

ICDAMS 2018

Program Schedule & Session Details

3rd International Conference on
Design, Analysis, Manufacturing & Simulation

6-7 April 2018



Organized by

Departments of Mechanical & Automobile Engineering



Engineer to Excel

SAVEETHA
SCHOOL OF ENGINEERING



SAVEETHA
INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES
(Declared as Deemed to be University under Section 3 of UGC Act 1956)

2018

ICDAMS

2018

Program Schedule

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DAY - 01 06.04.2018Friday	TIME		EVENT			
	8:30 AM onwards		REGISTRATION <u>Venue:</u> Reception Desks (4 th Floor)			
	09:30-10:45 AM		INAUGURATION <u>Venue:</u> Seminar Hall - 4 (4 th Floor)			
	10:45-11:00 AM		HIGH TEA			
	11:00-11:35 AM		INVITED TALK 1 Dr. George A. Georgantopoulos - "Boundary Layer and Applications" <u>Venue:</u> Seminar Hall - 4 (4 th Floor)			
	11:35 AM-12:10PM		INVITED TALK 2 Dr. GyorgySzekely-"Advanced Separation Materials for Sustainable Chemical Manufacturing" <u>Venue:</u> Seminar Hall - 4 (4 th Floor)			
	12:10-1:00 PM		WORKING LUNCH			
	01:00-2:30 PM		Technical Session 1 FLUIDS ENGINEERING <u>Venue</u> CLAB 411 (4 th Floor)	Technical Session 2 MANUFACTURING ENGINEERING - I <u>Venue</u> CLAB 412 (4 th Floor)	Technical Session 3 DESIGN ENGINEERING <u>Venue</u> CLAB 413 (4 th Floor)	Technical Session 4 BIO-ENGINEERING <u>Venue</u> CLAB 414 (4 th Floor)
	02:30-2:45 PM		HIGH TEA			
	02:45-4:30 PM		Technical Session 5 COMPUTATIONAL FLUID DYNAMICS <u>Venue</u> CLAB 411 (4 th Floor)	Technical Session 6 COMPOSITE MATERIALS - I <u>Venue</u> CLAB 412 (4 th Floor)	Technical Session 7 NOISE, VIBRATION, & HARNESS <u>Venue</u> CLAB 413 (4 th Floor)	Technical Session 8 INTERDISCIPLINARY <u>Venue</u> CLAB 414 (4 th Floor)

DAY - 02 07.04.2018 Saturday	TIME	EVENT			
	09:00-09:30 AM	<p style="text-align: center;">INVITED TALK 3</p> <p style="text-align: center;">Dr. Christina G. Georgintopoulou - "Block Nested Cartesian Refinement and Numerical Solution for Recirculating Flows"</p> <p style="text-align: center;"><u>Venue:</u> Seminar Hall - 4 (4th Floor)</p>			
	09:30-10:00 AM	<p style="text-align: center;">INVITED TALK 4</p> <p style="text-align: center;">Dr. Nikolaos S. Vasilikos- "Renewable Resources of Energy and PV Panels Efficiency Optimization for GCC countries"</p> <p style="text-align: center;"><u>Venue:</u> Seminar Hall - 4 (4th Floor)</p>			
	10:00-10:30 AM	<p style="text-align: center;">INVITED TALK 5</p> <p style="text-align: center;">Dr. Arunkumar Jayakumar- "An Assessment on Additive Manufacturing Technique to Fabricate Integral PEM Fuel Cell/Electrolyser Component"</p> <p style="text-align: center;"><u>Venue:</u> Seminar Hall - 4 (4th Floor)</p>			
	10:30-10:45 AM	HIGH TEA			
	10:45 AM-12:15 PM	<p style="text-align: center;">Technical Session 9 HEAT TRANSFER</p> <p style="text-align: center;"><u>Venue</u> CLAB 411 (4th Floor)</p>	<p style="text-align: center;">Technical Session 10 MANUFACTURING ENGINEERING - II</p> <p style="text-align: center;"><u>Venue</u> CLAB 412 (4th Floor)</p>	<p style="text-align: center;">Technical Session 11 FEA/FEM</p> <p style="text-align: center;"><u>Venue</u> CLAB 413 (4th Floor)</p>	<p style="text-align: center;">Technical Session 12 INDUSTRIAL ENGINEERING</p> <p style="text-align: center;"><u>Venue</u> CLAB 414 (4th Floor)</p>
	12:15-01:00 PM	WORKING LUNCH			
	01:00-2:30 PM	<p style="text-align: center;">Technical Session 13 ENERGY SYSTEMS</p> <p style="text-align: center;"><u>Venue</u> CLAB 411 (4th Floor)</p>	<p style="text-align: center;">Technical Session 14 COMPOSITE MATERIALS - II</p> <p style="text-align: center;"><u>Venue</u> CLAB 412 (4th Floor)</p>	<p style="text-align: center;">Technical Session 15 INTERNAL COMBUSTION ENGINES</p> <p style="text-align: center;"><u>Venue</u> CLAB 413 (4th Floor)</p>	-
	02:30-2:45 PM	HIGH TEA			
	02:45-3.30 PM	<p style="text-align: center;">VALEDICTORY FUNCTION</p> <p style="text-align: center;"><u>Venue:</u> Seminar Hall - 4 (4th Floor)</p>			

