

MECHANICAL ENGINEERING INTERNATIONAL CONFERENCE (MEICON 1.0)

on

Advancements, Innovation, and Automation for Sustainability

TECHNICAL SESSIONS

Date: December 19, 2024 (Thursday)

Time: 02.30 PM (IST)

Day 01 (Physical Mode)			
Track 1: Thermal Engineering & Track 6: Sustainable Solutions for Smart Living			
Venue - 01 (EE Seminar Hall, FB-14)			
Keynote Speaker & Session Chair: Dr. Tushar Choudhary, Assistant Professor, IIITDM Jabalpur, Madhya Pradesh, India			
Topic: Present and Emerging Hybrid Energy Generation Techniques			
Moderator: Prof. Akash Pandey & Dr. Kuber Nath Mishra			
Timing	Author(s)	Manuscript ID	Title
02.30 PM – 02.38 PM	Padma Lochan Nayak, Prabir Kumar Jena, Rabindra Behera	MEICON-TE-105	Improved Performance of Inverted Stepped Vertical Fin Arrays Under Free Convection Environment: A CFD Simulation
02.38 PM – 02.46 PM	Anupam Kumari, Nivedan Mahato, Shiv Kr. Sah	MEICON-TE-110	Structural Analysis of Gas Turbine Blades: Impact of Film Cooling Configurations and Pitch-to-Diameter Ratios
02.46 PM – 02.54 PM	Ashish Mishra, Siddharth S Chakrabarti, Mithilesh Kumar Sahu	MEICON-TE-123	A Comprehensive Review on Various Factors Affecting the Thermal Conductivity of Nano fluids
02.54 PM – 03.04 PM	Pragati Priyadarshini Sahu, Abhilas Swain, Radha Kanta Sarangi	MEICON-TE-134	Saturated Pool Boiling Heat Transfer Performance of Isopropanol with Surfactant and Graphene Oxide Nano-Particles
03.04 PM – 03.12 PM	Mithilesh Kumar Sahu, Pushpak Tiwari, Rajesh Giri	MEICON-TE-137	Enhancement in Heat Transfer Rate Through Perforated Pin Fin in Thermal System
03.12 PM – 03.20 PM	Santosh Kumar Sahu	MEICON-TE-144	A Review on Performance Analysis of Steam Turbine Surface Condenser & its Improvement
03.20 PM – 03.28 PM	Chandrashekhar Kumar Kewat	MEICON-TE-154	Sound Power Generation in Electric and Other Vehicles
03.28 PM – 03.36 PM	Souvik Singh Rathore, Vishesh Ranjan Kar, Sanjay	MEICON-TE-155	Effect of Blade Curvature and Twist Angle on Campbell Diagram of CNT Reinforced CMC Rotating Blades
03.36 PM – 03.44 PM	Bhartendu Mani Tripathi, Sooraj Maurya, Shailendra Kumar Shukla	MEICON-SSSL-601	Modelling and Analytical Comparison of the Evaporator Designs for Organic Rankine Cycle (ORC) Using Refrigerant R245fa
03.44 PM – 03.52 PM	Saroj Kumar Rajwar, Bablu Murmu, Ramesh Murmu	MEICON-SSSL-602	Identification of Safety Measures Through Evaluation of Road Crash Data on Mining Area Roadways in Jharkhand, India
03.52 PM – 04.00 PM	Sandeep Kumar Sharma, Tushar Choudhary, Harsh Pandey	MEICON-SSSL-639	A Critical review on the Approaches, Challenges and Innovations in Advancing Heat Sink Technologies
04.00 PM – 04.08 PM	Harishankar Singh Yadav, Sanjay Kumar Sharma, Atulya Kumar	MEICON-SSSL-640	CFD Analysis of Solar Parabolic Through Collector using Therminol as Working Fluid
04.08 PM – 04.16 PM	Jitesh Kumar Singh, Akash Pandey, Laxminarayan R. Bhandarkar, R. D. Patidar	MEICON-SSSL-606	Integration of Management and Technology for Utilizing Solar Energy
04.16 PM – 04.24 PM	Kuber Nath Mishra, Akash Pandey, Mithilesh Kumar Sahu, Hemant Naik	MEICON-SSSL-609	Monthly Performance comparison of solar stills integrated with PVT-CPC collector
04.24 PM – 04.32 PM	Mithilesh Kumar Sahu, Siddharth S Chakrabarti, Kuber Nath Mishra, Akash Pandey, Hemant Naik	MEICON-TE-114	Impact of Varying Fluid Flow Rates on Plate Heat Exchanger Performance
04.32 PM – 04.40 PM	Hemant Naik, Mithilesh Kumar Sahu, Kuber Nath Mishra, Akash Pandey	MEICON-TE-140	Secondary Flow and Field Synergy Analysis for Flow over Upstream Located Rectangular Winglets Mounted on Fin Surface of Fin-Tube Heat Exchanger

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Date: December 19, 2024 (Thursday)

