



NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL
WARANGAL, TELANGANA, INDIA – 506004



1st International Conference
on
Applied Mechanical Engineering Research (ICAMER2019)
2nd - 4th May 2019

DAY -1 (02 May 2019, Thursday)

Day-1 02.05.2019 (Thursday)				11:00 AM – 11:45AM	11:45 AM – 12:30 PM	12:30 PM – 1:15 PM		2:00PM –2:45 PM	2:45 PM –4:00 PM		4:15 PM – 5:45 PM
	Registration 8:30 AM – 9:30 AM)	Inaugural Session 9:30 AM – 10:30AM)	High Tea 10:30 AM – 11:00 AM	Key note-1 Venue: Bose Hall	Key note-2 Venue: Bose Hall	Key note-3 Venue: Bose Hall	Lunch Break 1:15 PM –2:00 PM)	Key note-4 Venue: Bose Hall	Technical Session-1		
				Speaker: Dr. G Padmanabham Director, ARCI Topic: Additive Manufacturing: Challenges and Perspectives	Speaker: Prof. C S P Rao Director, NIT Andhra Topic: Recent Developments in Matrix Composites	Speaker: Prof. P N Rao University of Northern Iowa, USA Topic: Titanium Machining - Sustainability		Speaker: Dr. P S Lee NUS, Singapore Topic: High Efficiency Thermal Management Technologies	Track-1 (5 Papers) Track-2 (5 Papers) Track-3 (5 Papers) Track-4 (5 Papers) Total (20 Papers)	Tea Break (4:00 PM – 4:15 PM)	Track-1 (6 Papers) Track-2(6 Papers) Track-3 (6 Papers) Track-4 (6 Papers) Total (24 Papers)

Inaugural: Dr. B R Ambedkar Learning Centre, NIT Warangal

Technical Sessions: Seminar Hall Complex, NIT Warangal

Track -1 (Thermal) Venue : Homi Bhabha Hall		Track -2 (Design) Venue : Bose Hall		Track -3 (Production) Venue : Ramanujan Hall		Track -4 (Industrial/Production) Venue : Raman Hall	
Technical Session-1 (2:45 PM – 4:00 PM)	Technical Session-1 (4:15 PM – 5:45 PM)	Technical Session-1 (2:45 PM – 4:00 PM)	Technical Session-1 (4:15 PM – 5:45 PM)	Technical Session-1 (2:45 PM – 4:00 PM)	Technical Session-1 (4:15 PM – 5:45 PM)	Technical Session-1 (2:45 PM – 4:00 PM)	Technical Session-1 (4:15 PM – 5:45 PM)
ICT - 035	ICT - 043	ICD - 036	ICD - 069	ICP - 001	ICP - 012	ICI - 001	ICP - 058
ICT - 046	ICT - 073	ICD - 052	ICD - 004	ICP - 011	ICP - 034	ICI - 003	ICP - 108
ICT - 018	ICT - 076	ICD - 066	ICD - 028	ICP - 036	ICP - 064	ICI - 008	ICP - 083
ICT - 031	ICT - 060	ICD - 070	ICD - 030	ICP - 057	ICP - 079	ICI - 009	ICP - 110
ICT - 034	ICT - 032	ICD - 067	ICD - 039	ICP - 068	ICP - 109	ICI - 013	ICP - 035
	ICT - 064		ICD - 071		ICP - 106		ICP - 085



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DAY -2 (03 May 2019, Friday)

Day-2 03.05.2019 (Friday)	9:00 AM – 9:40AM	9:45 AM –10:30 AM		11:00 AM – 1:00PM		2:00 PM-2:45 PM	2:45 PM –3:45PM		4:00 PM –5:45 PM
	Key note-5 Venue: Bose Hall	Key note-6 Venue: Bose Hall		Technical Session-2		Key note-7 Venue: Bose Hall	Technical Session-3		
	Speaker: Shri. N V Marathe ARAI, Pune Topic: Advances in Power train development to meet future performance demands	Speaker: D.Uma Maheshwar GE Aviation-India Topic: Digital Transformation in Engineering		Track-1 (8 Papers) Track-2 (8 Papers) Track-3 (8 Papers) Track-4 (8 Papers) Total (32 Papers)		Speaker: Dr. Sachin Singh Gautam IIT Guwahati Topic: Gecko Spatula Peeling – Numerical Findings Using Nonlinear Finite Element Based Study	Track-1 (4 Papers) Track-2 (4 Papers) Track-3 (4 Papers) Track-4 (4 Papers) Total (16 Papers)		Track-1 (7 Papers) Track-2 (7 Papers) Track-3 (7 Papers) Track-4 (7 Papers) Total (28 Papers)
			Tea Break (10:30– 11:00 AM)		Lunch Break (1:00PM –2:00 PM)			Tea Break (3:45 PM – 4:00 PM)	