Session Details

ICDAMS 2018

Date: 06.04.2018		Technical Session 1 FLUIDS ENGINEERING	Venue: CLAB 411
Time: 1.00 PM - 2.30 PM			
S. No.	Paper ID	Paper Title	
1	68	Investigation of Efficacy of Low Length-to-Diameter Ratio and Nozzle Pressure Ratio on Base Pressure in an Abruptly Expanded Flow <i>G. M. Fharrukh Ahmed, S. A. Khan</i>	
2	152	Slug-Bubble Regime Identification in a Square Channel using a IR Sensor <i>S. AafrinSulthana, T. Marieswaran, N. Braghadesh, N. Mithran, M. Venkatesan</i>	
3	187	Drag Reduction in a Class 8 Truck - Scaled Down Model <i>R. Vishwa Krishna, R. Suwathy, M. Pragadeesh, M. Venkatesan</i>	
4	303	Recirculating Flows Analysis and Estimation Inside Channels <i>Christina G. Georgantopoulou, Nikolaos S. Vasilikos, George A. Georgantopoulos</i>	
5	154	Measurement of Hydrogen Peroxide Concentration using IR Sensor - A Numerical Model <i>S. VijayaRaghavan, P. M. Siva, S. P. NeethishKannaa, P. Mohith, N. Mithran, M. Venkatesan</i>	
6	205	Non-Newtonian Fluid Pumping using 3D Printed Mechanism <i>VishwakVenkatesh, K. S. Dhinesh, D. Aditya Srinivasan, M. Venkatesan</i>	
7	55	Modification & Development of Dual Side Water Pumping System using Solar Energy with Scotch Yoke Mechanism <i>P. Rajesh, C. Mahesh, M. Prakash</i>	
8	103	Fabrication and Analysis of a Vortex Tube <i>RayapatiSumanth, L. Vishnu, Prakash Malaiyappan</i>	
9	224	Review Paper on Development in Sail Boat by Using Hydro Foils <i>T. Ganesan, D. K. Jawahar, C. Sadhasivam</i>	
10	246	Experimental and Analysis of a Vortex Tube <i>L. Vishnu, RayapatiSumanth, Prakash</i>	
11	295	Effect of Single Channel Serpentine Flow Field on Hydrogen Polymer Electrolyte Membrane (PEM) Fuel Cell <i>B. Antony Beswin, V. Sujith Kumar, B. MullaiSudaroli</i>	
12	239	Development in Sail Boat using "T" Hydrofoil <i>T. Ganesan, D. K. Jawahar, C. Sadhasivam</i>	

Date:06.04.2018		Technical Session 2 MANUFACTURING ENGINEERING - I	Venue: CLAB 412
Time: 1.00 PM - 2.30 PM			
S. No.	Paper ID	Paper Title	
1	21	Diagnostic System to Determine Lining Condition <i>VitaliyYemelyanov, NataliyaYemelyanova, Alexey Nedelkin</i>	
2	218	Experimentation and Simulation Process of Friction Stir Welding for Lightweight Similar and Dissimilar Materials <i>M. Variavel, R. Pugazhenth, V. Jayakumar</i>	
3	78	Evaluation of Mechanical Properties of Friction Stir Welded Commercially Pure Aluminium <i>S. Suresh Kumar, B. Ravisankar, S. Vishnu Chandar, R. P. DhivakarRaviram, R. Sathish</i>	
4	91	Thermo-Mechanical Modeling of Friction-Stir Welding in Dissimilar Aluminium Alloys <i>U Sudhakar, J Srinivas</i>	
5	276	Investigation of Friction Welding by Various Properties of Al-Cu Joints <i>Sivananthan, Kirankumar, G. Raviteja</i>	
6	328	Selection of Cutting Parameters for the Machinability of Inconel 718 using Grey Relational Analysis <i>Ivan Sunit Rout, P. Pal Pandian</i>	
7	318	Characterization of Multilayer Nano-coating of Piston Ring <i>S. Sivabalan, G. Sathishkumar, R. Pugazhenth, K. ErikiAnanda</i>	
8	280	Parametric Optimization of WED Control Variables on Magnesium AZ91 Alloy by TOPSIS Method <i>MantriSriram, A. Muniappan</i>	
9	225	Mechanical Behaviour of Aluminium Plate Joints Using TIG Welding <i>KattaRanadeep Reddy, UnnamSudheerChowdary, S. Suresh Kumar</i>	
10	282	Optimization of WEDM Process Parameters using Standard Deviation and MOORA Method <i>M. Ajithkumar, A. Muniappan</i>	
11	286	Optimization of WEDM Process Parameters using Standard Deviation and Multi Objective Optimization on the Basis of Ratio Analysis <i>R. Prasanna, A. Muniappan</i>	
12	289	Optimization of WEDM Process Parameters on Machining of AZ91 Magnesium Alloy using MOORA Method <i>T. Bharath, A. Muniappan</i>	
13	278	Investigation of WEDM Process Parameters of Cutting Speed using Taguchi Technique <i>R. Sathiyaraj, A. Muniappan</i>	