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Day 01 (Physical Mode)			
Track 2: Robotics, Automation & Mechatronics & Track 4: Innovative Product Design			
Venue - 02 (Live Classroom)			
Keynote Speaker & Session Chair: Dr. B. B. V. L. Deepak, Associate Professor, NIT Rourkela, Odisha, India			
Topic: Recent Advancements in Robotics in the Context of Industry 4.0			
Moderator: Dr. Saroj Kumar & Dr. Mukesh S. Desai			
Timing	Author(s)	Manuscript ID	Title
02.30 PM – 02.40 PM	Alok Kumar Jha, Nikhade G R, Saroj Kumar, Krishna Kant Pandey	MEICON-RAM-281	Dynamic Simulation and Torque Analysis of a 5-DOF SCORBOT ER-IV Manipulator for Welding Operations Using MATLAB-Sim Mechanics
02.40 PM – 02.50 PM	Sourin Das, Saroj Kumar	MEICON-RAM-282	Implementation of Excess Coal fines for DRI-Making in Steel Plants
02.50 PM – 03.00 PM	Bindi Saurabh Thakkar, Bhankti N. Patel, Pradeep Kumar Karsh	MEICON-IPD-402	Effect of Thickness Dependency of Random Natural Frequencies in Hybrid Composite Plates
03.00 PM – 03.10 PM	Rajesh Giri, Pushpak Tiwari, Mahesh Bhiwapurkar, Saroj kumar	MEICON-RAM-227	A Review on Simple Process and Methodology of Path Planning Algorithm
03.10 PM – 03.20 PM	Anurag Vijaywargiya, Mahesh Bhiwapurkar	MEICON-IPD-431	Biomechanical Evaluation of Asymmetric Lifting Task in Constrained Lifting Posture
03.20 PM – 03.30 PM	Saroj Kumar, Mahesh K Bhiwapurkar, R. D. Patidar, Dayal R. Parhi	MEICON-RAM-237	Navigational Analysis of Humanoid NAO Robot Using AI Technique

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TECHNICAL SESSIONS

Date: December 19, 2024 (Thursday)

Time: 02.30 PM (IST)

Day 01 (Physical Mode)			
Track 3: Materials & Intelligent Manufacturing & Track 5: Industrial Engineering			
Venue - 03 (G-14)			
Keynote Speaker & Session Chair: Dr. Kaushik Bandyopadhyay, Assistant Professor, IIT, Bhilai, C.G., India			
Topic: Recent Trends in Manufacturing and Industry 4.0			
Moderator: Dr. Ravindra Singh Saluja & Dr. Dharmender Singh Saini			
Timing	Author(s)	Manuscript ID	Title
02.30 PM – 02.40 PM	C. Kant Tiger, Nitin Nayak, Ashish Kumar Singh, Pagidipalli Praveen	MEICON-MIM-312	Study of Composite Materials in Radar Absorbing Applications
02.40 PM – 02.50 PM	Abhishek Sahu, Lakshman Sondhi, Sanjay Kumar Singh, Sanjay Yadav, Rakesh Kumar Sahu, Royal Madan	MEICON-MIM-328	Investigating the Behaviour of Hybrid Aluminium Composites with Alumina and Silicon Carbide Reinforcement
02.50 PM – 03.00 PM	Novel Kumar Sahu, Neha Gupta	MEICON-MIM-355	Compression in Different Metal Lattice Structures Fabricated Using Additive Manufacturing
03.00 PM – 03.10 PM	Abhay Kumar, Umesh Vishwakarma, Dharmender Singh Saini, Laxminarayan R. Bhandarkar	MEICON-MIM-365	Fuel Rate Reduction After Controlling Operating Parameters of Blast Furnace
03.10 PM – 03.20 PM	Omprakash S. Thakare, Ajay K. Gupta, Kamal I. Ansari, R. Anki Reddy	MEICON-IE-516	Trends in Raw Materials Inventory Optimization, and Production Efficiency in Steel Industry Operations
03.20 PM – 03.30 PM	Prashant Kumar Sahu, Jitesh Kumar Singh, Mukesh Shyamkant Desai	MEICON-MIM-322	Reducing Carbon Emissions in Basic Oxygen Furnace for Making Green Steel: A Comprehensive Review
03.30 PM – 03.40 PM	Alok Kumar Jha, Mukesh Shyamkant Desai, Ravindra Singh Saluja	MEICON-MIM-335	Barrier Identification for Implementation of Industry 4.0 in The Structural Steel Fabrication Industry
03.40 PM – 03.50 PM	Prajakta Mane, Ashok J. Keche, Swamini Chopra	MEICON-MIM-324	Wear Performance and Structural Analysis of Injection Moulded PBT/PC Blends After Cryogenic Treatment
03.50 PM – 04.00 PM	Sanjeev Kumar, Sardar Singh Rathi	MEICON-MIM-349	An Investigation of Oxide Dispersion Strengthened Steels for High Temperature Applications: A Review
04.00 PM – 04.10 PM	Sardar Singh Rathi, Mithilesh Kumar Sahu, Sanjeev Kumar	MEICON-IE-505	Performance of Rolling Mill Enhanced through Lean Manufacturing Implementation and Mill Speed
04.10 PM – 04.20 PM	Umesh Vishwakarma, Dharmender Singh Saini, Laxminarayan R. Bhandarkar	MEICON-MIM-330	Micro Electrical Discharge Machining: A Comprehensive Review
04.20 PM – 04.30 PM	Mahesh Bhiwapurkar, R. D. Patidar	MEICON-IE-506	Condition Monitoring of Plant Machinery by Infrared Thermal Imaging