Technical Sessions: Seminar Hall Complex, NIT Warangal

Track -1 (Thermal) Venue : Homi Bhabha Hall			Track -2 (Design) Venue : Bose Hall			Track -3 (Production) Venue : Ramanujan Hall			Track -4 (Thermal/Production) Venue : Raman Hall		
Technical Session-2 (9:45 AM – 10:30 AM)	Technical Session-3 (2:45 PM – 3:45PM)	Technical Session-3 (4:00 PM – 5:45 PM)	Technical Session-2 (9:45 AM – 10:30 AM)	Technical Session-3 (2:45 PM – 3:45PM)	Technical Session-3 (4:00 PM – 5:45 PM)	Technical Session-2 (9:45 AM – 10:30 AM)	Technical Session-3 (2:45 PM – 3:45PM)	Technical Session-3 (4:00 PM – 5:45 PM)	Technical Session-2 (9:45 AM – 10:30 AM)	Technical Session-3 (2:45 PM – 3:45PM)	Technical Session-3 (4:00 PM – 5:45 PM)
ICT - 004	ICT -016	ICT - 003	ICD – 002	ICD – 009	ICD – 063	ICP – 010	ICP – 080	ICP – 005	ICT – 079	ICP – 002	ICI – 007
ICT - 011	ICT - 005	ICT - 024	ICD – 008	ICD – 011	ICD – 065	ICP – 013	ICP – 009	ICP – 045	ICT - 009	ICP – 008	ICP – 093
ICT - 026	ICT - 008	ICT - 030	ICD – 016	ICD – 033	ICD – 019	ICP – 022	ICP – 037	ICP – 095	ICT - 015	ICP – 094	ICP – 107
ICT – 033	ICT - 010	ICT - 080	ICD – 037	ICD - 040	ICD – 073	ICP – 030	ICP – 046	ICP – 048	ICT - 048	ICP - 029	ICP – 014
ICT - 040		ICT – 041	ICD - 043		ICD – 023	ICP – 082		ICP – 053	ICT - 078		ICP – 071
ICT - 045		ICT - 051	ICD – 044		ICD – 075	ICP – 099		ICP – 077	ICT - 061		ICP – 092
ICT -057		ICT - 053	ICD - 047		ICD - 017	ICP – 026		ICD - 074	ICT - 083		ICD – 076
ICT - 072			ICD - 068			ICP - 047			ICT - 085		



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DAY -3 (04 May 2019, Saturday)

Day-3 04.05.2019 (Saturday)	9:30 AM – 11:45AM		12:00 AM – 12:40PM			
	Technical Session-4	Tea Break (11:45AM – 12:00 AM)	Key note-8 Venue: Bose Hall	Valedictory (12:45 PM -1:30 PM)	Lunch Break (1:30 PM –2:30 PM)	Local Tour (2:30 PM – 5:30 PM)
	Track-1 (9) Track-2 (9) Track-3(9) Track-4 (9)		Speaker:			
	Total (36)		Topic:			

Technical Sessions: Seminar Hall Complex, NIT Warangal

Track -1 (Thermal) Venue : Homi Bhabha Hall	Track -2 (Design) Venue : Bose Hall	Track -3 (Production) Venue : Ramanujan Hall	Track -4 (Production) Venue : Raman Hall
Technical Sesssion-4 (9:30 AM – 11:45AM)	Technical Sesssion-4 (9:30 AM – 11:45AM)	Technical Sesssion-4 (9:30 AM – 11:45AM)	Technical Sesssion-4 (9:30 AM – 11:45AM)
ICT - 082	ICD – 005	ICP – 006	ICP – 096
ICT - 006	ICD – 006	ICP – 102	ICP – 065
ICT - 054	ICD – 045	ICP – 031	ICP – 075
ICT - 056	ICD – 048	ICP – 070	ICP – 084
ICT - 062	ICD – 051	ICP – 076	ICP – 044
ICT - 067	ICD – 062	ICP – 087	ICP – 054
ICT - 071	ICD – 021	ICP – 024	ICP – 056
ICT - 075	ICD – 072	ICD - 077	ICP – 063
ICT - 001	ICD - 026	ICD - 078	ICP - 033
	ICD - 061		

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02 nd May 2019 (Thursday)	Technical Session -1 Track -1 (Thermal) Venue :HomiBhabha Hall	Paper ID	Paper Title	Authors	Affiliation	(2:45 PM –4:00 PM)
		ICT - 035	Experimental study on the performance of Micro Aerial Vehicle propeller	Dr.Premkumar PS ¹ , Sureshmohan M ² , Siyuly K ¹ , VasanthakumarS ¹ , Naveen Kumar R, DenielaGreneS ¹ , Sanjaykumar S ¹	¹ Department of Aeronautical Engineering, Kumaraguru College of Technology, Coimbatore, India. ² Graduate engineer trainee, Altran Technologies, India	
		ICT - 046	CFD Analysis in the Design of Diffuser for Air Cooling of Low Concentrated Photovoltaic/Thermal (LCPV/T) Solar Collector	Rohit Meshram P.D.Sawarkar	Department of Mechanical Engineering, Visvesvaraya National Institute of Technology, Nagpur-440010, Maharashtra, India	
		ICT - 018	Surface Pressure Characteristics over Indian Train Engine	K. Vivek, B. Ashok Kumar, KarthickDhileep, S. Arunvinthan, S. Nadaraja Pillai	Turbulence and Flow Control Laboratory, SASTRA Deemed University, Thanjavur – 613 401, Tamil Nadu, India	
		ICT - 031	Optimal selection of insulating material for energy conservation in steam pipe using Analytical Hierarchy Process	M.Siva Subrahmanyam ¹ , Aparna Devi ² , B.Jagadeesh ³	¹ Department of Mechanical Engineering, MVGR College of Engineering (A), Vizianagaram 535005, AP,India, ² Industrial Engineering, GITAM, Visakhapatnam 530045, AP,India	
		ICT - 034	Alternate Heating process in ESP Hoppers of Thermal Power plant – an Experimental pilot Investigation	Dr.R.Saravanan, Dr.Ramakotaiah Maadumala	<i>Department of Mechanical Engineering,</i> Ellenki College of Engineering and Technology, Hyderabad -502319, Telangana State, India	