Date:06.04.2018		Technical Session 3 DESIGN ENGINEERING	Venue: CLAB 413
Time: 1.00 PM - 2.30 PM			
S. No.	Paper ID	Paper Title	
1	157	Numerical Estimation of Notch Stress Intensity Factors of Sharp V-Notches <i>Mirzaul Karim Hussain, K. S. R. K. Murthy</i>	
2	184	Optimal Radial Strain Gage Locations for Sharp V-Notched Configurations Subjected to Mode I Loading <i>Pranjol Paul, K. S. R. Krishna Murthy, Debabrata Chakraborty</i>	
3	201	A Pioneering Tactic for Sustainable Waste Management: Design of a Cost-Effective Recycling Machine <i>A. Agarwal</i>	
4	126	Study on Fatigue Life of Heat-Treated Aluminium Alloy Coated with Castor Oil. <i>A. Sivasubramanian, T. S. Kirubasankar, S. Vinothkumar</i>	
5	173	Fatigue Life Prediction under Mixed Mode Loading using Equivalent Stress Intensity Factor Models <i>S. Sajith, K. S. R. K. Murthy, P. S. Robi</i>	
6	120	Stress Analysis of Power Piping from Auxiliary Steam Piping to Air Heater Soot Blowing <i>S. Aathresh, T. Madankumar, V. Velmurugan</i>	
7	28	Effect of Variation of Extended Length on End Correction in Extended Tube Resonators <i>Sunali, UtkarshChhibber, Ranjeet Kumar, R. N. Hota</i>	
8	79	Aeroelastic Analysis of Composite UAV Wing Structure <i>M. K. Karthik, K. Manojkumar, K. K. Arunraja, A. Jayasuriya</i>	
9	261	Design and Simplification of Multipurpose Wrench <i>PallepattuMadhu</i>	
10	272	Stress Analysis of Composite Helical Spring (Cr-Va + Stainless steel) <i>S. Ganesh, D. Vinodh</i>	
11	274	Plan and Examination of Rail Wheel by Utilising 2800 Maraging Steel <i>M. Nagaraju, V. Vamsidhar Reddy, S. Bhagyaraja</i>	
12	336	Design and Analysis of Al 7075 Connecting Rod <i>M.Srinivas Rao, A. Girish Kumar, D.Vijayaganapathy</i>	
13	339	Design and Analysis of SG Cast Iron Steering Knuckle <i>M.V.RamPradeep,C.Aravinth, D.Vinodh, D.Vijayaganapathy</i>	

Date:06.04.2018		Technical Session 4 BIO-ENGINEERING	Venue: CLAB 414
Time: 1.00 PM - 2.30 PM			
S. No.	Paper ID	Paper Title	
1	29	Methods of Computational Modeling of Coronary Heart Vessels for its Digital Twin <i>IlyaNaplekov, Ivan Zheleznikov, Dmitry Pashchenko, PolinaKobysheva, Anna Moskvitina, RavilMustafin, Maria Gnutikova, Alina Mullagalieva, Pavel Uzlov</i>	
2	151	Design, Analysis and Development of Force Plate for Prosthetic Application <i>V. Santhosh Kumar, K. Sai Charan, D. Siva Kumar, S. Siva Sampath, Y. KalyanChakravarthy, A. Srinath</i>	
3	56	Design and Analysis of Dental Surgical Fixture <i>H. G. Suhas, Rajkumar</i>	
4	31	Design of Salon Chair to Prevent Varicose Veins <i>E. Naveen</i>	
5	158	An Automatic Physical Access Control System Based on Hand Vein Biometric Identification by Wavelet Transform Algorithm <i>R. SakthiPrabha</i>	
6	172	Musculoskeletal & Risk Assessment during Threshing of Rice-Grains <i>Debesh Mishra, SuchismitaSatapathy</i>	
7	176	Design and Simulation of Simplified Epilepsy Risk Level Classification Technique from EEG Signals <i>Sunil Kumar Prabhakar, HarikumarRajaguru</i>	
8	292	Diabetic Ketoacidosis detection and Implementation with Internet of Things <i>S. Shashank, L. Naveenram, R. Vijayavel, S. Jeyakumar</i>	
9	233	An Improved Method for Early Detection of Lung Cancer <i>T. Inbamalar, R. Sandhya, R. Sangeetha, R. Sinduja, R. Vaisunavee</i>	
10	317	Correlation Analysis of Risk Factors and their Influence over Diabetes Mellitus using Wearable Devices for Pervasive Healthcare <i>P. Divya, P. Harish, S. Kanjana, J. Jeyalakshmi, Mohana</i>	