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TECHNICAL SESSIONS

Date: December 20, 2024 (Friday)

Time: 11.25 AM (IST)

Day 02 (Online)			
Technical Session 1 (Thermal Engineering)			
Session Chair: Dr. Sunil Kumar, Associate Research Scientist, A&M University, Texas USA			
Moderator: Prof. Akash Pandey/ Dr. Mithilesh Sahu			
https://meet.google.com/wot-ybfo-jbf			
Timing	Author(s)	Manuscript ID	Title
11.50 AM – 11.58 PM	Sheik Salman Basha, Praveena Devi Nagireddy, Kiran Kumar Kupireddi	MEICON-TE-101	Current Research Advances in Nanofluids and Nanodielectric Fluids in Power Transformer Oil: An Analysis Using Scientometric Technique
11.58 PM – 12.06 PM	Aniket A.Dhavale, Mandar M.Lele	MEICON-TE-102	Optimizing Heat Transfer in Metal Foam-Coated Heat Exchangers using Genetic Algorithms and Artificial Neural Network
12.06PM – 12.14 PM	Prateek Bajpai, Tushar Choudhary, Devi Singh Rawat	MEICON-TE-103	Study of Stress Distribution in an Engine Cylinder Equipped with Fins and without Fins
12.14 PM – 12.22 PM	Mahalingesh Bagali, Jagannath Hirkude, M. Prabhakaran	MEICON-TE-104	Effect of Compression Ratio and EGR on Performance and Emissions of a Diesel Engine Fuelled with Cottonseed Biodiesel
12.22 PM – 12.30 PM	Jayesh Chordiya, Ram Vinoy Sharma	MEICON-TE-108	Thermal Convection Effect in a Fluid-Saturated Porous Enclosure Embedded with an Impermeable Rectangular Fluid Block
12.30 PM – 12.38 PM	G. G. Naik, H. M. Dharmadhikari	MEICON-TE-111	Comparative Analysis of CuO and ZnO Nanoparticle blended with Ternary Blend of Cotton Seed oil, Neem Oil and Orange Peel Oil for Performance and Emission of CI engine
12.38 PM – 12.46 PM	Brijesh Patel, Gajraj Deshmukh, Shailendra Kumar Bohidar	MEICON-TE-115	Evaluating Indoor and Outdoor Thermal Comfort Parameters in Indian Railway Sleeper Class Coach
12.46 PM – 12.54 PM	Mohit Natekar, Ishan Date, Jayesh Subhash Chordiya	MEICON-TE-117	Thermal Modulation of Differentially Heated Porous Enclosure with Strategically Inserted Vertical Diathermal Spikes
12.54 PM – 01.04 PM	Vaibhav Damle, Santosh Kumar Sharma, Sourabh Kumar Soni	MEICON-TE-119	Performance comparison of Inclined Solar Chimney with and without a Perforated Plate for Natural Ventilation using Computational Fluid Dynamics
01.04 PM – 01.12 PM	Rakesh Roshan Apatta, Santosh Kumar Panda, Basanta Kumar Rana, Jnana Ranjan Senapati	MEICON-TE-120	Analysing the Role of a Stationary Solid Horizontal Roller on Rayleigh-Taylor Instability: A Numerical Perspective
01.12 PM – 01.20 PM	Priya Ranjan, Basanta Kumar Rana, Jitendra Kumar Patel	MEICON-TE-121	Numerical Simulation of Three Different Type of Obstacles in T-Shaped Micromixer
01.20 PM – 01.30 PM	B. Sachuthananthan, R. Vinoth	MEICON-TE-122	Utilization of Pyrolysis Oil Derived from Waste Plastic in a Direct Injection Diesel Engine Featuring Modified Piston Bowl
01.30 PM – 02.30 PM	Lunch		
02.30 PM – 02.38 PM	Syed Nabeel Zaidi	MEICON-TE-125	Study of Heat Transfer and Cooling Time-Temperature Behaviour of Blood Samples by Numerical and Experimental Methods
02.38 PM – 02.46 PM	Vishal Saxena, Vinayak Kumar Srivastava, Suraj Kumar, Arun Chauhan, Sahwag Khan	MEICON-TE-127	Exergy and Energy Analysis of Co-Generation Bagasse Based Thermal Power Plant of Kessar Sugar Mill-Baheri
02.46 PM – 02.54 PM	Sunil Kumar K. Prajapati, Ragesh G. Kapadia	MEICON-TE-130	Applicability of CFD Methodology for Subcooled Flow Boiling: Fuel Assembly Design Application
02.54 PM – 03.02 PM	Prakash Ghose, Kunja Bihari Sahu, Vijay Kr. Mishra, Rishitosh Ranjan, Chandrika Samal	MEICON-TE-135	A Novel CFD Approach to Determine the Size of an Automotive Radiator Through Data Extrapolation Method
03.02 PM – 03.10 PM	Salman Basha Sheik, Praveena Devi Nagireddy, Kiran Kumar Kupireddi, Durga Prasad Challapalli, Thanuj Baditha, Surya Sumanth Chirtapudi	MEICON-TE-136	A Review on CFD Studies of Hybrid Nano Fluid Convective Heat Transfer Characteristics in Alternative Elliptical Axis Oval Tube
03.10 PM – 03.18 PM	Millerjothi N K, Ashok I, Nikhila V S, Muvash J, B. Sachuthananthan	MEICON-TE-138	Innovative Energy Harnessing from Fuel Cells: Sustainable Electricity Generation - A Review
03.18 PM – 03.26 PM	Amit Kumar, K. Harikrishnan, Z. Fathimashahiba, M. Arjunan, R. Sripadma, Mukesh Kumar, Pooja	MEICON-TE-139	An Efficient Method for Recovering Water from Streams of Humidified Waste Gases
03.26 PM – 03.34 PM	Santosh Kumar Panda, C. Venkate Gowda, Basanta Kumar Rana, N. Navya, Rakesh Roshan Apatta	MEICON-TE-145	Investigating the Role of Equivalence Ratio and Reynolds Number on Compressed Natural Gas/Air Premixed Laminar Flame Impingement
03.34 PM – 03.42 PM	Ananth P Nampoothiri, Adhil Navas, Darsan Devanand, Vighnesh B, Rajesh TN, Vaisakh S Nair	MEICON-TE-151	Numerical Analysis on the Effect of Dimples on Aerodynamic Performance of NACA 4412 Aerofoil
03.42 PM – 03.50 PM	Vasudevan D, Venkatesan M, Dinesh Kumar P, Vinoth Kumar J	MEICON-TE-152	Experimental Investigation of Surfactants in Stability and Thermal Conductivity of GCN Based Nano Fluids
03.50 PM – 03.58 PM	Kunal, Sushil Kumar Dhiman	MEICON-TE-153	Thermal Performance by Curved Tubes in Cross-Flow of Air at A Subcritical Reynolds Number
03.58 PM – 04.06 PM	Vandita Shahu, Kunal Yadav, Abhay Pardhi, Himanshu Renke, Akash Bhongade, Aatif Khan	MEICON-TE-157	Review of Nitinol Engine

