



**International Conference on Innovation, Sustainability, and Applied Sciences (ICISAS 2023)**  
**9<sup>th</sup> and 10<sup>th</sup> December 2023**

**DAY 1 – 9<sup>th</sup> December 2023**

**Inauguration and Keynote Addresses**

**Date: 9<sup>th</sup> December 2023**

**Time: 9:00 AM to 10:50 AM**

**Venue: Lecture Theatre (11.24 & 11.25)**

<b>Time Slot</b>	<b>Event</b>
08:00 AM – 09:00 AM	Registration
09:00 AM – 09:25 AM	Inaugural Ceremony
09:25 AM – 09:50 AM	Keynote Address by Mr Andrew Stotter Brooks, Vice President Learning and Development - Etihad Aviation Group Title: Motivation and Engaging Leadership
09:50 AM – 10:15 AM	Keynote Address by Dr Arshi Ayub Mohamed Zaveri, CEO - TRUST WITH TRADE GROUP, Senior Advisor - Royal Family Offices, UAE Title: Innovation Centric Investments, ESG & Philanthropy
10:15 AM – 10:40 AM	Keynote Address by Dr Vedrana Mladina, Associate Director of Counseling at NYU Abu Dhabi/ UAE Country Chapter Director Middle East Psychological Association Title: Change and Innovation: Source of Stress and Resistance or an Opportunity for Learning and Growth?
10:40 AM – 10:45 AM	Group Photo

**Coffee/Tea (10:45 AM to 11:00 AM)**

## Paper Presentations (Parallel Sessions)

Each presenter(s) will have 10 minutes for presentation and 2 minutes for Q&A

### Session 1: Sustainable Development

Date: 9<sup>th</sup> December 2023

Time: 11:00 AM-1:15 PM

Room No: 10.4

Session Chair: Dr Aravind N, National University of Science and Technology, Oman

Paper ID	Paper Title and Names of Authors
202312186	Repurposing Slaughterhouse Waste for Ocular Therapeutics: Innovations in Tissue Engineering and AI-Enhanced Assessments Author: Peter Corridon
20231214	Fabrication of silver coated iron oxide infused hydrogel for waste water treatment Author(s): Tejasvi Singh, Claire Mary Savio, Godwin Joseph Nallathambi, Sujith Kalluri and Asha Anish Madhavan
20231225	Water Hyacinth (Eichhornia crassipes) Natural Fibers: Distinctly Different Extraction Methods and Morphological Properties Author(s): Winowlin Jappes, Ajithram A, Adam Khan Mahaboob Basha, Anushraj B, Nc Brintha and Rami Alfattani
20231250	Revolutionizing Date Palm Harvesting: A Novel Automated Tree Climber Robot for Agricultural Efficiency Author(s): Suresh Manic Kesavan, Ali Saud Al Bimani, Imad Al Naimi, Asiya Najeeb and Mohammed Yaseen
20231274	Identifying Human Factor Challenges in an Aircraft Component Maintenance Organization Author(s): Jibran Abbas and Ashish Khare
20231292	Experimental Study on Mechanical Properties of Concrete with Shredded Plastic Wastes Author(s): Fatma Mohammed Said Al Mujaibi and Aravind N
20231221	Technology-Integrated Active Learning for Sustainability: A Quasi-Experimental Approach Author(s): Anum Zahra, Zahra Waheed and Tehreem Fatima
202312194	ZnO- $\beta$ -cyclodextrin nanocomposite: antimicrobial activity and photocatalytic degradation Author(s): Bhawana Jain and Reena Negi Rawat
202312164	Fast Food Outlets and Government Planning Schemes Author(s): Constanze Meier and Dora Marinova

## Session 2: Manufacturing Techniques

**Date: 9<sup>th</sup> December 2023**

**Time: 11:00 AM-1:15 PM**

**Room No: 10.7**

**Session Chair: Dr R Karthikeyan, Professor, BITS Pilani, Dubai**

<b>Paper ID</b>	<b>Paper Title and Names of Authors</b>
20231219	Tropical review on machining and machinability of nickel – titanium alloy using different source of energy Author(s): Adam Khan Mahaboob Basha, Ebenezer G, Winowilin Jappes JT and Rajesh S
202312112	Statistical Analysis of Mechanical Properties of FDM 3D Printed PLA-Based Composites Author(s): Yashwant Munde, Avinash Shinde, Prashant Anerao, I. Siva and Ajit Bhosale
202312134	Experimental Investigations on Submerged Friction stir welding of AZ31 magnesium Alloy Author(s): Nimal R.J Golden Renjith, Sucharitha M, Balasubramanian Karuppiyah, Rajeswari N, Thirumalai R and Sabarish R
202312168	The Effects of Microstructure and Mechanical Properties of AlSi14 Alloy Produced by Selective Laser Melting (SLM) Technique Author(s): Sagar Ghader, Mohammed Shaikh and M Chithirai Pon Selvan
20231229	Comparative Analysis of phytochemical evaluation of seed and leaf of Moringa oleifera nanoparticles Author(s): Amna Kashif, Meby Susan Johnson, Shwetha Sajeev and Reshmi S. Nair
202312114	Performance evaluation of cellulose acetate embedded with graphene oxide and titanium dioxide nanoparticles membrane. Author(s): Eman K.Muhye Adeen, Abeer Ghabish Khamis Al Saadi and Satyanarayana S. V.
202312155	Green synthesis of Copper Nanoparticles using Ananas Comosus Author(s): Shwetha Sajeev, Meby Susan Johnson, Amrutha Nambiar and Reshmi S Nair
20231252	Investigation of textured tools in the cutting of distinct materials Author(s): Nimel Sworna Ross, Mashinini P M, Adam Khan M and Samuel Ratna Kumar P S