Date: 06.04.2018		Technical Session 5 COMPUTATIONAL FLUID DYNAMICS	Venue: CLAB 411
Time: 2.45 PM - 4.30 PM			
S. No.	Paper ID	Paper Title	
1	13	Effect of Blade Profiles on the Performance of Bidirectional Wave Energy Turbine <i>P. Madhan Kumar, AbdusSamad</i>	
2	15	Sloshing Response of Partially Filled Rectangular Tank under Periodic Horizontal Ground Motion <i>Amiya Pandit, Kishore Chandra Biswal</i>	
3	4	Numerical Investigation of Hybrid Blend Design Target Bullets <i>V. R. Muruganatham, T. Babin</i>	
4	135	Recent Advancements in Shape Optimization of Aero Spiked High Speed Re-Entry Vehicle Using CFD <i>Harish Panjagala, E. L. N. RohitMadhukar, I. Ravi Kiran</i>	
5	190	Numerical Model for Concentration Measurement during Decomposition of H ₂ O ₂ over Silver Catalyst <i>KB. Sanjay Vasanth, G. Gokul Raj, M. Venkatesan M</i>	
6	18	Numerical Investigation of Steam Ejector Characteristics for Petroleum and Petrochemicals Heating Before Transportation <i>Dmitry Pashchenko, IlyaNaplekov, Ivan Zheleznykov</i>	
7	143	Thermo Mechanical Analysis of Engine Valve and Valve Seat Insert by Finite Element Method <i>G. Ragul, SamratMajumdar, S. Sankar, Prasidh E Prakash, J. Dehesinghraj</i>	
8	1	Numerical and Heat Transfer Investigation in Heat Exchanger Packed with CuO Embryonic Fluids <i>Prakash Malaiyappan, S. Rinesh, Ben Mathew, G. Bharathiraja</i>	
9	179	Investigation of Thermal Characteristics in Solid Rocket Nozzle with Insulate Using CAD/CAE <i>S. Madhu, A. Muniappan, P. Arunagiri, Sattu Naveen Kumar</i>	
10	212	Design and Analysis of Exhaust Manifold for a Car Engine <i>AnoopJohny, S. David, D. Prakash, V. Dhanasekar, T. Pragadeeswaran</i>	
11	193	Performance Investigation of a Rotary Heat Exchanger Installed with Four Ducts using Computational Fluid Dynamics <i>Saneesh Nair, Vinod Kotebavi, Alokekumar Das</i>	

Date: 06.04.2018		Technical Session 6 COMPOSITE MATERIALS - I	Venue: CLAB 412
Time: 2.45 PM - 4.30 PM			
S. No.	Paper ID	Paper Title	
1	32	Study of Hardness and Flexural Strength of Banyan and Peepal Fibre Reinforced Hybrid Composites <i>V. DurgaPrasada Rao, G. Moses Dayan, V. NavyaGeethika</i>	
2	38	Woven Hemp and Glass Fiber Hybrid Composite - A Comparative Study on Flexural and Hardness Properties with and without NaOH Treatment <i>G. Velmurugan, Md. Asad Salman Pasha, V. Arasu</i>	
3	104	Investigation of Mechanical Properties of Natural Fibre Composite with Fibre Surface Treatment and without Surface Treatment <i>Pankaj Giri, V. Charan Kumar</i>	
4	146	Investigation of Mechanical Properties of Natural Fibre Composite <i>V. Charan Kumar, Pankaj Giri</i>	
5	271	Experimentation on Composite Brake Pads with Aluminum Reinforcement of Sic and Flyash <i>Sivananthan, Tharun Kumar, Lokesh</i>	
6	84	Effect of Fiber Volume Fraction on the Tensile Strength of GFRP Composites under Water Absorption <i>C. Arivazhagan, M. K. Karthik, K. K. Arunraja, K. Manojkumar</i>	
7	165	Investigation on Fracture Toughness of Treated Hybrid Particulate Reinforced Polyester Composites <i>M. Kullayappa, C. Sai Bharath Reddy, G. Bharathiraja</i>	
8	235	Experimental Analysis of Mechanical Properties of Aluminium Metal Matrix with Silicon and Carbon Fiber <i>M. Prakash, M. Sasivardhan Reddy, Godhalla Madan Gopal Goud</i>	
9	285	Investigation of Wire EDM Control Variables on Kerf Width for Al6063/SiC/ Al ₂ O ₃ Composite by Response Surface Methodology <i>A. P. Jaivaakheish, A. Muniappan</i>	
10	266	Investigation of Mechanical Properties Foral-Sic-Tib ₂ Metal Matrix Composite <i>Sivananthan, Elvin Raju Ch, YeswanthPulla</i>	
11	290	Parametric Optimization of WEDM Process Parameters on Al/Sic/Graphite Hybrid Composites using TOPSIS Method <i>R. Ajithkumar, A. Muniappan</i>	

Date: 06.04.2018		Technical Session 7 NOISE, VIBRATION AND HARNESS	Venue: CLAB 413
Time: 2.45 PM - 4.30 PM			
S. No.	Paper ID	Paper Title	
1	340	Evaluation of Defects in Ball Bearings using Vibration Signal Analysis <i>Nouby M. Ghazaly, Abdulhadi O. A. Alajmi, G. T. Abd el- Jaber</i>	
2	5	Free Vibration Characteristics of Thick Doubly Curved Variable Stiffness Composite Laminated Shells using Higher-Order Shear Deformation Theory <i>AnandVenkatachari, K. Ramajeyathilagam</i>	
3	161	Parametric Study on Free Vibration and Instability of a Functionally Graded Cracked Shaft in a Rotor-Disc-Bearing System: Finite Element Approach <i>DebabrataGayen, Debabrata Chakraborty, Rajiv Tiwari</i>	
4	16	Geometrical Optimization of Magnetorheological Fluid Based Rotary Damper <i>Yashkumar H. Patel, Dipal Patel</i>	
5	137	Experimental Analysis of Novel Engine Mount for Two Cylinder Tractor Engine <i>M. Ravi Teja Reddy, V. Jayakumar, D. Santhosh Kumar, A. Muniappan</i>	
6	145	Optimization of Two-Wheeler Braking Squeal Noise Reduction Using SolidworksAnd Finite Element Analysis <i>Anmolkumar, PV. Senthil</i>	
7	147	Design, Structural Analysis and Performance Investigation on Static Seismic Analysis of G+10 Multi Storey Structures with and without Floating Column - A Comparative Study <i>Chandan Kumar, G. Ragul, V. Jayakumar, Prasidh E Prakash</i>	
8	253	Evaluation of Design and Materials for Mixer Jar to Optimize it's Vibration Level <i>G. Harish Kumar, A. Muralidharan, C. Thiagarajan</i>	
9	255	Developing of Mixer Jar with Damping Materials to Reduce it's Noise Level <i>A. Muralidharan, G. Harish Kumar, C. Thiagarajan</i>	
10	307	Design and Analysis of Bumper by Using GFRP (Steel & Aluminium) <i>S. Ravi Shankar, M. Arun Kumar, M. Prakash</i>	
11	309	Study of Vibration Analysis of an IC Engine using Biofuel Blends <i>T. S. A. Suryakumari, S. Ranganathan, Challam Naveen kumar, G. Nethaji</i>	
12	334	Design and Analysis of Chassis Bracket with Modification in the Design of the Current Brackets <i>G. V. Ramaraju, Sandeep Doki, S. Bhakiyaraja</i>	
13	299	Design and Analysis of Composite Multi-Leaf Spring by C. S. Jithin, M. Prakash	