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Day 02 (Online)			
Technical Session 2 (Robotics, Automation & Mechatronics)			
Session Chair: Dr. Golak Bihari Mahanta, Assistant Professor, NIT Patna, Bihar, India			
Moderator: Dr. Saroj Kumar			
https://meet.google.com/uiy-jcwr-epc			
Timing	Author(s)	Manuscript ID	Title
11.50 AM – 12.00 PM	Vijay A Sangolgi, Mithun Patil, Shivprasad Rathod, Karthikaya Pawar, Abhishek Gadekar, Aniket Patil	MEICON-RAM-217	Facial Recognition Enhanced Music Recommendation System: An Exploration of CNN in User Centric Music Discovery
12.00 PM – 12.10 PM	Milan Kumar Motta, Abinav Nuthikarla, Saathvika Revalla, Narayana Nimmagadda, Harshavardhan Kosanam, Ankith Kasetty	MEICON-RAM-219	Design and Development of Pulse-guard: An Automated Foot Massager for Enhanced Healthcare Applications
12.10 PM – 12.20 PM	Balajee Maram, Rohan R Maram	MEICON-RAM-222	A IoT Powered Smart Healthcare Framework for Zoonotic Disease Detection in Fog Cloud Computing Ecosystems
12.20 PM – 12.30 PM	Balajee Maram, Rohan Raj Maram	MEICON-RAM-223	Fusion Data Driven Lung Disease Classification with Transfer Learning and Textural Feature Analysis
12.30 PM – 12.40 PM	Sumit D. Kaldate, R. R. Deshmukh	MEICON-RAM-224	A Review Study of Soft Pneumatic Bending Actuator with Varying Longitudinal and Transverse Cross Section and Its Effect on The Output Parameters
12.40 PM – 12.50 PM	Brijesh Patel, Addisu Kidanemariam, Prabhat R. Mishra, Shailendra K. Bohidar	MEICON-RAM-225	Kinematic Analysis and Simulation of a Six-Legged Robot
12.50 PM – 01.00 PM	Amruta Bhawarshi, Rajwardhan Mali, Aatish Malve, Manas Patil, Chinmay Mandavkar, Durgesh Malvi, Saurabh Kale, Ashish Kumar	MEICON-RAM-233	Tilt Safety Mechanism for Two-Wheeler
01.00 PM – 01.10 PM	Venkata Hangarage, Gururaj Mukarambia, Bhagyashree Agasar	MEICON-RAM 236	Bilingual Natural Scene Text Detection using CRAFT Model and Region Based Word Segmentation
01.10 PM – 01.20 PM	Nivethitha T., Karthikeyan G., Hisham Sulaiman M., Nishanth P.	MEICON-RAM-243	Enhancing Spatial Map-Reading Through the Integration of Ultrasonic and Infrared Sensing Modalities with Advanced SLAM Algorithms in Wearable Technologies
01.20 PM – 01.30 PM	Bipin Kumar Singh, Shameer. M. S., Vijay Ram G, Suhan. M, Amarnath A. S	MEICON-RAM-246	Industry 5.0 Evolution, Technologies and Application a Prolix Review
01.30 PM – 02.30 PM	Lunch		
02.30 PM – 02.40 PM	Bipin Kumar Singh, R. Kanishk, S. Harini, Arun S M	MEICON-RAM-250	Development of Robotic System for Automatic Garbage Collector: A Review
02.40 PM – 02.50 PM	Raghav.S. K, Suresh Kumar.M. S, Srija.R., Lakshmi Priyasni.B. R., Sabitha. S,	MEICON-RAM-259	Integration and Evaluation of Path Planning Algorithms in Autonomous Mobile Robots Using ROS
02.50 PM – 03.00 PM	Jonnala Thanishka, Killana Pavan Kumar, Abhinaya R., Ashwin Pandian S. T., Akhil V. M.	MEICON-RAM-261	Flex Sensor-based Prosthetic Robotic Hand
03.00 PM – 03.10 PM	Akhil V. M., Shatha Varsha Sree T., Jeevakamal K. R., Guhan K. B., Gowtham S. D.	MEICON-RAM-262	Solar Powered Agricultural Robot for Irrigation