### Session 3: General Management, Finance, and Education

**Date: 9<sup>th</sup> December 2023**

**Time: 11:00 AM-1:15 PM**

**Room No: 11.23**

**Session Chair: Prof Dana Corina Deselnicu, The National University of Science and Technology, Romania**

<b>Paper ID</b>	<b>Paper Title and Names of Authors</b>
202312195	The Impact of Social Media Influencers on Consumer Purchase Intention; The Review of Parasocial Relationship and Xenocentrism Author(s): Sepideh Samadi and Imran Akhtar
20231251	Advancing Sentiment Analysis of Social Media Data: Unveiling Public Perception of Environmental Challenges in Malaysia Author(s): Anum Zahra, Lan Ma and Kok Wei Khong
20231256	Does an agency problem impact corporate social responsibility (CSR) performance? Industry-wise empirical evidence from Indian firms Author(s): Tewodros Abera Belay, Shveta Singh Singh and Smita Kashiramka
20231263	Management players, diversity, and performance in Omani non-financial companies: A study Author(s): Umair Saeed Bhutta and Fayaz Ahamed
202312105	Core banking solutions, networking effects, and bank performance: Evidence from the Global South Author(s): Navendu Prakash, Shveta Singh and Seema Sharma
202312129	How does happiness shape academic success? Unveiling the role of academic self-efficacy and buoyancy in the journey to student achievement. Author(s): Nidhi Sehgal, Bella Butler and Everyl Colaco
202312132	The Impact of Career Guidance for Career Readiness with Secondary Students in the United Arab Emirates. Author: Maria Vitoratos
202312156	Systematic review of the use of machine learning in higher education Author(s): Meruyert Serik, Nassipzhan Duisegaliyeva, Danara Tleumagambetova and Madina Ermagambetova
202312108	A Review Analysis on Monitoring and Assessment for Effective Climate Risk Management Author: Naima Umar

### Session 4: Information Technology/Computing

**Date: 9<sup>th</sup> December 2023**

**Time: 11:00 AM-1:15 PM**

**Room No: 11.16**

**Session Chair: Dr Suresh Manic Kesavan, National University of Science and Technology, Oman**

<b>Paper ID</b>	<b>Paper Title and Names of Authors</b>
20231233	BIMANIC: AI-Driven Personalized Education Guidance for Higher Education in Oman Author(s): Kesavan Suresh Manic, Ali Saud Al Bimani, A.A Nizamudin, Gangadharan Balaji and A.A Amal
20231240	Conceptual Development of a Mobile Application for Digital Storytelling and Awareness in Project Areas Aided by CHRIST, Delhi NCR Author(s): Ankita Das and Sneha Saha
20231245	Assessment of impact of IOT susceptibility on children of working and non-working mothers in UAE Author(s): Sonakshi Ruhela, Amna Chaudhry and Banafsha Rajput
20231258	Innovative Smartphone App Fostering Transgender Inclusion in Chennai, Tamil Nadu Author: Gnana Sanga Mithra S
20231282	Applications of Robotics an Advanced Approaches in Forensic Investigations Author(s): Gursirat Khokhar, Anas Samad, Aby Joseph and Nrashant Singh
20231287	Intellectual safety and Intellectual provocation in the classroom- A conceptual model to foster deep learning among students of higher education. Author: Sneha Bhatia
202312178	Role of AI and Digitization in People Management Function for Business Excellence: A Voyant Tool Analysis and Agenda for Future Research Author(s): Anurag Sharma, Ruchi Tyagi and Suresh Vishwakarma
202312103	Exploratory Study of Barriers to Smart Home Technologies: Affordance Approach Author(s): Ravinder Kumar Verma and Anushruti Vagrani

### Session 5: Psychology and Humanities

**Date: 9<sup>th</sup> December 2023**

**Time: 11:00 AM-1:15 PM**

**Room No: 11.9**

**Session Chair: Dr Peter Corridon, Acting Associate Dean of Student Affairs, Assistant Professor of Physiology and Immunology, Khalifa University, Abu Dhabi**

<b>Paper ID</b>	<b>Paper Title and Names of Authors</b>
20231224	Unravelling the Psychological Benefits of Meditation and Associated Positive Practices: A Thematic Analysis of Semi-Structured Interviews of Meditation Trainers and Advanced Meditation Practitioners from 11 Different Meditation Practices in India Author(s): Garima Rajan and Kamlesh Singh
202312101	Superstitious Beliefs: Demographic Correlates and its Relation with Self Efficacy Author(s): Surekha Chukkali, Anjali Miriam Dey and Eishika Kochhar
20231239	Good Vibrations: A Literature Review on Utilizing Virtual Reality to Promote Positive Emotions Author(s): Kashish Kaushik and Sneha Saha
20231242	The Potential of Technology to Promote Happiness: A Conceptual Model of Indian Psychology Based Happiness Mobile App Author(s): Ellora Kar and Sneha Saha
20231243	Tattoos and Personal Identity: A Thematic Exploration Among Young Adults Author(s): Apoorv Aggrawal, Kashish Nagpal, Bani Bhatia and Ridhima Shukla
20231264	When Mere Awareness May Not Lead to Sustainable Climate Change Action: Exploring Psychological Barriers in Pro-environmental Behaviours Author(s): Amalina Sengupta and Sairaj Patki

## Session 6: Optimization Techniques (Online)

**Date: 9<sup>th</sup> December 2023**

**Time: 11:00 AM-1:15 PM**

**Room: <https://us06web.zoom.us/j/3011808088?pwd=7lU9qr830yKexLkTFoNtRh4VDI50BL.1> (Meeting ID: 301 180 8088; Passcode: 007)**