Date: 06.04.2018		Technical Session 8 INTERDISCIPLINARY	Venue: CLAB 414
Time: 2.45 PM - 4.30 PM			
S. No.	Paper ID	Paper Title	
1	19	Internet of Things Based Notifications using Smart Notice Board <i>G. Lavanya, N. N. Deepika, T. Sangeetha, R. Maheshwari, R. Josephine</i>	
2	227	Secured Image Transmission Using MIMO-OFDM Technique <i>R. Vijayanandh, S. Monisha, S. Nandhini, D. Niranjadevi, J. Nivedha</i>	
3	231	Design the Efficient SRAM Circuit using 4 Transistor with Sleepy Logic <i>P. Sivakumar, Jenyfal Sampson, S. Nivetha</i>	
4	82	Kinematic Design, Analysis and Simulation of a Hybrid Robotwith Terrain and Aerial Locomotion Capability <i>S. Sreevishnu, MonishKoshy, Anjai Krishnan, Gautham P. Das</i>	
5	3	Automatic Anti-Dazzling Headlight System <i>R. Hari Prasad, R. Naveen Kumar, M. Muniyappan</i>	
6	80	Mechatronics in the Advancement of Aerospace Industry <i>P. Ram Prajith Kumar, J. Prasanna</i>	
7	220	Survey on Gait Recognition using Intelligence Modals <i>P. ArthiDevarani, K. G. Anitha, V. Deepika</i>	
8	319	Sentimental Analysis and Data Mining to Detect Fraudulent App in Play Store <i>R. C. Annaporani, K. Mohana, V. Sumathy</i>	
9	330	Design and Fabrication of Mechanized Page Turner <i>D. Sai Praveen, S. Naveen Kumar, J. Prakash Raj</i>	
10	329	Pesticide Sprayer and Temperature Monitoring using Drones <i>S. Poovizhi, H. Monisha, S. Nalini, N. Parvathy, D. Preethi</i>	
11	320	Improving Safety on Highways using VANET <i>T. Priyadarshini, S. Mathumathi, S. SreeSubha</i>	
12	169	LBP Features Based Object Recognition by using HOG Algorithm <i>AnuPriya George, X. Felix Joseph</i>	
13	194	Congestion Management Inderegulated Power Systems using Generator Rescheduling and Facts Devices <i>R. Yamini, S. Sangamithirai, R. Swathi, S. Ramya</i>	

Date: 07.04.2018		Technical Session 9 HEAT TRANSFER	Venue: CLAB 411
Time:10.45 AM-12.15 PM			
S. No.	Paper ID	Paper Title	
1	153	Enhancement of Heat Transfer in Phase Change Material using Graphite-Paraffin Composites <i>R. Sathiyaraj, R. Rakesh, N. Mithran, M. Venkatesan</i>	
2	199	A Simulation Study of Cooling System for Heavy Duty Diesel Engine <i>AdsulPranita, Kotebavi Vinod, Bedekar Sanjeev, Mishra Ashwini</i>	
3	228	Analytical Performance Analysis of Cross Flow Louvered Fin Automobile Radiator <i>R. Badgujar Pankaj, S. Rangarajan, S. R. Nagaraja</i>	
4	94	Estimation of Effective Thermal Conductivity of Two-Phase Material for Hollow Circular Model <i>Prateek Kumar Sahu, NishaNetam, Lal Chandra Shah</i>	
5	108	Computational Investigations on the Effect of Delta Winglets Arranged in Paralyzed and Inline Approaches <i>P. Bharathkumar, P. Ganesh, C. Sadhasivam</i>	
6	315	Analysis of Heat Transfer Rate using Nano Fluid in Heat Exchanger <i>S. Hassan Bajil, P. JeyaYogeshwaran, P. Mariswaran, M. Nijanthan, R. Venkatesh, M. Ashok Kumar</i>	
7	141	Numerical Investigation of a Delta Winglets Behaviour of Radiator Tube Heat Exchanger <i>C. Himanandareddy, T. Gowthamreddy, C. Thiagarajan</i>	
8	298	Effect of Single Channel Serpentine Flow Field on Hydrogen Polymer Electrolyte Membrane (PEM) Fuel Cell <i>B. Antony Beswin, V. Sujith Kumar, B. MullaiSudaroli</i>	
9	102	Computation and Investigation of an SMA Engine using Low Heat Recovery <i>M. R. Nagendra, M. Tamilselvan, C. Sadhasivam</i>	
10	138	Experimental Investigation of Radiator Tube in Automotive Rib Turbulator <i>T. Shahirvali, M. Prakash</i>	
11	294	Experimental Study and Parametric Analysis of PEM Fuel Cell <i>S. Dinesh, TR. Gowtham, B. MullaiSudaroli</i>	
12	250	Numerical Studies on Automotive Radiator Tube with Delta Winglets on One End Wall <i>T. Gowtham Reddy, C. Himananda Reddy, C. Thiagarajan, C. Sadhasivam</i>	