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Day 02 (Online)			
Technical Session 3 (Materials & Intelligent Manufacturing)			
Session Chair: Dr. Krishna Kishore Mugada, Assistant Professor, SVNIT Surat, Gujrat, India			
Moderator: Dr. Dharmender Singh Saini			
https://meet.google.com/jzf-duvj-svy			
Timing	Author(s)	Manuscript ID	Title
11.50 AM – 11.58 PM	Yogesh Sable, H. M. Dharmadhikari	MEICON-MIM-313	Exploring ANN Techniques for Modelling Surface Roughness in Wire EDM of Aluminium/Silicon Carbide Composites
11.58 PM – 12.06 PM	Alok Vardhan, Abhishek Mishra, Gajesh Kumar	MEICON-MIM-315	Investigation of Filler Wire Effects on Microstructural and Mechanical Properties of Pressure Vessel Welds
12.06 PM – 12.14 PM	Abhay Magdum, Varinder Singh, Ravindra Badiger	MEICON-MIM-316	Effect of Process Parameters in Joining Hastelloy X Through Microwave Hybrid Heating (MHH)
12.14 PM – 12.22 PM	Sandip L. Thengade, M. S. Kadam	MEICON-MIM-318	Analysis of Wear and Frictional Characteristics of Asbestos Free Brake Pad
12.22 PM – 12.30 PM	Kiran Kumar R. Jagtap, R. R. Deshmukh	MEICON-MIM-319	A Review Study on the Performance Evaluation of Titanium-Coated and Uncoated Cutting Tools Under Machining Alloys in The Milling Process
12.30 PM – 12.38 PM	Shubham Patharkar, Deepa B. Bailmare, Danish Khatik, Satnamkaur S. Mattu, Kavita Pande, Swamini Chopra, Abhay D. Deshmukh	MEICON-MIM-325	Advancements in Super Capacitor Technology: A Novel Microwave-assisted Carbonization Route for Onion Peel Waste-derived Electrode Material
12.38 PM – 12.46 PM	Deepak Bhimrao Magar, Mukesh Shyamkant Desai, Sujit G. Chaudhari, Shreeniwas R. Chinchkhedkar, Nilesh V. Sawadekar, Krishna R. Dachawar	MEICON MIM-327	Integration of Smart Materials in Additive Manufacturing: Technological Challenges, Emerging Opportunities, and Future Prospects
12.46 PM – 12.54 PM	Bhaven Prajapati, Laxminarayan Bhandarkar, Jitesh K. Singh, Umesh Vishwakarma, Dharmender Singh Saini	MEICON-MIM-331	Analysis of the Surface Finish and Tool Wear During Machining of Al Alloy Using Cubic Boron Nitride Insert
12.54 PM – 01.04 PM	Manish Shukla, M. K. Gaur, R. K. Pandit	MEICON-MIM-333	Thermal Energy Storage Phase Change Materials for Low Temperature Region: A Review
01.04 PM – 01.12 PM	Ravikumar K., Dinesh kumar S., Nirmal Kannan V., Arunnath A., Rajadurai N. Murthy	MEICON-MIM-334	Advancement in the Micro-structural and Mechanical Behaviour of AA 7075 Alloy Through Incorporation of Boron Carbide and Zirconia Reinforcements
01.12 PM – 01.20 PM	Vivek R., Venkatesh S., Kavin Kumaar S. S., Kaviyarasu E., Subash R.	MEICON-MIM-336	Al ₂ O ₃ Particle Sizing on Planetary Ball Milling for Experimentation for PCE for Experimentation for PCE
01.20 PM – 01.30 PM	Prakash Deodhar, Sanjeev Kumar	MEICON-MIM-338	Optimization of TIG Welding Parameters in Austenitic 304 Stainless Steel Weldments Using Grey Based Taguchi's Method
01.30 PM – 02.30 PM	Lunch		
02.30 PM – 02.38 PM	Anbarasu K. G., Sathiyaraju M., Ashok K. G.	MEICON-MIM-341	Effect of Chemical Polishing on Surface Quality and Geometrical Accuracy of 3D Printed Parts with 50 % Infill Density
02.38 PM – 02.46 PM	N. Rajesh, G. Guru Mahesh	MEICON-MIM-344	A Comparison of Hardness and Wear Behaviour of Two 3D Printed Materials and Its Optimization
02.46 PM – 02.54 PM	Dhruvik Patel, Amit Kumar, Garima Singh, Rimjhim Singh	MEICON-MIM-345	Artificial Neural Networks (ANN)-Based Prediction of Mechanical Properties of Steel Alloys
02.54 PM – 03.02 PM	Alden Binoy C., Kaviyarasu L., Yogeswaran M., Abdul Anas S., Tharun Kumar N., Vinayagamoorthi M. A., Manivelmuralidaran V.	MEICON-MIM-347	Comparative Study of High-Speed Steel and Carbide Tool in Drilling Process on Aluminium Alloy 6061 Using Grey Relational Approach
03.02 PM – 03.10 PM	Jigyanshu Sharma, Nitin Yadav, Nikhil Mishra, Alok Vardhan, Gajesh Kumar	MEICON-MIM-350	Effects of PWHT on Microstructure and Mechanical Properties of GTAW-Welded Pressure Vessel Steel
03.10 PM – 03.18 PM	Gokila Krishnan G., Sri Parasuram T. R., Thianessvarmv., Sachuthananthan B., MonishT.	MEICON-MIM-351	Application of Non Destructive Testing
03.18 PM – 03.26 PM	Santosh Sahu, S. P. S. Matharu, Ritesh Kumar Dewangan	MEICON-RAM-352	Surfactant-Driven Stability in Nano Fluids: Mechanisms, Applications, and Thermo-Physical Properties Enhancement
03.26 PM – 03.34 PM	Gokilakrishnan, Dineshkumar, Gokula Kannan, Mounish, Vasanth Krishnan	MEICON-MIM-353	Review of Additively Manufactured Parts
03.34 PM – 03.42 PM	Waman Kharat, Vivek Gupta, Sunil Waddar, Prerna Mishra	MEICON-MIM-359	A Comprehensive Review on Corrosion Behaviour of Friction Stir Welded Components
03.42 PM – 03.50 PM	Laxminarayan R. Bhandarkar, Saroj Kumar Sarangi, Ayashkanta Jena	MEICON-MIM-360	Growth of Micro-Crystalline Diamond Using Transitional Metal Powders on Cemented Carbide Inserts using HFCVD Technique and Dry Turning of Aluminium
03.50 PM – 03.58 PM	Vikas Dive, Amol Mali, Sandesh Solepatil	MEICON-MIM-361	Comprehensive Review on Laser Direct Energy Deposition Metal Additive Manufacturing Processes
03.58 PM – 04.06 PM	Albela H. Pundkar, Sharad S. Chaudhari	MEICON-MIM-364	Advancing Frontiers: A Comprehensive Review on 21st Century Smart Materials and Their Emerging Applications to Mechanical Engineering