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02 nd May 2019 (Thursday)	Technical Session -1 Track -2 (Design) Venue : Bose Hall	Paper ID	Paper Title	Authors	Affiliation	(2:45 PM –4:00 PM)
		ICD - 036	Synthesis and characterization of nano-grease for automotive wheel bearing application	Pankaj S. Ghatage, Abhijeet P. ShahDhananjayKumbhar	Rajarambapu Institute of Technology, Islampur, Affiliated to Shivaji University, Kolhapur, Maharashtra, India	
		ICD - 052	Design and kinematics of a Coal Bunker scraper guide - mechanism	Bijoy Ramakrishnan, Alex Sherjy Syriac, Chetan Chaudhari, Aditya Shah, S.S.Chiddarwar	Dept. of Mechanical Engineering, Visvesvaraya National Institute of Technology, Nagpur, Maharashtra, India - 440010	
		ICD – 066	Application of single sided NMR and Acousto-Ultrasonic methods for NDE of composite structures	S K Sahoo ^a , R N Rao ^a , Srinivas Kuchipudi ^b , M K Buragohain ^b	^a Department of Mechanical Engineering, National Institute of Technology, Warangal, Telangana, India-506004. ^b Advanced Systems Laboratory, DRDO, Kanchanbagh PO, Hyderabad, India – 500058.	
		ICD - 070	Comparative study of modal analysis of flight vehicle using different joint rotation constant values	R Santhanam, Dr. P C Jain, Y Krishna ¹ , PSR Anjaneyulu ¹	Defence Research and Development Laboratory, Hyderabad, India, 500058	
		ICD - 067	Effect of Material Damping on the Vibration Response of Cantilever Beams in Dynamic Environment	L. Viswanadhama ^b , R. N. Rao ^a , Ch. Sri Chaitanya ^a	^a Department of Mechanical Engineering, National Institute of Technology, Warangal, Telangana, India-506004. ^b Research Centre Imarat (RCI-DRDO), Vignankancha, Hyderabad, India – 500069.	

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02 nd May 2019 (Thursday)	Technical Session -1 Track -3 (Production) Venue : Ramanujan Hall	Paper ID	Paper Title	Authors	Affiliation	(2:45 PM –4:00 PM)
		ICP – 001	Performance and life cycle analysis of soybean oil based minimum quantity lubrication in machining of Ti6Al4V	R.R.Srikant, P.N.Rao	Department of Technology, University of Northern Iowa, Cedar Falls, IA, USA. 50614	
		ICP – 011	Experimental and Microstructural Analysis of TIG and MIG Welding on Dissimilar Steels	Aravind Reddy ¹ , Abu Sufyan Malik ²	¹ Vasavi College of Engineering, Hyderabad 500031, India ² Mahaveer Institute of Science & Technology, Hyderabad 500005, India	
		ICP – 036	Multi-response optimization of process parameters in Turn-milling processes- An experimental approach	Arun Vikram. K ¹ , Ratnam.C ² , VVK.Lakshmi ¹ RDV.Prasad ³	¹ Department of Industrial Engineering, GITAM Institute of Technology, Vizag, Andhra Pradesh, India ² Department of Mechanical Engineering, AU College of Engineering (A), Vizag, Andhra Pradesh, India ³ Department of Mechanical Engineering, ANITS Engineering College, Vizag, Andhra Pradesh, India	
		ICP – 057	Experimental Investigation on Friction Stir Welding of HDPE reinforced with SiC and Al and Taguchi Based Optimization	S. Ramesh Babu ¹ , Dr. S.R.K. Hudgikar ² Y.Poornachandra Sekhar ³	¹ VTU Belagavi Karnataka, India- 590018 ² Lingarajappa Engineering College, Bidar, Karnataka, India- 585403 ³ AITs, Rajampeta, India-516126.	
		ICP - 068	Analysis of micro cracks and micro hardness in white layer formation on machined surfaces in EDM process	K Leela kumar ¹ , ChSrinivasa Rao ² , B Sateesh ¹	¹ Department of Mechanical Engineering, Vignana's IIT(A), Visakhapatnam-530049, India ² Department of Mechanical Engineering, AUCE, Andhra University, Visakhapatnam-530003, India	