Date: 07.04.2018		Technical Session 10 MANUFACTURING ENGINEERING - II	Venue: CLAB 412
Time:10.45 AM-12.15 PM			
S. No.	Paper ID	Paper Title	
1	311	An Assessment on Additive Manufacturing Technique to Fabricate Integral PEM Fuel Cell/Electrolyser Component <i>ArunkumarJayakumar</i>	
2	175	Optimization of Electric Discharge Machining Parameters on Titanium Alloy (Ti-6al-4v) using Taguchi Parametric Design and Genetic Algorithm <i>K. Umanath, D. Devika</i>	
3	124	Preparation of Al-TiO ₂ Composite by Stir Casting Method and Analysing it's Tribological Characteristics <i>Vishnu Dutt, C. Thiagarajan</i>	
4	144	Parameter and Multiple Performance Optimization of MEDM through Various Electrode for Heat Treated Tool Steel <i>G. Ragul, Prasad E Prakash, S. Sankar, SamratMajumdar, V. Jayakumar</i>	
5	180	Optimization of WDM Process during Machining of Al-Al ₂ O ₃ Composite using Taguchi Based Grey Relational Analysis <i>Aaryan Mohan Singla, Shubhang Sharma, AkshayKaul, G. Rajyalakshmi</i>	
6	281	Multi Objective Optimization of Process Parameters in WEDM of Aluminium Hybrid Composite using Taguchi and TOPSIS Techniques <i>R. Senthilkumar, A. Muniappan</i>	
7	284	Experimental Investigation of WEDM Process Parameters for Cutting Speed using Response Surface Methodology <i>R. Solomon, A. Muniappan</i>	
8	288	An Estimating the Effect of Control Process Variables on Kerf Width in Wire EDM of AZ91 Magnesium Alloy by Taguchi Method <i>G. MdShaqib, A. Muniappan</i>	
9	234	Synthesis of Al5052-SiC-Graphite Composites through Stir Casting Method and Analysis its Mechanical Properties <i>G. Saivineeth, M. Prakash</i>	
10	279	Utility Approach for Multi Target Streamlining of Process Parameters in Wire EDM <i>S. K. Veerabhadra Rao, A. Muniappan</i>	
11	260	Experimental Analysis of Al6063 Alloy Metal Matrix with Boron Carbide and Graphite <i>P. Ashokkumar, S. Ariharan, C. Thiyagarajan</i>	
12	267	A Detailed Study and Analysis of Al-SiC and Magnesium as Piston material <i>Arunagiri, MadhuSrikarLohit, Anish Kumar</i>	

Date: 07.04.2018		Technical Session 11 FEA/FEM	Venue: CLAB 413
Time:10.45 AM-12.15 PM			
S. No.	Paper ID	Paper Title	
1	65	Design & Weight Optimization of a Wheel Rim for Sport Utility Vehicle <i>Harish Panjagala, M. Balakrishna, ShasikantKushnoore, E. L. N. RohitMadhukar</i>	
2	83	Mechanical Design and Analysis of Hybrid Mobile Robot with Aerial and Terrain Locomotion Capability <i>Monish Koshy, S. Sreevishnu, Anjai Krishnan, Gautham P. Das</i>	
3	313	Design and Analysis of Gripper Sensor <i>P. Sandeep Narayanan, V. Manoj Kumar</i>	
4	33	Comparison of Convergence Rate of Higher Order Tetrahedral &Hexahedral Elements for Linear Static Structural FEA <i>MirAamir Abbas</i>	
5	283	Thermal Analysis of Dissimilar Materials Diffusion Bonding using Finite Element Method <i>S. Suresh Kumar, B. Ravisankar, F. Mohammed Ajmal Sheriff</i>	
6	136	Modelling and Analysis of Novel Engine Mount using Finite Element Analysis <i>D. Santhosh Kumar, V. Jayakumar, M. RaviTeja Reddy, A. Muniappan</i>	
7	338	Design and Analysis of Al 7075 Steering Knuckle Components <i>C.Aravinth, M.V.Ram Pradeep, D.Vinodh, D.Vijayaganapathy</i>	
8	139	Investigation on Effect of Addition of Mg, SiCAnd Fly Ash in Aluminium Alloy for Automotive Alloy Wheel Rims <i>Abdul Hafeez Asif, V. Jayakumar, Chintala Sai Virinchy</i>	
9	236	Analysis on E-Tronic Turbocharger to Eliminate Turbo Lag <i>Aakash, Manoj Sivaraman, Bharathiraja</i>	
10	268	Study of Piston Material and Analysis Using Magnesium and Structural Steel in Ansys Software <i>Arunagiri, Anish Kumar, MadhusrikarLohit</i>	
11	275	Design and Analysis of the Rail Wheel by Using 4140 Maraging Steel <i>V. Vamsidhar Reddy, M. Nagaraju , S. Bhakyaraja</i>	
12	245	Design and Analysis of Camshaft <i>M. Prakash, Mohammedfazil, Syedshokathali</i>	
13	302	Design and Analysis of Composite Mono Leaf Spring <i>S. Ram Balaji, M. Prakash</i>	

