum Science and Technology			
35	sanchariguha1996@gmail.com	Ms.	Sanchari Guha	Kyoto Institute of Technology	Quantum Computing: Current scenario and Future prospect	Online	Quantum Science and Technology	Oral
36	laxmansur21@gmail.com	Dr.	Suranjan Lakshan	ihar Institute of Technology, Maranga, Purnea	Implementation of Octal phase shift Keying (OPSK) using Electro-Optic Modulator (EOM)	Online	Quantum Science and Technology	Oral
					Technical Track IV: Data Science, Machine learning and AI			
37	priyanka2552singh@gmail.com	Mrs.	Priyanka Singh	Lovely Professional University	Academic Engagement Scale for University Students: Development and Validation in the	Online	Data Science, Machine learning and AI	Oral
38	rupanpaul9@gmail.com	Mr.	RUPAN PAUL	DEPT. OF COMPUTER SCIENCE &	Low-light Object Detection with Image Enhancement using Deep Learning	Online	Data Science, Machine learning and AI	Oral
39	labonisarkar.sona@gmail.com	Mrs.	Laboni Sarkar	Swami Vivekananda University	Machine Learning for Anomaly Detection: A Review	Online	Data Science, Machine Learning and AI	Oral
40	labonisarkar.sona@gmail.com	Mrs	Laboni Sarkar	Swami Vivekananda University	Intrusion detection system: A comprehensive review	Online	Data Science, Machine Learning and AI	Oral
41	sarder.amitava@gmail.com	Mr.	AMITAVA SARDER	SWAMI VIVEKANANDA UNIVERSITY	Spam Detection using a Naïve Bayes Classifier in the context of Social Media Big Data	Online	Data Science, Machine learning and AI	Oral
42	sarder.amitava@gmail.com	Mr.	Amitava Sarder	Swami Vivekananda University	Spam Detection on Social Media Text	Online	Data Science, Machine learning and AI	Oral
43	vasumathibaskar@gmail.com	Dr.	B.Vasumathi	University	Optimizing Prompt Engineering for Voice-Activated AI Systems	Online	Data Science, Machine learning and AI	Oral
44	bhuvan27112003@gmail.com	Mr	BHUVAN ATUL SAVANT	Department of Information Science and	Advanced Machine Learning Algorithms for Resolving Human-Animal Conflict in Hybrid	Online	Data Science, Machine learning and AI	Oral
45	utpalmajee2012@gmail.com	Mr.	Utpal Majee	Bidhan Chandra College, Asansol	A new efficient to approach to solve Multi Objective Transportation Problem	Online	Data Science, Machine learning and AI	Oral
46	kb.19ce1502@phd.nitdgp.ac.in	Mr.	Koyndrik Bhattacharjee	National Institute of Technology, Durgapur	Enhancing Pipeline Safety with Real Time Leak Detection via One Class SVM and	Online	Data Science, Machine learning and AI	Oral
47	rkarmakar@cs.buruniv.ac.in	Dr.	Rahul Karmakar	The University of Burdwan	A Prototype Modeling of a Smart Agriculture Monitoring System using IOT Based Drones	Online	Data Science, Machine learning and AI	Oral
48	gsarker.cse@nitdgp.ac.in	Dr.	GOUTAM SARKER	Computer Science and Engineering	One Optimal Convolution Neural Network for Differentiation among Coronavirus	Online	Data Science, Machine learning and AI	Oral
49	nagasreenivasarao_p@pe.iitr.ac.in	Mr.	Nagasreenivasarao P.	IIT ROORKEE	Synthetic Data Generation and Regression Analysis of the generated data: A	Online	Data Science, Machine learning and AI	Oral
50	yeshali64@gmail.com	Ms	SHALINI S	St. Joseph's Insititute of Technology	Development of smart school id card system	Online	Data Science, Machine learning and AI	Oral