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02 nd May 2019 (Thursday)	Technical Session -1 Track -4 (Industrial/Production) Venue : Raman Hall	Paper ID	Paper Title	Authors	Affiliation	(2:45 PM –4:00 PM)
		ICI– 001	Design and Ergonomic Work Posture Evaluation of Garbage Disposal Pushcart	P Jayesh, Gopala Krishna A, Abhay Mohan Sheikh Afridhi	MVJ College of Engineering, Bangalore, India.	
		ICI – 003	Service Quality Measurement in Health Care Sectors – A Case Study	P.S.Prema Kumar ¹ Dr.G.Rambabu ²	¹ KoneruLakshmaiah Education Foundation, Vaddeswaram, 522501, AP, India ² Andhra University College of Engineering, Visakhapatnam, 530003, AP, India	
		ICI – 008	Analysis and optimization of queuing systems in airports – Discrete event simulation	RishabhJain ^a , Hrishikesh Bedekar ^b , Jayakrishna K ^c , Vimal K E K ^d , Vijay Manupati ^e	^a School of Mechanical Engineering, Vellore Institute Technology, Vellore – 632014, India ^b School of Mechanical Engineering, Vellore Institute Technology, Vellore – 632014, India ^c School of Mechanical Engineering, Vellore Institute Technology, Vellore – 632014, India ^d Department of Mechanical Engineering, NIT Patna, Bihar – 800005, India ^e Department of Mechanical Engineering, NIT Warangal, Telangana – 506004, India	
		ICI – 009	Conceptual framework for performance measurement of hospital supply chain management	Dr. Pranav G. Charkha ¹ Dr. Santosh B. Jaju ²	¹ Department of Mechanical Engineering, Datta Meghe Institute of Engineering, Technology & Research, Wardha, Maharashtra, India ² Department of Mechanical Engineering, G. H. Raisoni College of Engineering, Nagpur, India, Maharashtra	
		ICI – 013	An Extensive Study of multi level inventory lot sizing optimization problem	V.V.D.Sahithi ¹ , C.S.P.Rao ² , M. Srinivasa Rao ³	¹ Mechanical Engineering Department, VNRVJIET, Hyderabad -500090, Telangana,India ² NIT Andhra Pradesh, Tadepalligudem – 534102, Andhra Pradesh,India ³ JNTU Hyderabad, Hyderabad -500090, Telangana,India	

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02 nd May 2019 (Thursday)	Technical Session -1 Track -1 (Thermal) Venue : HomiBhabha Hall	Paper ID	Paper Title	Authors	Affiliation	(4:15 PM – 5:45 PM)
		ICT - 043	Experimental investigation on the effect of particle concentration and temperature on thermophysical properties of water based metal oxide nanofluids	Ramesh BabuBejjam ^a , K. Kiran Kumar ^b , Venkata Sai Sudheer ^b , N. PraveenaDevi ^c	^a SASI Institute of Technology & Engineering, Tadepalligudem, West Godavari, Andhra Pradesh, 534101, India ^b National Institute of Technology Warangal, Warangal, Telangana, 506 004, India ^c SR Engineering College, Warangal, Telangana, 506 004, India	
		ICT - 073	Thermal Design Methodology for Regenerative Fuel-Cooled Scramjet Engine Walls	G. Vijayakumar	Defence Research and Development Laboratory, Hyderabad 500058, India	
		ICT - 076	Thermal Design and Testing of External Protuberance of Hypersonic Carrier Vehicle Airframe	G. Vijayakumar, S. Narendar, J. Justina Geetha	Defence Research and Development Laboratory, Hyderabad, India 500058	
		ICT - 060	Numerical analysis of heat transfer and pressure drop characteristics for the plate-fin and tube heat exchanger	P.V.Durga Prasad ^a , R.Venkateswar Rao ^b , M.Sreeramul ^c	^a Mechanical Engineering, M.V.S.R.Engineering College, Hyderabad 501510, Telangana, India ^b Mechanical Engineering, Vignana Bharathi Engineering College, Hyderabad 501510, Telangana, India ^c Mechanical Engineering, Hyderabad Institute of Science & Technology, Hyderabad 510510, India	
		ICT - 032	Heat transfer enhancement using overlapped dual twisted tape inserts with nanofluids	Rokkala Rudrabhiramu ¹ , K.Harish Kumar ² , Dr.K.Kiran Kumar ³ , Dr.K.Mallikarjuna Rao ⁴	^{1,2} Vignan's Institute of Information Technology, Visakhapatnam, Andhra Pradesh, India. ³ National Institute of Technology, Warangal, Telangana, India ⁴ Jawaharlal Nehru Technological University, Kakinada, Andhra Pradesh, India	
		ICT - 064	Numerical study of Hydrogen-Fueled Scramjet performance with passive Techniques	Obula Reddy Kummitha ¹ , K.M.Pandey ² , Rajat Gupta ²	¹ BVRIT, Narsapur – 502313, Telangana, India ² NIT Silchar, Silchar-788010, Assam, India	