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Day 02 (Online)			
Technical Session 4 (Innovative Product Design)			
Session Chair: Dr. Vishesh Ranjan Kar, Assistant Professor, Mechanical Engineering, NIT Jamshedpur, Jharkhand, India			
Moderator: Dr. Laxminarayan R. Bhandarkar			
https://meet.google.com/tqt-mhop-trt			
Timing	Author(s)	Manuscript ID	Title
11.50 AM – 12.00 PM	Shivangi Sharma, M. K. Gaur, R. K. Pandit	MEICON-IPD-401	Reactive Distillation: An Innovative Process Intensification Technique
12.00 PM – 12.10 PM	Amit D. Desale, Girish R. Desale	MEICON-IPD-404	Enhancing Performance of Spring Washers in the Raigad Ropeway System: A Case Study
12.10 PM – 12.20 PM	Mohammadazar Bargir, Ravindra Deshmukh	MEICON-PID-405	A Comprehensive Analysis of Knee Implants Manufactured Using Additive Manufacturing Technology to Enhance Biomechanical Properties
12.20 PM – 12.30 PM	Devendra Sahu, Ritesh Kumar Dewangan, Surendra Pal Singh Matharu	MEICON-IPD-406	Vibration Signal Based Analysis of gradually developed wear defects in Rolling Element Bearings
12.30 PM – 12.40 PM	Mangesh Mote, Anilkumar Sathe, Mangesh R. Phate	MEICON-IPD-407	Manufacturing and Testing of Al/Sic/Coconut & Bagasse Ash Metal Matrix Composite for Underwater Application
12.40 PM – 12.50 PM	Santosh Kumar, Prashant V. Washimkar, Deepak V. Bhope, Shrikrishna G. Tarnekar	MEICON-IPD-408	Performance Evaluation of Hybrid Energy Storage System Using Combination of Flywheel and Super Capacitor for the Intermittent Mechanical Process Machine: An Analytical Approach
12.50 PM – 01.00 PM	Mayuri B. Ardak, Anilkumar Sathe, Mangesh R. Phate	MEICON-PID-409	Design and Performance Optimization of a 60-minutes Mechanical Chronometer Using Advanced Computational Techniques
01.00 PM – 01.10 PM	K. Sathish, K. Manickaraj, S. Aditya Krishna, Kamalapuram Mahaboob Basha, R. Pravin, Raghul K. K.	MEICON-PID-410	Investigation on 1 Hp Centrifugal Pump Micro Grooved Impeller and Evaluation of Its Performance Characteristics Using Numerical and Experimental Method
01.10 PM – 01.20 PM	Priyanka Singha, Ambika, Harshita Jha, Shambhawi Raje, Shipra Aggarwal	MEICON-PID-414	Material Optimization of Connecting Rod Employing Different Alloys and Composites
01.20 PM – 01.30 PM	Dinesh Kumar Pasi, Manoj Chouksey, Ashesh Tiwari	MEICON-IPD-420	A New Approach for Unbalance Identification Using Finite Element Model-Based Method
01.30 PM – 02.30 PM	Lunch		
02.30 PM – 02.40 PM	Suresh Kumar M. S., Kasiselvanathan M., Gautham Ramkumar, Surya R., Hariharan L. A.	MEICON-IPD-428	Acoustic Fire Extinguishing Technologies: A Comprehensive Review of Advancements, Challenges, and Future Prospects
02.40 PM – 02.50 PM	Siddheshwar Tuljapure, Deepak Maslekar	MEICON-IPD-430	Enhancement of Energy Absorption of a Rectangular Tube during Oblique Impact Loading