**Session Chair: Dr T Satish Kumar, Amrita School of Engineering, India**

<b>Paper ID</b>	<b>Paper Title and Names of Authors</b>
202312142	Lower bound on Givens rotation matrices decomposition of Quantum Fourier Transform Author(s): P.C. Karthik, G.K Sandhia, M Gayathri and R Thilagavathy
202312145	Predictive Political Decision-making using Deep Learning Architectures for Multimodal Analysis Author(s): Veeramani T, Thilagavathy R, Deebalakshmi R and Meganathan E.
202312152	Enhancing Face Recognition Using Hyperparameter Tuning: A Metaheuristic Approach Author(s): Hemashree P, Chandra Blessie E, Jayamol P James and Sandhya Sarma K M
20231247	Enhanced Heart Disease Prediction Accuracy through Combined Hybrid Machine Learning Model Author(s): Natraj N A, Sundaravadivazhagan B, Gopinath Samyudurai and Bhavani Sridharan
20231271	Smart Control for Low Energy Harvesting Systems Author: Steffi Thomas
202312123	Sustainability of Flame Retardancy of Polypropylene Nanocomposites Loaded With and Without Microencapsulated Additives for Tribological and Thermal Properties Author(s): T Pramod, M Adam Khan, R R N Sailaja and P Sampathkumaran
202312191	Design and performance analysis of Maximum Power Extraction Charge Controller (MPECC) for Solar photovoltaic system Author: N. Kalaiselvan, Hariprasath K, Guhan G
202312106	A proposed framework for exploring the relationship between workplace spirituality and innovative work behaviour Author: Ritu Singh and Yogesh Updhaya
2023125	Design of an Anaerobic Biofilter using Biochar from Agricultural Waste and its Application for Safe Water Discharge from Food Industries in Developing Countries Author(s): Aramide Adesina, Fadheelah Makanjuola, Quadri Salami and Julius Akinbomi

20231248	Security Assurance of the IoT Environment by Applying Machine Learning: A Survey Author(s): Faizal Mukthar Hussain S, Karthikeyan R, Ramamoorthi S, Balamurugan V and Prakash Kumar Sarangi
202312188	Knowledge of Biosafety and Biosecurity among Laboratory Practitioners in Islamabad, Pakistan: A Three-Day Training Program Assessment Author(s): Nosheen Fatima Rana, Hadiya Malik, Tahreem Tanweer, Iqra Shafique and Farid Mena

## Lunch (01:00 PM to 02:00 PM)

### Plenary Sessions

**Date: 9<sup>th</sup> December 2023**

**Time: 1:50 PM to 03:30 PM**

**Venue: Lecture Theatre (11.24 & 11.25)**

Time Slot	Event
01:50 PM – 02:10 PM	Plenary Speech by Dr Aditya Vyas, Public Health Physician Deputy Director - WHO Collaborating Centre for Climate Change and Health Impact Assessment, Curtin University, Australia Title: Health at the Centre of Climate Negotiations?
02:10 PM – 02:30 PM	Plenary Speech by Prof Adam Khan, Head of Centre for Surface Engineering Kalasalingam Academy of Research and Education, India Title: Bio Mimics in Search Space Optimization
02:30 PM – 02:50 PM	Plenary Session by Dr Surekha C, Dr Ridhima Shukla and Dr Sneha Saha, Department of Psychology School of Social Sciences, CHRIST (Deemed to be) University, Delhi NCR Campus, India Title: Thriving Amongst Challenges: Harnessing Positive Emotions, Zest, and Resilience in Virtual Work Environment
02:50 PM – 03:10 PM	Plenary Speech by Dr Roopali Sharma, Professor, Amity Institute of Psychology and Allied Sciences, Amity University, India Title: Positive Psychology for Sustainable Living in Present Era

## Coffee/Tea (03:10 PM to 03:30 PM)



## Session 7: Psychology and Humanities

**Date: 9<sup>th</sup> December 2023**

**Time: 3:30 PM-5:00 PM**

**Room No: 11.9**

**Session Chair: Dr P Swamydhas, Principal, Dr Sivanthi Aditanar College of Education, India**

<b>Paper ID</b>	<b>Paper Title and Names of Authors</b>
20231276	Impact of Cultural Diversity on Psychological Well-being and Subjective Happiness in an Indian context Author(s): Santwana Mani, Roopali Sharma and Navin Kumar
20231290	Menstruation Effect on Well-Being: Exploring the mediating role of physical pain and psychological anguish Author(s): Nidhi Bhatia, Khyati Manchanda and Biswajita Parida
20231299	Social and emotional learning interventions and professional outcome of prospective teachers Author(s): P. Swamydhas and E. Sundar Ganesh
202312210	What influences the Consumers' Purchase Intention of Energy-Efficient Home Appliances in United Arab Emirates? Author: Sarwat Jahan
20231231	Ageism, Culture and Willingness to work with older adults among Youth in India Author(s): Pallak Mallika Mannan and Surekha Chukkali
202312118	Addressing Job Burnout in Culturally Diverse Workforces Author(s): Aarya Dedhia and Moitrayee Das
202312193	Employee Engagement in Post-COVID Remote Working Arrangements: Is Family Support as Critical as Supervisory Support? Author(s): Mahwish Anjam, Brajesh Bolia, Premila Koppalakrishnan
202312147	Significance of Fairly Distributed Instances and Optimal Ratio for Validation Set in Machine Learning Author(S): Hina Nasir, Archana Pandita and Chaudhary Nauman Bin Nasir

### Session 8: Information Technology/Computing

**Date: 9<sup>th</sup> December 2023**

**Time: 3:30 PM-5:00 PM**

**Room No: 11.16**

**Session Chair: Dr P Mohan Kumar, Professor, School of Computing Sciences, Hindustan Institute of Technology and Science, India**