Date: 07.04.2018		Technical Session 12 INDUSTRIAL ENGINEERING	Venue: CLAB 414
Time:10.45 AM-12.15 PM			
S. No.	Paper ID	Paper Title	
1	43	The Transition Towards Sustainable Supply Chain Management: An Empirical Study <i>Amrita Singh, Parul Agarwal, Saurav Dixit, Sonali Singh, SanjaiSahai</i>	
2	44	Key Benefits of Adopting Lean Manufacturing Principles in Indian Construction Industry <i>Subhav Singh, Saurav Dixit, Sanjay Sahai, Ameet Sao, Shivangni Sharma, Raja Subramanya Kumar</i>	
3	248	Perceptions on Service Quality: A Study of Old Age Homes in Kerala and Tamil Nadu <i>Devika Anil, K. Hemamala</i>	
4	249	Service Failures and Recovery Strategies in E-Tailing: Examining the Effects of Product Type and Transaction Frequency <i>Rini Miriam Vincy, K. Hemamala</i>	
5	177	Ergonomic Evaluation of Seeding, Fertilizing and Weeding Postures in Agricultural Field <i>Debesh Mishra,Subhakanta Singh</i>	
6	215	Administrative Decision Making by Computational Intelligence strategies for Dairy Development Sector <i>M. Nirmala Devi, S. Meena</i>	
7	181	Hypothetical Correlation Between Major Critical Factors for Transportation Waste in Automobile Industries <i>Arunagiri, Abhishekkumar, Mallikarjunachary</i>	
8	66	A Dynamic Optimization Model for Multi-Objective Maintenance of Sewing Machine <i>Rama Krishna Reddy Guduru, Saddam Hussain Shaik, SatyanarayanammaYaramala, Narayana Prakash TMS, AurelijusDomeika</i>	
9	189	Identification of Major Critical Factors for the Transportation Waste in Industries using Statistical Tools <i>Arunagiri, Mallikarjunachary, and Abhishek kumar</i>	
10	142	Effectiveness and Distribution Challenges in Channels for Ayurvedic Solutions: A Case Study <i>J. Dehesingh Raja, Prasad E Prakash, SamratMajumdar, V. Jayakumar, G.Ragul</i>	
11	183	Analysing the Impact of 5S in the Industrial Environment <i>Arunagiri, Singamanil, Vamshisai</i>	

Date: 07.04.2018		Technical Session 13 ENERGY SYSTEMS	Venue: CLAB 411
Time: 1.00 PM - 2.30 PM			
S. No.	Paper ID#	Paper Title	
1	35	Role of Solar Energy and Issues in its Implementation in the Indian Context <i>Saurav Dixit, Subhav Singh, Sonali Singh, Richu George Varghese, Amit Kumar Pandey, Deekshant Varshney</i>	
2	204	Review of Energy Status and Associated Conservational Issues in Botswana <i>A. Agarwal, O. M. Seretse, M. T. Letsatsi, E. Dintwa</i>	
3	191	Design, Modelling and Experimental Investigation of an Economic Domestic STHW System using T*Sol® Simulation in Botswana <i>O. M. Seretse, A. Agarwal, E. Dintwa, O. M. Moloko, M. S. Batlhalefi</i>	
4	71	Theoretical Prediction and Modeling of Sustainable Standards for Green Buildings towards Effective Economic Growth Through Better Ecological Standards and Building Heat Transfer <i>G. Kalivarathan, Binaya Patnaik, Mebratu Markos, Tesgaye Alemayehu Atiso, Lollo Chande Lollo, M. Muthuganesh</i>	
5	73	Investigation of Solar Panel Efficiency with Water Cooling and Filter Papers <i>Yakkala M. K. Raghunadh, K. Siva Kishore Babu, A. Mahesh Babu, A. Indra Reddy, Somanath</i>	
6	211	Performance Evaluation of a 15 kW Biomass Gasifier in Downdraft and Updraft Operating Modes: An Experimental Study <i>K. Shanmuganandam, J. Anichai, V. Jayakumar</i>	
7	93	A PMV-PPD Model Based Study of Thermal Comfort in Low-Income Group House in Chhattisgarh <i>Nisha Netam, Shubhashis Sanyal, Shubhankar Bhowmick</i>	
8	116	Design Fabrication and Dynamic Characteristics of PEM Fuel Cell <i>T. Sasikumar, G. Nagaraju, B. MullaiSudaroli</i>	
9	297	Diesel Engine Performance and Emission Analysis using Waste Vegetable Oil as Bio Fuel <i>M. L. Sai Deepak, D. Naga Kumar</i>	
10	223	Management of Ambient Air Quality using Screening of Point Source Regulatory (SPR) Model <i>S. Bhakiyaraja, S. Palanivelraja</i>	
11	214	Alternate Fuel for Internal Combustion Engine using Ethanol-99 <i>Anoop Johnny, S. Nakkeeran, S. Dhinakaran</i>	
12	296	Performance Study on PEM Fuel Cell <i>T. Sasikumar, G. Nagaraju, B. MullaiSudaroli</i>	
13	322	Experimental Investigation of Performance of 3 kW Pyrolyser <i>K. Shanmuganandam, V. Jayakumar, A. Muniappan, P. Arunagiri</i>	