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02 nd May 2019 (Thursday)	Track -2 (Design)	Venue : Bose Hall	Technical Session -1		(4:15 PM – 5:45 PM)
			Paper ID	Paper Title	
			ICD – 069	Coupled analysis of Underwater System by Numerical Approach	
			ICD - 004	Dynamic Performance Analysis of a Four Ton Automobile Chassis	
			ICD - 028	Pre-strain in Dielectric Elastomer Actuator; Challenges towards Structure-Property Relationship	
			ICD - 030	Modified Electromechanical Model for Dielectric Elastomer Cylindrical Actuators	
			ICD – 039	Low Cost Test Rig for Demonstrating Single Plane Balancing Using Vibrations	
			ICD - 071	Design and Analysis on Reinforced Carbon-Basalt fibres composite laminate	

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02 nd May 2019 (Thursday)	Technical Session -1 Track -3 (Production) Venue : Ramanujan Hall	Paper ID	Paper Title	Authors	Affiliation	(4:15 PM – 5:45 PM)
		ICP – 012	Thermal management of avionic packages using micro-blower	K. Velmurugan ^a , Dr.Chandramohan V P ^b , Dr. S. Karunanidhi ^a , D. Sai Phaneendra ^a	^a RCI, DRDO ^b NIT, Warangal	
		ICP – 034	Mathematical Modelling of Material Removal Rate using Buckingham Pi Theorem in Electrical Discharge Machining of Hastelloy C276	P.Ravindranatha Reddy ¹ , G.Jayachandra Reddy ² , G.Prasanthi ³	¹ Faculty of Mechanical Engineering, JNTUA, Ananthapuramu-515002, A.P., India. ² Department of Mech. Engg., YSR Engineering College of YVU, Proddatur-516360, A.P., India. ³ Department of Mech. Engg., JNTUA College of Engineering, Ananthapuramu-515002, A.P., India.	
		ICP – 064	Design and Simulation of Porous Ti-6Al-4V alloy structures for Additive Manufacturing of Bioimplants	A. Rudra Kumar, S. Rambabu, K. Sri Harsha	Department of Mechanical Engineering, Vignan's Institute of Information Technology, Visakhapatnam 500049, Andhra Pradesh, India	
		ICP – 079	Optimization of Minimum Quantity Lubrication Parameters	Amrita. M ¹ , Srikant. R. R ² , Venkata Ramana V S N ³	¹ Gayatri Vidya Parishad College of Engineering (A), Visakhapatnam –530048. India ² Dept. of Technology, University of Northern Iowa, Cedar Falls, IA, USA. 50614 ³ GITAM (Deemed to be) University, Visakhapatnam – 530045. India	
		ICP – 109	Effect of co-deposition of carbides on the functional properties in cold sprayed coatings	S.Kumar, L.Venkatesh, Naveen M Chavan, D.Srinivasa Rao	International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI) Balapur Po, Hyderabad 500 005	
		ICP – 106	Investigation on Influence of Hybrid Nanofluid/MQL on Surface Roughness in Turning Inconel-718	Mechiri Sandeep Kumar ^a , V. Vasu ^b , A. Venu gopal ^b	^a Department of Mechanical Engineering, B. V. Raju Institute of Technology, Narsapur, Medak, Telangana . 502313, India ^b Department of Mechanical Engineering, National Institute of Technology, Warangal, Telangana. 506004, India	

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02 nd May 2019 (Thursday)	Track -4 (Industrial/Production)	Technical Session -1 Venue : Raman Hall	Paper ID	Paper Title	Authors	Affiliation	(4:15 PM – 5:45 PM)
			ICP – 058	Mechanical Properties Of Natural Fiber Reinforced Composites	K.Kalyani , A. Muni Tanuja, P.Priyanka	ME Dept, Anurag Group Of Institutions, Hyd-88, Telangana, India	
			ICP – 108	Different methods of improving hardness in diode-laser treated surfaces of low-carbon low-hardenability steels	Mr.K.V.PhaniPrabhakar Dr.S.M.Shariff Dr.P.SureshBabu Dr.S.Kumar	International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI) Balapur Po, Hyderabad 500 005	
			ICP – 083	Mechanical Characterization of Unidirectional Banana-Glass Fiber Reinforced Hybrid Composites	Ch. Naveen Reddy ¹ , M. Bhargav ² Dr. K. Ajay Kumar ³	^{1,3} VNR VJIET, Hyderabad, 500090, India ² NIT Warangal, Warangal, 506004, India	
			ICP – 110	Challenges in translating research on dissimilar materials fusion joining into technology	K.V. Phani Prabhakar, AnbuRasu E G. Padmanabham	International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI) Balapur Po, Hyderabad 500 005	
			ICP – 035	Effect of Exfoliated Vermiculite as thickening and foaming agent on the Physical Properties of Aluminium Foam	VVK Lakshmi ¹ , K Arun Vikram ¹ , KV Subbaiah ² , K Suresh ¹ B Surendra Babu ¹	¹ Department of Industrial Engineering, GITAM Institute of Technology, Vizag, Andhra Pradesh, India ² Department of Mechanical Engineering, AU College of Engineering (A), Vizag, Andhra Pradesh, India	
			ICP - 085	An effective and economical method to improve structural homogeneity and mechanical properties of Al-Mg alloy processed by ECAE	Ananda Babu Varadala ¹ , Swami Naidu Gurugubelli ² , Sateesh Bandaru ³	¹ Mechanical Engineering, Vignan's Inst. of Engg. for Women, Visakhapatnam-530049, Andhra Pradesh, India ² Metallurgical Engineering, JNTUK-UCEV, Vizianagaram 535003, Andhra Pradesh, India ³ Mechanical Engineering, Vignan's Inst. of Info. Technology, Visakhapatnam-530049, Andhra Pradesh, India	