<b>Paper ID</b>	<b>Paper Title and Names of Authors</b>
202312128	Tri Safeguard: A Unified Framework for Mask Detection, Social Distancing, and Contactless Temperature Monitoring Author(s): Sundaravadivazhagan Balasubramanian, Robin Cyriac, Sahana Roshan, Kulandaivel Maruthamuthu Paramasivam and Boby Chellanthara Jose
202312133	Industrial Internet of Things (IIoT) based Offloading Control Scheme for Reducing Mechanical Failures of CNC Motors Author(s): Balasubramanian Karuppiah, Rajeswari N, Amudha G, Thirumavalavan S, and Rajasekar R
202312144	Design of Mobile application controlled Photovoltaic Seed Sowing and Drilling Machine Author(s): Mohamed Husam, Razik Akbar, Kareena Mueenuddin, Swaroop Ramaswamy and Apurv Yadav
202312148	Cyber Security Mesh Architecture: A Framework for Enhanced Compatibility and Security in the Digital Age Author(s): Akhil John Mampilly and Divya Midhunchakkaravarthy
202312165	Walk-through attendance marking system using RFID and face recognition Author(s): Austine S Manuel, Vaibhav Rajesh, Stephin Liji, Shyamith M and Manoj V. Thomas
2023129	Development of an Artificial Neural Network model for performance analysis, modelling and evaluation of membranes in Reverse Osmosis Desalination plants Author(s): Mohan Kumar P, Nachiyappan S, Mekala C and Ramesh K
20231281	Performance Evaluation of Artificial Neural Network Algorithms: A Case of Classification Problem Author(s): Deepesh Srivastava and Mohammed Anam Akhtar
202312198	Early Detection of Liver Diseases using Machine Learning Author(s): Dr Benita Christopher, Dr Khyati Marwah, Ms Rupinder Pal Kaur, Ms Shahra Jafar and Mohamed Aaqil Shiraz

**Session 9: General Management, Finance and Education**

**Date: 9<sup>th</sup> December 2023**

**Time: 3:30 PM-5:00 PM**

**Room No: 11.23**

**Session Chair: Dr Subburaj Alagarsamy, Manipal Academy of Higher Education, Dubai**

<b>Paper ID</b>	<b>Paper Title and Names of Authors</b>
202312126	Fostering Sustainability Education and Awareness: A Framework for Empowering Communities Author(s): Stella Ladislaus, Jobanpreet Singh, Afifa Ali Khan and Madeeha Umar
202312158	Financial feasibility evaluation of public private partnership (PPP) projects using real option analysis - a case study Author(s): Aman Ahlawat, Saurabh Jaglan, Pankaj Agarwal, Arti Chouksey, Sachin Dass, Sunita Kumari, Atul Garg and Charanjeet Singh
202312197	Navigating the Green Finance Landscape: A Comprehensive Bibliometric Exploration of Current Trends, Evolution, and Prospects Author(s): Noor Ulain Rizvi, Adil Sher Zama, Cheshta Kapuria, Thahani Iqbal
202312176	Appreciating Successful Growth Strategies: A Case of Omani Islamic Bank Using the Balanced Scorecard Approach Author: Fayaz Ahamed
202312187	Sustainability and associated concepts applied to life cycle assessment studies Author(s): Dana Corina Deselnicu, Andreea Barbu and Alexandra Ioanid
202312189	Tourists' Satisfaction and the Efforts Made by Accommodation Units to Ensure a Sustainable Journey: Evidence from Sinaia, Romania Author(s): Andreea Barbu, Dana Corina Deselnicu Alexandra Ioanid and Gheorghe Militaru
202312208	Student engagement, motivation, and perceptions of gamified learning – A Pilot Study Author: Sabiha Nuzhat
202312209	Antecedents of Quality Higher Education in the United Arab Emirates (UAE)- A Leximancer Analysis Author(s): Sagi Kunju Kunju Mathew, Charu Banga and Nidhi Sehgal

### Session 10: Material Engineering

**Date: 9<sup>th</sup> December 2023**

**Time: 3:30 PM-5:00 PM**

**Room No: 10.4**

**Session Chair: Dr Saravana Mohan M, Head of Mechatronics Engineering, Kumaraguru College of Technology, India**

<b>Paper ID</b>	<b>Paper Title and Names of Authors</b>
20231211	Simulation study on Titanium addition to Cu-Al-Ni Shape Memory Alloy in Rotary joint property of Redundant Articulated Robot Author(s): Saravana Mohan M, Samuel Ratna Kumar P S, Vasantharaj C, Aziz Kahtan, Mashinini P M & Sikkandhar Thanish G
20231217	Evaluation of Mechanical properties of Welds Fabricated at A Close Proximity on Offshore structures Author(s): Nakkeran T, Adam Khan M and Winowlin Jappes JT, R Devarajan, Jerry Sorton, C Dhamodharan, Win Myint Soe
20231236	Experimental Investigation on Ductility Property of Glass Fibre Reinforced Polymer Chopped Strand Mat Laminate Author: Aravind N
20231286	Effect of Stirrer Design on Particle Distribution of Aluminium Composite in Stir Casting Process using CFD Simulation Author(s): Pradeep Kumar Krishnan and Said Hamed Rashid Al Oraimi
202312163	Comparison of seismic behaviour of a typical multistoried building with conventional, composite and steel columns supported on fixed base, base isolators and dampers. Author: Biju Mathew, Srilakshmi.T. K
20231293	Investigation on Mechanical and Tribological Performance of Biodegradable Polylactic acid (PLA)-Hemp composite Author(s): Avinash Shinde, Yashwant Munde, Siva I, Chithirai Pon Selvan, Smita Deore and Ajit Bhosale
20231298	Mechanical and Wear Studies of Al <sub>2</sub> O <sub>3</sub> -B <sub>4</sub> C Composite Using Microwave Sintering Process for Automotive Applications Author(s): Pon Selvan Chithirai, Vishal Gadher and Mahesh Raj Nagaraja