Date: 07.04.2018		Technical Session 14 COMPOSITE MATERIALS - II	Venue: CLAB 412
Time: 01.00 PM - 2.30 PM			
S. No.	Paper ID#	Paper Title	
1	62	Experimental Analysis of Mechanical Properties of Aluminium Metal Matrix with Silicon and Carbon Fiber <i>M. Prakash, Godhalla Madan Gopal Goud, M. Sasivardhan Reddy</i>	
2	133	Synthesis of Al5052-SiC-Graphite Metal Matrix Composite and Evaluation of its Properties <i>P. Manoj Kumar, M. Prakash</i>	
3	140	Investigation And Analysis Of Novel Composite Material For Automotive Alloy Wheel Rims <i>Chintala Sai Virinchy, V. Jayakumar, Abdul Hafeez Asif</i>	
4	244	Development of Aluminium Based Silicon Carbide and Titanium Carbide by Metal Matrix Composite <i>M. PRAKASH, A. Harishyadav, K. Durgaprathap</i>	
5	251	Mechanical Characterisation of Al6063 Alloy Metal Matrix with Boron Carbide and Graphite <i>S. Ariharan , P. Ashokkumar, C. Thiyagarajan</i>	
6	257	Hardness and Wear Test of Al-SiC-TiB ₂ Hybrid Metal Matrix Composite <i>Sivananthan, Ch. Elvin Raju, YeswanthPulla</i>	
7	287	Fabrication of Al6063/SiC/Graphite Hybrid Aluminium Composite using Stir Casting Method <i>S. Justin Arokiyaraj, A. Muniappan</i>	
8	291	Investigation of Reinforced Composite Aluminium Materials <i>R. SarathChandhara Raja, K. Raja Karthick, V. Velmurugan</i>	
9	310	Mechanical and Tribological Properties of Aluminium Metal Matrix Composite-A Review <i>G. Nethaji, Challam Naveen Kumar, T. S. A. Suryakumari</i>	
10	321	Experimental Development of Metal Matrix Composite Material of (Al/SiC/TiC) <i>K. DurgaPrathap, A. Harish Yadav, M. Prakash</i>	
11	332	Prediction of Mechanical Behaviour of Aluminium Hybrid Composite using CAD/CAE <i>R. Saravana Kumar</i>	
12	273	Stress Analysis of Composite Helical Spring (Cr-Va + Low Carbon Steel) <i>N. KarthikMahadevan, D. Vinodh</i>	

Date: 07.04.2018		Technical Session 15 INTERNAL COMBUSTION ENGINES	Venue: CLAB 413
Time: 01.00 PM - 2.30 PM			
S. No.	Paper ID	Paper Title	
1	30	Evaluation of Critical Blockage Ratio and Pulse Length in a Pulse Detonation Engine using CFD and MATLAB <i>S. Srikrishnan, P. K. Dash, V. Jayakumar</i>	
2	97	Impact of Nano-Silicon Fuel Additive on Combustion, Performance and Emission of a Twin Cylinder CI Engine <i>S. A. Anand Kumar, V. Raja, R. P. DhivakarRaviram, G. Sakthinathan</i>	
3	6	Performance Improvement of Racing Engine Using Simulation Study and Experimental Validation <i>R. Kishore, S. B. HariPragadish</i>	
4	7	Design and Analysis of Combined F-Head Type Engine with Tapered Piston: A Preview <i>Vinay Khatod, Meet Bakotia</i>	
5	121	Experimental Analysis on SCR System for Various Emission Reduction in Diesel Engine <i>S. Thirumurugan, P. Ravindrareddy, V. Velmurugan</i>	
6	122	Emission Control in Heavy Duty Diesel Engine by Using Selective Catalytic Reduction Along with ECU <i>K. Reddy Sharath, P. Naresh, V. Velmurugan</i>	
7	170	Performance, Combustion and Emission Characteristics of Solenoid Operated D.I. Diesel Engine <i>K. M. Arvind, V. Karthik, S. Sivananthan</i>	
8	174	E-Tronic Turbocharger: Making Diesel Engines More Efficient and Powerful <i>Manoj Sivaraman, AS. Aakash, G. Bharathiraja</i>	
9	213	Alternate Fuel for Internal Combustion Engine using Ethanol-85 <i>AnoopJohny, S. Dhinakaran, S. Nakkeeran</i>	
10	241	Performance of a Compression Ignition Engine with Blends of Biodiesel (From a Mixture of Spirulina Microalgae Oil and Sunflower Oil) and Diesel <i>S. Sankar, ManivarmaKumaresan, G. Ragul, Christeena Mathew</i>	
11	335	Design and Analysis of AISI 8620 Steel Connecting Rod <i>A. Girish Kumar, M. Srinivas Rao, D. Vijayaganapathy</i>	