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03 rd May 2019 (Friday)	Technical Session -2	Venue :HomiBhabha Hall	Paper ID	Paper Title	Authors	Affiliation	(9:45 AM – 10:30 AM)
			ICT - 004	Combustion Performance Of Hybrid Rocket Motor Under The Influence Of Cylindrical Protrusion	Manikandan K ¹ , Lakshmi Das K ¹ , Purushothaman N ² , Karthik ¹	¹ SASTRA Deemed to be University, Thanjavur TN 613401,India ² Hindustan Deemed to be University, Chennai TN 603103, India	
			ICT - 011	Mixed convective heat transfer with surface radiation in a vertical channel in presence of Heat spreader	S K Mandal, Arnab Deb, Dipak Sen	Department of Mechanical Engineering, NIT-Arunachal Pradesh, Yupia-791112, Arunachal Pradesh, India	
			ICT - 026	Design, Development and Analysis of Intake Manifold of Single Cylinder Diesel Engine	Nikhil A. Bhave ¹ Mahendra M. Gupta ¹ , Sandeep S. Joshi ¹ , Mohan G. Trivedi ¹ , Neeraj Sunheriya ²	¹ Shri Ramdeobaba College of Engineering and Management, Nagpur 440016, India ² National Institute of Technology, Raipur 492013 ,India	
			ICT – 033	Flow characteristic study of contraction of compressor intermediate S-shaped duct facility	Manish Sharma Beena D. Baloni	Department of Mechanical Engineering, Sardar Vallabhai National Institute of Technology, Surat-395007,Gujarat, India	
			ICT - 040	Heat transfer enhancement of Al2O3 based nanofluid in a shell and helical coil heat exchanger	Prabhakar Zainith, Niraj Kumar Mishra	National Institute of Technology, Srinagar Garhwal, Uttarakhand 246174, India	
			ICT - 045	Pressure Drop in Vertical Pneumatic Conveying: Comparison between Numerical Predictions with Existing Correlations	Pandaba Patro, Debasis Mishra	Veer Surendra Sai University of Technology, Burla,Odisha, India	
			ICT -057	The Analytical Study of Velocity Slip on Two Phase Flow in an Eccentric Annular Region	Umadevi B ¹ , Dinesh P.A. ² , Vinay. C.V ¹	¹ Department of Mathematics, JSS Academy of Technical Education, Bangalore –60, India ² Department of Mathematics, M. S. Ramaiah Institute of Technology, Bangalore–54, India	
			ICT - 072	Numerical Analysis of Porous Recto semi-circular Enclosures withNon uniform heating of Bottom Wall	Shantanu dutta ¹ Arupkumar biswas ²	¹ Department of Mechanical Engineering, NSHM Knowledge Campus Durgapur -713214, India ² National Institute of Technology Durgapur-713212,India	

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03 rd May 2019 (Friday)	Technical Session -2 Venue : Bose Hall Track -2 (Design)	Paper ID	Paper Title	Authors	Affiliation	(9:45 AM – 10:30 AM)
		ICD – 002	Damage and failure analysis of short carbon fiber reinforced epoxy composite pipe using FEA	Anju Verma, Apurba Mandal, DungaliSreehari	National Institute of Technology, Uttarakhand, Srinagar Garhwal, 246174, India	
		ICD – 008	Simple Optimization Algorithm for Design of a Uniform Column	Joji Thomas ¹ , Anshuman Kumar Sahu ² , Siba Sankar Mahapatra ²	¹ Department of Mechanical Engineering, Christian College of Engineering and Technology, Bhilai, Chhattisgarh, India ² Department of Mechanical Engineering, National Institute of Technology, Rourkela, Odisha, India	
		ICD – 016	Quantitative analysis of Tribological Performance on Al-CSA Composite using Orthogonal Array	Siva Sankara Raju R ¹ , Venkata Siva B ² , Srinivasa Rao G ³	¹ Department of Mechanical Engineering, AITAM, Tekkali-532201, A.P, India ² Department Mechanical Engineering, NEC, Narasaraopeta-522601, A.P, India ³ Department Mechanical Engineering, RVR&JC, Guntur-522019, A.P,India	
		ICD – 037	Hamiltonian based solutions of Certain PDE in Plasma Flows	Vivek S Sharma ¹ , Parag V Patil ² , Milan A Joshi ³	^{1,3} MPSTME, NMIMS, Shirpur 425405, Maharashtra, India ² Independent Mathematician, Jalgaon 425001, Maharashtra, India	
		ICD - 043	On the Response of a Beam Structure to a Moving Mass Using Green's Function	Sudhansu Meher ¹ Suraj Parida ² Rabindra Kumar Behera ³	¹ Government College of Engineering, Keonjhar 758002, India ^{2,3} National Institute of Technology, Rourkela 769008, India	
		ICD – 044	A Programmatic Approach for the Prediction of Service life of Deep Drawing Die Using ANN	Vishal Naranje, Sachin Salunkhe	¹ Department of Mechanical Engineering, Amity University, Dubai,345019, Dubai, UAE ² Department of Mechanical Engineering, Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology, Avadi -600 062, Chennai, Tamil Nadu, India	
		ICD - 047	Analysis and Selection of Bio-Stents Using Finite Element Method	Jannatul Bashar, Jayabal K	Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram, India	
		ICD - 068	Active vibration control in Turbocharger rotor system with the use of electromagnetic actuator	Rajasekhara Reddy Mutra ¹ , Dr J. Srinivas ²	¹ Vignan's Institute of Information Technology, Visakhapatnam, Andhra Pradesh, 530046, India, ² National Institute of Technology, Rourkela, Odisha. 769008, India	