MECHANICAL ENGINEERING INTERNATIONAL CONFERENCE (MEICON 1.0)
on
Advancements, Innovation, and Automation for Sustainability

TECHNICAL SESSIONS

Date: December 20, 2024 (Friday)

Time: 11.25 AM (IST)

Day 02 (Online)			
Technical Session 5 (Industrial Engineering)			
Session Chair: Dr. Varinder Singh , Associate Professor, MED, KK Birla Goa Campus, BITS Pilani, Goa, India			
Moderator: Dr. Ravindra Singh Saluja			
https://meet.google.com/ruw-xfxg-pbb			
Timing	Author(s)	Manuscript ID	Title
11.50 AM – 12.00 PM	Gajesh Kumar, Alok Var	MEICON-IE-501	Strategic Framework for Impact of Sound Level, Cognitive Task and Age of Worker-On-Worker Performance
12.00 PM – 12.10 PM	Amit Jain, R S Rajput, Deepesh Bhardwaj	MEICON-IE-502	Artificial Intelligence in Mechanical Condition Monitoring: A Review of Techniques and Applications
12.10 PM – 12.20 PM	Anupriya Kamble, Pankaj Zine	MEICON-IE-503	Industry 4.0 Technologies and Their Percolation: A Literature Review & Field Survey in SMEs
12.20 PM – 12.30 PM	Sangita	MEICON-IE-507	An Analytic Hierarchy Process approach for Performance Appraisal of the officers working in a Manufacturing Industry
12.30 PM – 12.40 PM	Gajesh Kumar, Girish Kumar, Pravin Kumar	MEICON-IE-508	Strategic framework for developing supply chain resilience by using Total Interpretive Structural Modeling
12.40 PM – 12.50 PM	Sitikanta Sahoo, Deepak Singhal, Sushanta Tripathy	MEICON-IE-509	Shipbuilding and Ship Repair Yards Waste Management: Evaluation of Challenges

MECHANICAL ENGINEERING INTERNATIONAL CONFERENCE (MEICON 1.0)

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Advancements, Innovation, and Automation for Sustainability

TECHNICAL SESSIONS

Date: December 20, 2024 (Friday)

Time: 11.25 AM (IST)