## Session 11: General Management, Finance, and Education (Online)

**Date: 9<sup>th</sup> December 2023**

**Time: 3:30 PM-5:30 PM**

**Room: <https://us06web.zoom.us/j/3011808088?pwd=7IU9qr830yKexLkTFoNtRh4VDI50BL.1> (Meeting ID: 301 180 8088; Passcode: 007)**

**Session Chair: Dr K Senthilkumar Kalyansundaram, Kalignarkarunanidhi Institute of Technology, India**

Paper ID	Paper Title and Names of Authors
20231270	Performance Evaluation of Mutual Funds of Banking and Non-Banking Financial Companies in India Author(s): Krishnamoorthy K, Ashok Kumar S and Priska L
202312161	Sustainability Analysis of the Weekly Pattern in the KSE-100 Index of Pakistan Stock Exchange: Employing Arch/GARCH Models with Contemporary Data. Author(s): Zafarullah Khan, Tosin Ekundayo and Sabiha Nuzhat
202312196	Exploring the Public-private partnerships, Environmental Kuznet's curve, and Environmental Degradation nexus: An Empirical Analysis of Asia Author(s): Sakshi Malik, Cheshta Kapuria, Noor Ulain Rizvi
20231228	Dynamics of future and options (F&O) traders experience and perception Author(s): Thirunavukkarasu T, Sivagnanabharathi S and Selvaprasanth N
20231235	A Proposed Implementation for Evidence Management Using Blockchain Technology Author(s): Revathy Sathyaprakasan, Samina Alvi, Pratheeksha Govindan, Sharon Philip, Parli Hari and Nrashant Singh
202312171	Online and Hybrid Education Scientific Mapping Analysis Author(s): Simran Rani, Trisha Sharma and Shailendra Kumar Pokhriyal
202312172	Secure and Trustworthy Healthcare for the Elderly with Blockchain-Enabled Pervasive Systems Author(S): Calarany C, K. Shantha Kumari, Kanmani P, Ramya S.R, D. Suganya
202312173	A multimodal stress detection system with wearable sensors using machine learning and deep learning approaches Author(s): M. Geetha Jenifel, Kanmani P, K. Shantha Kumari, Geetha B.G., S. Sri Saye Laksmi and D. Deepika
202312183	Influence of Socio Demographics in Online Purchases at Bengaluru City in India Author(s): Ravanan R, Senthilkumar K and Raghavendra B.S.

202312146	Integration of Membrane Technology for Water Desalination Systems using Renewable Energy Resources Author(s): Binumol Shahulhameed, R Krishna Priya, Zuweina Hamdan Said Al Kindi, Maria Rajesh Antony Amaladhas and Liya Alias
202312107	Exploring the Relationship Between Workplace Spirituality and Social Capital with reference to Delhi NCR school teachers. Author(s): Ritu Singh and Yogesh Updhaya
202312169	Understanding the Correlation between Happiness and Creativity Author(s): Tala El Chafehi, Sheza Zahra, Rabia Javed and Nashitha Ibrahim

## DAY 2 – 10<sup>th</sup> December 2023

**Date: 10<sup>th</sup> December 2023**

**Time: 9:15 AM to 10:15 AM**

**Venue: Lecture Theatre (11.24 & 11.25)**

Time Slot	Event
09:15 AM – 09:35 AM	Keynote Address (Online) by Dr Pethuru Raj Chelliah, Chief Architect and Vice President Edge AI Division Reliance Jio Platforms Ltd. (JPL) Bangalore, India <a href="https://us02web.zoom.us/j/89273670910?pwd=VTFHRjdRaE1zSm1sMkhqVHdBQ0pBdz09">https://us02web.zoom.us/j/89273670910?pwd=VTFHRjdRaE1zSm1sMkhqVHdBQ0pBdz09</a> (Meeting ID: 892 7367 0910; Passcode: 007) Title: Illustrating Edge AI Techniques and Tools for Real Digital Transformation
09:35 AM – 9:55 AM	Keynote Address (Online) by Prof Wahidul K Biswas, Deputy Director - Sustainable Engineering Group Curtin University, Australia <a href="https://us02web.zoom.us/j/89273670910?pwd=VTFHRjdRaE1zSm1sMkhqVHdBQ0pBdz09">https://us02web.zoom.us/j/89273670910?pwd=VTFHRjdRaE1zSm1sMkhqVHdBQ0pBdz09</a> (Meeting ID: 892 7367 0910; Passcode: 007) Title: Sustainable Engineering for the 21 <sup>st</sup> Century and Beyond
9:55 AM – 10:15 AM	Keynote Address by Dr Winowilin Jappes, Senior Professor, School of Mechanical, Aero, Auto and Civil Engineering (SMACE), Kalasalingam Academy of Research and Education, India Title: Aquatic Threat Water Hyacinth (Eichhornia crassipes) Plant Into Commercial Applications: Waste Into Zero Waste Approach

**Coffee/Tea (10:15 AM – 10:30 AM)**

## Panel Discussion

**Date: 10<sup>th</sup> December 2023**

**Time: 10:30 AM to 11:30 AM**

**Venue: Lecture Theatre (11.24 & 11.25)**

**Topic: Envisioning a Net-Zero Built Environment through Energy Transition, Circular Economy, Food Choices and ESG Principles**