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03 rd May 2019 (Friday)	Technical Session -2 Venue : Ramanujan Hall Track -3 (Production)	Paper ID	Paper Title	Authors	Affiliation
		ICP – 010	Solid lubricant effect on the microstructure and hardness of the Functionally graded cemented tungsten carbide	Rityuj Singh Parihar, Srinivasu GangiSetti, Raj Kumar Sahu	Department of Mechanical Engineering, National Institute of Technology Raipur, Raipur 492010, Chhattisgarh, India,
		ICP – 013	Evaluation of Mechanical Properties of Banana and S-glass Fiber Reinforced Hybrid Nano Silica Composite	P. Srinivas Manikanta, M. Somaiah Chowdary, Dr. M.S.R Niranjankumar	Mechanical Engineering Department, Prasad V Potluri Siddhartha Institute of Technology, Vijayawada- 520007, Andhra Pradesh, India.
		ICP – 022	Environment effect on Impact strength of Pistachio shell filler based Epoxy Composites	Sandeep Gairola, Somit Gairola, Hitesh Sharma	Mechanical department, National Institute of Technology Uttarakhand, Uttarakhand, India
		ICP – 030	Wear resistance of structural steels having ultra-low carbon to high carbon concentration	Soumya Sourav Sarangi ¹ , Avala Lavakumar ^{1,2} , D Narashimachary ³	¹ Department of Metallurgical& Materials Engineering, Veer Surendra Sai University of Technology, Odisha, India – 768018 ² Department of Materials Science and Engineering, Kyoto University, Japan ³ Department of Metallurgical and Materials Engineering, National Institute of Technology, Rourkela, Odisha, India - 769008
		ICP – 082	Investigation on the Microstructure and Mechanical properties of AZ91D Magnesium Alloy Plates joined by Friction Stir Welding	K. N. B. Kumar C. Vanitha	Department of Metallurgical and Materials Engineering, National Institute of Technology, Warangal Warangal-506004, Telangana state, India.
		ICP – 099	Multi-Parametric Optimization of Electrical Discharge Machining of Inconel-690 using RSM-GRA Technique	Bhavani Marturi ¹ , Murahari Kolli ² , Adepu Kumar ³ , Seelam Pichi Reddy ⁴ , Sai Naresh Dasari ⁵	^{1,2,4,5} Department of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram-521456, ³ Department of Mechanical Engineering, National Institute of Technology Warangal, Warangal-506004,Telangana State, India
		ICP – 026	Experimental investigation of process parameters of EDM on 17-4 PH steel using taguchi method	Sampath Velpula ^a , K.Eswaraiah ^b , B.Anil Kumar ^c	^a Department of Mechanical Engineering, VBIT Medchal-501301, TS, India ^b Department of Mechanical Engineering, KITS Warangal-506015, TS, India ^c Department of Mechanical Engineering, KUEC Warangal-506009, TS, India
		ICP - 047	FEM modeling of coated tools to study the influence of coating thickness	M.Khirod Kumar ^a , Hareesh ^a , P.Vamsi Krishna ^a , S. Sambhu Prasad ^d	^a Department of Mechanical Engineering, National Institute of Technology, Warangal ^d Department of Mechanical Engineering, Pragathi Engineering College, surampalem-, India