Day 02 (Online)			
Technical Session 6 (Sustainable Solutions for Smart Living)			
Session Chair: Dr. Rajendran Prabakaran, International Research Professor, Yeungnam University, Republic of Korea			
Moderator: Dr. Kuber Nath Mishra			
https://meet.google.com/knf-kgpm-ydz			
Timing	Author(s)	Manuscript ID	Title
11.50 AM – 12.00 PM	P. M. G. Bashir Asdaque, Rahul Kumar, Joy Mondal	MEICON-SSSL-603	Modelling of Geometrically Nonlinear and Electromechanically Coupled Piezoelectric Based Slender Transducers for Green Energy
12.00 PM – 12.10 PM	Richa Shukla, R. S. Jadon, Renu Jain	MEICON-SSSL-604	Opinion Analysis Using Social Media in the Automobile Industry with Machine Learning
12.10 PM – 12.20 PM	Neelima Singh, Rohan Chouhan, Akshay Kumar Sahu, Suraj Kumar Mukti	MEICON-SSSL-608	Study and Analysis of Impact of Skill Development and Certification Within Region of Municipal Corporation of Raipur and Durg-Bhilai
12.20 PM – 12.30 PM	Satish Kumar Gavel, Gajendra Kumar Agrawal, T. V. Arjunan, Shyam Singh Kanwar	MEICON-SSSL-612	Experimental and Computational Study of Solar Evacuated Tube Collector using U Shaped Copper Tube for Air Heating Application
12.30 PM – 12.40 PM	Shreyansh Dixit, Anil Kumar Tiwari	MEICON-SSSL-614	Capability Augmentation of Solar Air Heater: Simulation on the Effect of U-Shaped Hollow Longitudinal Fin Parameters
12.40 PM – 12.50 PM	A. Vimal, E. Elancheahyan, S. Elavarasan, G. Jeevan Prakash, T. Gowtham	MEICON-SSSL-616	Review on Investigation of the Hydrodynamic Behaviour of Hydro Cyclone for Charcoal Segregation
12.50 PM – 01.00 PM	Bhushan C. Behede, Akshay R. Mahale, Gunvant D. Patil, Bhumika K. Patil, Harish R. Patil, Dhanisha S. Kulkarni	MEICON-SSSL-621	Exploring Sustainable Methods in Hydroponic Systems: A Review
01.00 PM – 01.10 PM	Sahil Atwal, Garima Singh, Amit Kumar	MEICON-SSSL-626	Enhanced Pipeline Health Monitoring through Multi Sensor Fusion Technology and Machine Learning
01.10 PM – 01.20 PM	Asiya Najeeb	MEICON-SSSL-630	Advancing Energy-Efficient Switchable Devices: CDS Nanowire-Dispersed Liquid Crystals for Sustainable Display Technologies
01.20 PM – 01.30 PM	Hemant Kumar Upadhyay	MEICON-SSSL-631	Analysing the Challenges to Adopting E-mobility in India
01.30 PM – 02.30 PM	Lunch		
02.30 PM – 02.40 PM	Ashok Kumar Singhdeo, Sushanta Tripathy, Deepak Singhal	MEICON-SSSL-632	Prioritizing the E-Waste Management Technologies in India: A Fuzzy Topic Approach
02.40 PM – 02.50 PM	Misba Gul	MEICON-SSSL-633	Comparative Analysis of Conventional and Advanced Timber Seasoning Technologies
02.50 PM – 03.00 PM	Amit Kumar, A. Devaprakash, S. Ajay, Dhanush Kumar, Purushothaman M., Manish Kumar, Atwari Rawani	MEICON-SSSL-634	Utilizing Technology and Creativity to Generate Fresh Water from Atmospheric Air Perception
03.00 PM – 03.10 PM	Misba Gul	MEICON-SSSL-636	Development of Light Weight Concrete Shell and Waste Glass: A comprehensive Study on Mechanical Properties
03.10 PM – 03.20 PM	Amit Kumar, B Selvakumar, Aashika J, Murugaprasath S, Selva Chandran T R, Sri Ram S K, Mukesh Kumar	MEICON-TE-118	An Approach to Optimize Solar Distillation Performance Using Nano fluids
03.20 PM – 03.30 PM	Rana M. Shakir, Ali L. Ekaid, Hasanen M. Hussein	MEICON-TE-126	Experimental and Numerical Analysis of Two Types of Phase Change Materials in a Solar Air Heater Compared to a System Without PCM
03.30 PM – 03.40 PM	Vishal Saxena, Vivek Kumar, Dinesh Kumar, Akash, Shivam Dhangar	MEICON-TE-128	Numerical Analysis & Simulation of Evacuated Tube Solar Collector for Heating Applications
03.40 PM – 03.50 PM	N. K. Millerjothi, S. Kavin Adhithan, B. Sri Poorani, P. Kiruba	MEICON-TE-129	Design Optimization and Heat Transfer Enhancement of Evacuated Tube Heat Pipe Solar Collector Thermal Energy Storage Using PCM
03.50 PM – 04.00 PM	Nikita Gupta, Abhishek Priyam	MEICON-TE-143	Impact of Thermal Performance of Floating Solar Panel on Power Generation