### Panelists:

- Prof Dora Marinova, Professor - Curtin University Sustainability Policy (CUSP) Institute, Curtin University, Australia
- Dr Atiq Zaman, Director, Circular Economics Pte Ltd, Singapore & Adjunct Senior Research Fellow, School of Management and Marketing, Curtin University, Australia
- Dr Asif Iqbal Siddiqui, Director, Circular Economics & University Associate, School of Management & Marketing, Curtin University
- Ms Luisa Valentim Barros, Head of Consulting Business Development - Global at WayCarbon, Brazil

### Moderator:

- Ms Fatima Martin, Principal, GEMS New Millenium School, Dubai



## Session 12: Materials Engineering

**Date: 10<sup>th</sup> December 2023**

**Time: 11:30 AM-1:15 PM**

**Room No: 10.1**

**Session Chair: Dr Mohammad Khalid, Institute of Applied Technology, Abu Dhabi**

<b>Paper ID</b>	<b>Paper Title and Names of Authors</b>
202312199	Environmental Impact Assessment of Heat Treatment Processes Author(s): A Karthik, Asha V, Amandeep Nagpal, Swaroop Ramaswamy, Raghad Ahmed Hussien, Irfan Khan, Shilpa Pahwa
202312200	Heat Treatment for Functional Coatings and Surface Modification Author(s): N M Deepika, B Rajalakshmi, Manish Gupta, Mohammad Khalid, Amar H. Shnawa, Dinesh Kumar Yadav, Ginni Nijhawan
202312201	Machine Learning-Assisted Heat Treatment Process Control Author(s): B Santhosh Kumar, Rakesh Chandrasheka, Amandeep Nagpal, Swaroop Ramaswamy, Amar H. Shnawa, Irfan Khan, Shilpa Pahwa
202312202	Microstructure Evolution and Property Optimization in Heat-Treated Ceramics Author(s): Ala Harika , Aravinda K, Navdeep Singh, Mohammad Khalid, Q. Mohammad, Shivani Singh, Pradeep Kumar Chandra
202312203	Digital Twins and Sustainable Manufacturing: Integration and Optimization Author(s): R Anuradha, Swathi B, H Pal Thethi, Sarath Raj Nadarajan Syamala, Dalael Saad Abdul-Zahra, Praveen, Ashish Kumar Parashar
202312204	Sustainability Metrics and Key Performance Indicators (KPIs) for Manufacturing Author(s): CSL Vijaya Durga, Anandhi R J, H Pal Thethi, Sarath Raj Nadarajan Syamala, Mohammed Brayyich, Praveen, Ashish Kumar Parashar
202312206	Biodegradable Materials and Their Role in Sustainable Packaging and Consumer Products Author(s): Ippa Sumalatha, Asha V, Alok Jain, Ali Asgher, Kahtan A. Mohammed, Preeti Maan, Bhishm Pratap
202312207	Unlocking the Potential of Solar Energy: Advanced Materials and Architectures Author(s): BK Aishwarya, Revathi V, Vanya Arun, Marc Nicholas Singh, Mohammed Ayad Alkhafaji, Ravi Kalra, Sorabh Lakhanpal

### Session 13: Sustainable Development

**Date: 10<sup>th</sup> December 2023**

**Time: 11:30 AM-1:15 PM**

**Room No: 10.7**

**Session Chair: Dr Swaroop Ramaswamy Pillai, Associate Professor, Amity University Dubai**

<b>Paper ID</b>	<b>Paper Title and Names of Authors</b>
202312143	Nurturing Fenugreek Microgreens with Fruit Peel Probiotics: A Nutritional Breakthrough Author(s): Krithika R and Raajeswari Paramasivam
202312160	Study of transitional flow through pipe with an orifice Author(s): Shehzeen Jamil Syeda, Aymen Benabdelmoumen and Chithrai Pon Selvan
202312170	Energy and cost-saving potential of radiant cooling system for a City in Pakistan Author(s): Samiullah Qureshi, Rizwan Ahmed Memon, Abdul Ghafoor Memon and Sanjay Kumar
202312175	Estimation of Performance Parameters of a Rotary Humidifier Author(s): Sampath Suranjan Salins, Sreejith Sanal Kumar, Antony John Jose Thommana, Fabin Terance Binu, Nafisa Shams, Parvathi Anilkumar and Clifton Stephen
202312102	Investigation of Heat Exchanger effectiveness using Solar Water Heater Author(s): Wellington Katsenga, Apurv Yadav and Hardeep Kumar
202312104	Comparative Investigation of a Conventional and a Floating Photovoltaic System Author(s): Tarun Karthikeyan Kumaran, Aazim Mohammed, Apurv Yadav and Swaroop Ramaswamy Pillai
202312205	Greening the Fabrication Process: Sustainable Materials for 3D Printing Author(s): M Hari Krishna, Manjunatha, Sorabh Lakhnopal, Sradha Udayakumar, Mohammed Brayyich, Ravi Kalra, Koushal Dhamija
202312211	Purchasing Behaviours at Dubai Duty free Author(s): Ferah Ferrah, Rakshana Chithirai Pon Selvan, Sumeri Eman Jamali and Thohid Ohiduzzaman

