

PROGRAM SCHEDULE
7th INTERNATIONAL CONFERENCE ON

**Smart and Sustainable Developments in Materials, Manufacturing
and Energy Engineering**

(SME-2026)

Venue: PHALGUNI SEMINAR HALL, 2ND FLOOR RAMANUJAM BLOCK

Invited Talk 1	
Date: 05.02.2026	Time: 11.30 to 12.30
By Mohd Ibrahim B.S, Assoc. Professor at Malay-Japan International Institute of Technology (MJIT) of Universiti Teknologi Malaysia, Kuala Lumpur.	
Invited Talk 2	
Date: 06.02.2026	Time: 10 to 11AM
TOPIC: Advanced applications of Metal 3D printing by Dr. Vishwas Puthige	

Date:05.02.2026	Time:2.00 to 4 PM (Session 1)
Venue: Phalguni	
Session Chair: Dr. Mohd Ibrahim B Co-Chair: Dr. Ajith Hebbale.	
Session Coordinator: Dr. Adarsh Rai Student Coordinator (M.Tech): Hemanth Kumar D. L	
PAPER ID	Advanced Manufacturing & Materials Authors and Paper Title (8 papers)
SME 2609	Mechanical and Tribological Performance of Hybrid AZ91 Magnesium Composites Reinforced with Titanium Diboride and Multi-Walled Carbon Nanotubes via Stir and Ultrasonic-Assisted Casting
SME 2619	Parameter Optimization for Additive Manufacturing of Lightweight Components in Aerospace/Automotive Applications
SME 2650	Review on welding and Stress relieving of Ti-6Al-4V: Challenges and Recent Advancements
SME 2675	Approximation Error Model for the Solution of Inverse Conjugate Heat Transfer Problem
SME 2690	Experimental role of Surface Preparation in Enhancing the Bond Strength of BFRP-Al-T6 Hybrid Joints
SME 2691	Surface Treatment Dependent Strength and Failure Behavior of Aluminum 5052-Basalt Fiber Composite Adhesive Joints
SME 2696	Shape Memory Alloy a Comprehensive Review
SME 2692	An experimental evaluation of the FSW of an aluminum matrix composite reinforced with minerals

Date:05.02.2026 Time: 2.00 to 4 PM (Session 2) Session Chair: Dr. Narasimha Marakala Co Chair: Dr. Grynal D'Mello Venue: Metrology lab Session Coordinator: Mr. Mohan Poojari Student Coordinator (M.Tech): Purushotham S	
PAPER ID	Modeling, Optimization & Control Systems Authors and Paper Title (6 papers)
SME 2601	MODIFIED FLOWER POLLINATION ENHANCED MODEL PREDICTIVE TEMPERATURE CONTROLLER FOR POLYMER EXTRUSION PROCESS
SME 2628	Electric Vehicle Fast Charging Optimization with V2G Integration using Adaptive Frilled Lizard Optimization
SME 2632	Artificial Neural Network Modelling for Production of Biodiesel from Waste Cooking Oil
SME 2685	Calculation the Reliability-Adjusted Distance to Optimize TSP Solutions
SME 2658	FPGA IMPLEMENTATION OF PERSONALIZED VOICE EXTRACTION SYSTEM
SME2626	Experimental Evaluation of Bamboo Cooling Pads for Evaporative Cooling System
SME2688	FESEM Analysis of Microwave and Ultrasonic Pretreated Lean Grade Iron ore
Date:06.02.2026 Time: 11.30 to 1:00 PM (Session 3) Session Chair: Dr. Narasimha Bailakeri Co-Chair: Dr. Rashmi P. Shetty Venue: Phalguni Session Coordinator: Mr. Sunil Kumar Shetty Student Corrdinator (M.Tech): Shubham Pai	
PAPER ID	Thermal & Energy Systems Authors and Paper Title (3 papers)
SME 2641	Performance study of a solar cooker working on evacuated tubes as solar energy collector
SME 2673	Matrix-equations to Forecast Working of Parallel-Cross-flow Heat-Exchanger
SME 2656	Mechanical and Thermal Properties of PLA Reinforced with Natural and Synthetic Materials - A Review
Date:06.02.2026 Time: 11.30 to 1:00 PM (Session 4) Session Chair: Dr. Vishwas Puthige Co-chair: Dr. Muralidhara Venue: Robotics CAD lab Session Coordinator: Mr Srinivas Prabhu M. Student Corrdinator (M.Tech): Vasu S.	
PAPER ID	Industrial Automation, PLCs & Instrumentation Authors and Paper Title (4 papers)
SME 2693	Design of a Self optimizing plc architecture for dynamic memory and scan time management in industrial automation
SME 2694	PLC-Based Implementation of PID Control for Flow and Level Regulation in a Tank System
SME 2695	High-Speed PLC-Based Motion Synchronization Using Feedforward + Feedback Modelling
SME 2698	Prediction of wear loss of silica/ graphene field Carbon fibre Polymeride composites using machine learning approach
Date:06.02.2025 Time:2 to 4 PM (Session 5) Session Chair: Dr. Shrinivasa Pai P Co-Chair: Dr. Dr. M.D. Kiran Venue: PHALGUNI Session Coordinator: Bhaskara P Student Corrdinator (M.Tech): Mr. Rynor Grawain	
PAPER ID	Structural & Mechanical Design Analysis & Condition Monitoring, Fault Diagnosis Signal Processing & Embedded Systems Authors and Paper Title (5 papers)
SME 2633	Aerodynamic shape optimization of a Fixed-Wing UAV Fuselage:A FV Study

SME 2680	Experimental Study on the Effect of Steel Mesh Diameter as Textile Reinforcement on the Flexural Behavior of Precast Concrete Sandwich Panels
SME 2687	Structural Analysis of the Wastes of the "Almalyk MMC" JSC Copper Concentrate Factory
SME 2602	Comparative Analysis of Fault Detection and Identification in Shell and Tube Heat Exchanger Using Multivariate Statistical Tools
SME 2643	Rolling Element Bearing Fault Diagnosis using Bhattacharya Distance

Help Desk/ Registration

Staff Coordinator: Dr. Divijesh

M. Tech. Students

Mr. Sachin Kempanna

Mr. Manoharachari