51	gourango.ghosh121@gmail.com	Mr.	Gourango Ghosh	THE UNIVERSITY OF BURDWAN	Enhancing Fraud Detection Accuracy through Hyperparameter Optimization of	Online	Data Science, Machine learning and AI	Oral

Technical Track V: Sustainable Composites Technology							
52	gm.21u10620@btech.nitdgp.ac.in	Mr.	Gautam Mishra	National Institute of Technology Durgapur	Optimizing the process of extraction of a polysaccharide from Zizyphus mauritiana fruit	Online	Sustainable Composites Technologies	Oral
53	PASIBHANGARMUKHERJEE@GMAIL.C(	Ms	PRIYASI BHANGAR	Brainware University	Effect of change in quantity and layers of chopped jute strand mat on the structure and	Online	Sustainable Composites Technologies	Oral
54	shantanu3511@yahoo.com	Dr	SHANTANU DEBNATH	SRKR Engineering College, Bhimavaram	Sustainable Superalloy Machining in a near dry Lubrication Environment: A GEP-PSO	Online	Sustainable Composites Technologies	Oral
55	nil192.iitkgp@gmail.com	Mrs.	Nilima Maji	Lovely Professional University, Punjab	Advancements in Surface Modification of Ferrite Nanoparticles and Their Diverse	Online	Sustainable Composites Technologies	Oral
56	santu.mathju@gmail.com	Dr.	Dr. Santu Dey	Bidhan Chandra College, Asansol	Characterizations of some types of solitons in general relativistic spacetime	Online	Sustainable Composites Technologies	Oral
57	aditi360124@gmail.com	Ms.	Aditi Roy	National Institute Of technology , Durgapur	Fabrication of efficient packaging substitute by blending of recycled polymer with surface	Online	Sustainable Composites Technologies	Oral
58	dey.sayon@gmail.com	Mr.	Sayon Dey	Brainware University	Numerical analysis and optimization of different process parameters in AZ31B magnesium	Online	Sustainable Composites Technologies	Oral
59	dl.21u10072@btech.nitdgp.ac.in	Mr.	Deep Laha	NIT Durgapur	Application of Biopolymer based flocculants in re-refining of waste lubricating oil using	Online	Sustainable Composites Technology	Oral
60	kushagra.bhargava1@s.amity.edu	Mr.	Kushagra Bhargava	Amity Institute of Nanotechnology	DEVELOPMENT OF SILVER-THERMOCOL NANOCOMPOSITE FOR ANTI-	Online	Sustainable Composites Technology	Oral
61	nityanandomahato@gmail.com	Mr.	NITYANANDO MAHATO	BRAINWARE UNIVERSITY	Stress distribution and heat transfer of steel alloys insights into gas turbine compressor	Online	Sustainable Composites Technologies	Oral
62	sayanton140503@gmail.com	Mr.	Sayanton Mazumder	National Institute of Technology Durgapur	ute fibre reinforced unsaturated polyesters laminate preparation using egg shell filler	Online	Sustainable Composites Technologies	Oral
63	chatterjeebhaskar36@gmail.com	Mr.	BHASKAR CHATTERJEE	RNTU,BHOPAL,MP	Application of Operation Research in Sustainable Environmental Management System	Online	Sustainable Composites Technologies	Oral
64	sayanton140503@gmail.com	Mr.	Sayanton	National Institute of Technology Durgapur	Parametric optimization of jute fibre reinforced unsaturated polyesters laminate synthesis	Online	Sustainable Composites Technologies	Oral
Technical Track VI: Environment and Water							
65	ashraf.sumayab@gmail.com	Ms	Sumaya Binta Ashraf	National Institute of Technology Durgapur	Optimized Adsorption of Toxic Ions Using Modified Rice Husk in Aqueous Solutions	Online	Environment and Water	Oral
66	naresh@bccollegeasansol.ac.in	Dr.	Naresh Chandra Pati	Bidhan Chandra College, Asansol	Delayed carrying capacity induced intricate dynamics in single-species evolution in ecology	Online	Environment and Water	Oral