## Session 14: Sustainable Materials

**Date: 10<sup>th</sup> December 2023**

**Time: 11:30 AM-1:00 PM**

**Room No: 10.4**

**Session Chair: Dr Renuka Seenivasan, Higher Colleges of Technology, Dubai**

Paper ID	Paper Title and Names of Authors
20231255	Bond behaviour of concrete beams reinforced internally with hybrid non-metallic reinforcements using artificial fine aggregates (M-sand) Author(s): Balamuralikrishnan Ramadoss, Saravanan Jagadeesan, Kumaran Ganapathy and Amala Udhai
20231288	Utilization of Face Masks in Concrete for Improved Strength Performance: Strategy Towards Green Construction Author(s): Jhanvi Sabhnani, Syed Ali, Kristoffer Jan and Vidya Mohanan
202312109	Green Wall Construction for Commercial Buildings in Composite Climate: State of the Art Review Author(s): Dikshitha Kylasa and Shriharsh Dixit
20231297	Studies on Mechanical and Tribological Properties of Al6062 MMC's Using Liquid Metallurgy Route for Commercial Engineering Applications Author(s): Chithirai Pon Selvan M, Mohammed Khan and Daniel Thangadurai T
202312154	Nanogel-silver nanoparticles nanocomposite for antibacterial and catalytic applications Author: Muhammad Ajmal
20231289	Improving the performance of Self-healing Aluminum Metal Matrix Composite for Space Applications Author(s): Keerthana Dana Sekaran and Pon Selvan Chithirai
20231295	Investigation on Mechanical Properties of E glass/Jute/Nanofiller Composite Material Author(s): Ashit Sreekumar and Sarath Raj Nadarajan Syamala

## Session 15: Psychology, Humanities, and Engineering (Online)

**Date: 10<sup>th</sup> December 2023**

**Time: 11:30 AM-2:00 PM**

**Room: <https://us06web.zoom.us/j/3011808088?pwd=7lU9qr830yKexLkTFoNrRh4VDI50BL.1> (Meeting ID: 301 180 8088; Passcode: 007)**

**Session Chair: Dr Titus Thankachan, Associate Professor, Karpagam College of Engineering, India**

Paper ID	Paper Title and Names of Authors
20231267	Perceptivity towards Employee Engagement: An exploratory study among the employees in Manufacturing Sector in Bangalore. Author(s): Kirti. M, S. John Manohar and Amiya Bhaumik
202312116	Impact of Employee Engagement on Organisational Performance: A study among Selected Companies in Service Sector in Karnataka Author(s): Kirti. M, S. John Manohar and Amiya Bhaumik
2023128	Emotional Intelligence and Aggression – A Cross Generational Study Author(s): Atika Zubery and Anganabha Baruah
20231227	Wellbeing and work-life balance of college teachers in Tamil Nadu Author(s): K.Senthilkumar Kalyansundaram, S.Sivagnanabharathi S and M. Deenadhayalan M
20231213	Implementation Of an Image Defogging Algorithm Using Wavelet Transform Author(s): Muminthaj S, Kayalvizhi S, Krishnakumar S, Preethi M, Prabhurajan L
20231260	Arduino-based emergency route clearing between vehicles Author(s): Anitha T, Nagarajapandian M, Sarmitha S, Selvam P, Manikandan T and Aravind M
202312180	Biogas Synthesis using Human Urine as Feedstock by Anaerobic Digestion Author(s): Robin Chaudhary, Jaganathan V M, Godwin Glivin, S Joseph Sekhar and Shan M Assis
20231241	Experimental approach for water distribution network to compensate the unequal discharge using Dual Pumping System Author(s): Mathan C, Saravanabalaji M, Aravindaguru I, Nandhini K M and Sowbarnika S
20231273	A Proficient Sensor Network Based Smart Meter Multi-Demand Response System Using IoT Author(s): I Aravindaguru, C Mathan, M Nagarajapandian, Prathap M R, P Veeramani and E Mukunthan

20231259	Revolutionizing Waste Management: AI-Driven Smart Dustbins for Environmental Pollution Mitigation Author(s): Vijayakumari G, Vijayakumar S.D, Praveenkumar R and Akhil John Mampilly
20231257	Execution of Energy Efficient Multipath Routing Protocols with FF-AOMDV in MANET Author(s): Praveenkumar R, Vijayakumar S.D, Brinda G and Akhil John Mampilly
202312141	Bubble Deck Concrete Slab: A Sustainable Thermal Insulation concrete Author(s): Maria Rajesh Antony, Zuwina Hamdan Said Al Kindi, Joseph Sekhar Santhappan, Binumol Shahulhameed, Shabbir Ahamad Kazi, Umar Sabhapathy and Haitham Al Shehhi
20231275	Beyond Disciplines: Applying Design Thinking Across Areas to Enhance Mental Health - Dementia Care as an Exemplar Author(s): Chaitanya Muppala and Nalini Bikkina

**Lunch (01:00 PM to 02:00 PM)**

## Session 16: Optimization Techniques

**Date: 10<sup>th</sup> December 2023**

**Time: 2:00 PM-4:00 PM**

**Room No: 10.1**

**Session Chair: Dr Samuel Ratna Kumar P S, Senior Research Associate, University of Johannesburg, South Africa**

Paper ID	Paper Title and Names of Authors
2023127	Optimization of curing time for the fabrication of raw edged cogged belt with enhanced breaking strength Author(s): Samuel Ratna Kumar P S, Mashinini P M, Saravana Mohan M and Adam Khan
20231234	Some results on anti-duplication self vertex switchings Author(s): Ashwin Shijo and C Jayasekaran
20231244	Optimization of solar energy harvesting through innovative scientific advancements Author(s): Fawzan Mohamed Kareem Navaz, Muvisha Ajay and Christina Philip
20231280	Examining the drivers of intentions to use mobile payment applications in an emerging economy: A SEM-NCA Approach Author(s): Mohammed Akhtar, Deepesh Kumar Srivastava, Khurram Ajaz Khan, Pankaj Kumar Tripathi and Madhvendra Pratap Singh
202312159	Utilizing Machine Learning for predicting Road Accident Frequencies in Haryana, India: A Predictive Modeling Approach Author(s): Saurabh Jaglan, Aman Ahlawat, Sachin Dass, Yogesh Chhimpa, Arti Raha, Sunita Kumari, Atul Garg and Amir Ali Khan
20231216	Augmented Reality and its Application – A Critical Review Author(s): Ramalaksmi, Rajesh S, Adam Khan M and Karthikeyan Subramanian
20231218	3-D Design Making of Eco-Friendly Toys Author(s): Dr.R. Ramalakshmi, Amarapuram Abhinav, M Siddharth Reddy, R Dhanush Babu, M Harsha Vardhan, Dr. S.Rajesh, Mr Karthikeyan Veerachamy and Dr Adam Khan M
202312181	Parental Phubbing and Low Self-Esteem: Untangling the Cords of Adolescent Social Exclusion Author(s): Dr. Deepika Gaur, Dr. Sandhya Gupta

## Session 17: Electrical, Electronics and Computing

**Date: 10<sup>th</sup> December 2023**

**Time: 2:00 PM-4:00 PM**

**Room No: 10.4**

**Session Chair: Dr Ved Prakash Mishra, Associate Professor, Amity University Dubai**

<b>Paper ID</b>	<b>Paper Title and Names of Authors</b>
20231215	Model Predictive Control Approach for Frequency Regulation of a Modern Microgrid Including Electric Vehicles Author(s): Hossein Shayeghi, Alireza Rahnama and Nicu Bizon
20231246	Auto Rickshaw Detection for Autonomous Navigation in real-time ETW setup Author(s): Prithvi Raj Pedapati, Ramesh Kumar C, Tejas Chavan, Ansar A and Nalin Kumar Sekar
20231291	Estimation of Bone Degeneration and Porosity Using T-Score from DXA Images for Osteoporotic Patient Classification and Therapy Ideation Author(s): Kottaimalai Ramaraj, Pallikonda Rajasekaran Murugan, Vishnuvarthanan Govindaraj, Arunprasath Thiyagarajan, Sheik Abdullah S and Rajesh K
202312119	Visualizing and Exploring Navigation Data using Machine Learning Techniques Author(s): Khyati Marwah, Archana Pandita and Puneet Mittal
20231266	Performance Analysis of Junctionless Silicon Nanotube Tunnel FET Author(s): A Nisha Justeena and P Rajendiran
20231238	The Role of Robotics in STEM Education: Recent Developments, Challenges and Future Opportunities Author(s): Fahad Sherwani and Muahammad Mujtaba Asad
20231237	Influence of Computer-Based Assessment on Students' motivation towards Science Learning: A Quantitative Analysis of Sindh Pakistan Author(s): Muahammad Mujtaba Asad, Muahammad Asalam Lashari, Fahad Sherwani and Norah Almusharraf
20231232	Enhancing Voltage Profile and Stability of the North-South 400kV Transmission Interconnection in Oman us-ing STATCOM Technology Author(s): Saif Al Omairi and Dr Satish Tanavade

## Session 18: Engineering (Online)

**Date: 10<sup>th</sup> December 2023**

**Time: 2:00 PM-4:00 PM**

**Room: <https://us06web.zoom.us/j/3011808088?pwd=7lU9qr830yKexLkTFoNtRh4VDI50BL.1> (Meeting ID: 301 180 8088; Passcode: 007)**

**Session Chair: Prof Natesa Moorthi C, Department of Mechanical Engineering, Erode Sengunthar Engineering College, India**

<b>Paper ID</b>	<b>Paper Title and Names of Authors</b>
202312130	Dimensional Analysis of High Strength Lightweight Concrete Author(s): Nanthini M and Ganesan R
202312182	Machining parameters optimization on Material Removal Rate in WEDM of SLD 8 Tool steel using DOE and RSM technique. Author(s): R. Anburaj, Clifton Stephen, Sampath Suranjan Salins and Chithirai Pon Selvan
202312139	Experimental Investigation of Novel Soil Stabilized Blocks Using Lime and Cement Author(s): Kandasamy A and Priya Rachel P
202312177	Experimental Investigation on Strength, Porosity and Permeability Properties of Ambient Cured Metakaolin based Geopolymer Concrete Author(s): Nanthini M, Ganesan R and V. Jaganathan
202312179	Effect of Bacillus subtilis on strength, durability and microstructural studies of self-healing concrete Author(s): Pooja Damodaran, Lakshmi Thangasamy and Ramesh Kumar G.B.
20231212	Iris controlled wheelchair Author(s): Mohanraj P, Rajasekar T, Vigneshwaran S, Sariga G and Vishnupriya D
20231272	EDM Process parameter optimization using GRA based RSM of machining titanium alloy Author(s): Mohankumar V, Senthilkumar M S, Karthik A, Chithirai Pon Selvan M
20231294	Numerical studies of solar water heating system with CPC solar collector and thermal energy storage Author(s): Natesamurthi C, Robinson Y, Mahesh Raj Nagaraja and Pon Selvan Chithirai
20231268	Concepts & Indicators of Social Sustainability in the Built Environment- A Review Author: Banafsha Quadri and Harveen Bhandari
202312136	Leveraging textual web content for phishing website detection with weighted average word embedding and machine learning



	Author(s): Saleem Raja Abdul Samad, Sundaravadivazhagan Balasubramaniyan, Pradeepa Ganesan, Madhavan Sridharan, Justin Rajasekaran and Amina Aljabri
20231226	Performance Assessment between Adaptive Neuro Fuzzy Interference System (ANFIS) and Fuzzy Logic Membership Functions to Reduce the Diesel consumption for Electrical Load of Train in a Hybrid Power Generation System Author(s): Zulfiqar Memon, Abdullah Tariq Sipra and Fawad Azeem

## Coffee/Tea (04:00 PM to 04:15 PM)

### Valedictory Schedule

**Date: 10<sup>th</sup> December 2023**

**Time: 4:15 PM to 05:00 PM**

**Venue: Lecture Theatre 11.24 & 11.25**

Timings	Events
4:15 PM – 5:00 PM	Closing ceremony, Awards and Certificates Distribution