67	saifireza007@gmail.com	Mr.	Md Saifi Reza	Brainware University	Extraction and characterization of fiber from pineapple leaf by different treatment	Online	Environment and Water	Oral
68	aditikoley02@gmail.com	Ms.	Aditi Koley	Maulana Abul Kalam Azad University of	Marigold (Calendula officinalis) leaves powder as a cost-effective and eco-friendly	Online	Environment and Water	Oral
69	chandana280418@gmail.com	Ms	kolluru sree manaswini	Andhra University	Green synthesis of Titanium Dioxide nanoparticles and its adsorptive studies on removal of	Online	Environment and Water	Oral
70	sv.21u10406@btech.nitdgp.ac.in	Mr	Shivam verma	National institute of technology durgapur	Adsorption-regeneration simulation for fluoride removal from simulated wastewater	Online	Environment and Water	Oral
71	db.me@brainwareuniversity.ac.in	Dr.	Debayan Bhowmick	Brainware University	Effect of Wall Corrugation on Entropy Generation for Mixed Convective Flows Over a	Online	Environment and Water	Oral
72	roykajari@gmail.com	Mrs.	Kajari Roy	Jharkhand Rai University	Impact of Sponge Iron Contamination on Soil Microbial Communities: A Metagenomic	Online	Environment and Water	Oral
73	sunnysaurabh197@gmail.com	Mr	Sunny Saurabh	National Institute of Technology Durgapur	Optimization of arsenic detection in water using electrochemical sensors fabricated from	Online	Environment and Water	Oral
74	freddysolomonsd@gmail.com	Mr	FREDDY SOLOMON S	PSG Institute of Advanced Studies	Preparation of an Ultrathin Graphitic Carbon Nitride (g-C3N4) for Visible-Light-Driven	Online	Environment and Water	Oral
75	subhab@ml.tanaka.co.jp	Dr.	Subhabrata Das	Tanaka Kikinzoku Kogyo K.K.	Nanocluster Assemblies as Electrocatalyst for Electrochemical Carbon Dioxide Reduction R	Online	Environment and Water	Oral
Technical Track VII: Biotechnology and Healthcare							
76	mukhopadhyay.rameswar007@gmail.com	Mr.	Rameswar Mukhopadhyay	Adamas University	Antibiofilm and antimicrobial potential of choi jhal (Piper chaba Hunter) extract against	Online	Biotechnology and Healthcare	Oral
77	sourajit.cse.ju@gmail.com	Mr.	Sourajit Maity	Sister Nivedita University	Skin Disease Classification: A Feature Fusion-based Custom Deep Learning Model	Online	Biotechnology and Healthcare	Oral
78	moupiyaghosh29091994@gmail.com	Dr.	Moupiya Ghosh	Institute of Engineering and Management	Enhanced antibacterial activity of a novel drug-conjugated magnetic nanoparticles	Online	Biotechnology and Healthcare	Oral
79	saptarsika@gmail.com	Mrs.	Saptarsika Das	Mizoram University	Design of a Multiband FSS Absorber	Online	Biotechnology and Healthcare	Oral
80	debichhandade@gmail.com	Ms	Debichhanda De	Ming Chi University of Technology	High Throughput Fabrication of Cost-Effective SERS Substrate with Remarkable	Online	Biotechnology and Healthcare	Oral
81	mr.das201718@yahoo.com	Mr.	AMIT KUMAR DAS	BANKURA UNIVERSITY	Stochastic gene transcription with non-competitive transcription regulatory architecture	Online	Biotechnology and Healthcare	Oral
ADDITIONAL							
82	kb.19ce1502@phd.nitdgp.ac.in	Mr.	Koyndrik Bhattacharjee	National Institute of Technology, Durgapur	Leveraging Hybrid Deep Reinforcement Learning and Ensemble	Online	Data Science, Machine learning and AI	Oral