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03 rd May 2019 (Friday)	Technical Session -2	Paper ID	Paper Title	Authors	Affiliation	(9:45 AM – 10:30 AM)
		ICT – 079	Numerical Analysis of Fluid-Structure Interaction of blood flow through a flexible tube with 90-degree bend using OpenFOAM	Rishabh N. Jaiswal ,Trushar B. Gohil	Department of Mechanical Engineering, Visvesvaraya National Institute of Technology, Nagpur-440010, Maharashtra, India	
		ICT - 009	Improved Water Purification Rates in Solar System using Plasmonic Particles	Dr. Sushant Satputaley, Bijay Sankhari, Aashish Nagose, Karan Ksheersagar	Department of Mechanical Engineering, St. Vincent Pallotti College of Engineering & Technology, Nagpur, 441108, Maharashtra, India	
		ICT - 015	Experimental investigation of four stroke single cylinder diesel engine with oxygenated fuel additives	Maloth Mohan Kumar, Vasmate Shiva Kumar	Department of Mechanical Engineering Anurag Group of Institutions Hyd India 500088	
		ICT - 048	CFD Modeling of Combustion and Calcination Reaction in Cement Calciner	Shital Mone ^a , B. S. Gawali ^a , M. S. Joshi ^a , Vivek Vitankar ^b	^a Dept. of Mechanical Engineering, Walchand College of Engineering, Sangli 416 415, Maharashtra, India ^b Director, FluidDimensions, Pune 411 045, Maharashtra, India	
		ICT - 078	The Effect of Diesel and Bio-Diesel Blends on CI Engine Performance and Emission Characteristics	J.Venkatesu Naik ^a , K.Kiran Kumar ^b , S Venkata Sai Sudheer ^b , Pallikonda mahesh ^b	^a SoET, SPMVV, Tirupati, Andhra Pradesh, 517502, India ^b National Institute of Technology Warangal, Warangal, Telangana, 506 004, India	
		ICT - 061	Incorporating Additional Power Cycle In Conventional Four Stroke SI Engine To Develop Six Stroke Engine	Shreyas Abhyankar, Agnel Thomas, Leslie Fernandes, Rohan John, Kamlesh Sasane , Aqleem Siddiqui	Mechanical Engineering Department Fr. C. Rodrigues Institute of Technology Vashi, Navi Mumbai, India	
		ICT - 083	Reliability Analysis Of Wind Turbine And Maximization Of Power Output	P.karunymoorthy, P.venkataramaiah, R.Lalu naik3	Department of Mechanical engineering, SVUCE, Tirupati, 517502, India	
03 rd May 2019 (Friday)	Track -4 (Industrial/Production)	ICT - 085	CFD analysis of helical coiled heat exchanger	S. JaiKumar, A. Umesh Anirudh, K. Janardhan Sai	Mechanical Engineering, GITAM (Deemed to be University), Visakhapatnam 530045, India.	(9:45 AM – 10:30 AM)

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03 rd May 2019 (Friday)	Track -1 (Thermal) Venue :HomiBhabha Hall	Paper ID	Paper Title	Authors	Affiliation	(2:45 PM – 3:45 PM)
		ICT -016	Experimental Analysis on Thermal Performance of a Solar Air Heater at Different Angular Positions	Sk. A. Rahaman, T. Eswar, S.J. Reddy, M. Mohan Jagadeesh Kumar	Gayatri Vidhya Parishad College of Engineering (A),Kommadi, Vizag, Andhra Pradesh, India 530048	
		ICT - 005	Social and economic impact assessment of solar water pumping system on farmers in Nagpur district of Maharashtra state of India	Devidas H. Yadav, Arunedra K. Tiwari, Vilas R. Kalamkar	<i>Department of Mechanical Engineering, Visvesvaraya National Institute of Technology, Nagpur 440010, Maharashtra, India</i>	
		ICT - 008	Experimental Study of Closed Loop Thermosyphon System using Different Working Fluids	Mahasidha R. Birajdar ¹ C. M. Sewatkar ¹	¹ College of Engineering, Pune, Maharashtra, India	
		ICT - 010	Identifying empirically important variables in IC engine operation through redundancy analysis	Satishchandra Salam TikendraNathVerma	Department of Mechanical Engineering, National Institute of Technology Manipur, Imphal – 795004, India	

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03 rd May 2019 (Friday)	Track -2 (Design) Venue : Bose Hall	Technical Session -3	Paper ID	Paper Title	Authors	Affiliation	(2:45 PM – 3:45 PM)
			ICD – 009	Unbalance and dynamic parameters estimation in a rigid rotor mounted on active magnetic bearings	Prabhat Kumar, Vikas Kumar, Kundan Kumar, Lakhan Singh Meena	Department of Mechanical Engineering, NIT Manipur, Imphal West, 795004, Manipur, India	
			ICD – 011	Investigating the influence of geometrical and material parameters on peeling behaviour of a gecko spatula	Sai praneeth Gouravaraju, Sachin S. Gautam [*]	Department of Mechanical Engineering, Indian Institute of Technology Guwahati, Guwahati, India 781039	
			ICD – 033	A numerical study to investigate the modal analyses of cracked airplane wing (NACA2415)	Gaurav Verma, Anshul Sharma, Yogesh K. Prajapati	Department of Mechanical Engineering, National Institute of Technology Uttarakhand- 246174, Srinagar, Uttarakhand, India	
			ICD - 040	Nonlinear Dynamic Analysis of Automotive Turbocharger Rotor System	S.Bala Murugan ¹ , R K Behera ¹ , P K Parida ²	¹ National Institute of Technology, Rourkela, 769008, Odisha, India ² College of Engineering and Technology, Bhubaneswar, 751003, Odisha, India	

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03 rd May 2019 (Friday)	Technical Session -3 Track -3 (Production) Venue : Ramanujan Hall	Paper ID	Paper Title	Authors	Affiliation	(2:45 PM – 3:45 PM)
		ICP – 080	Experimental investigation and mathematical modelling for material removal and tool wear in making of rectangular channels by Electric Discharge Machining (EDM) on Aluminium-Boroncarbide composite sintered preform	Suresh Gudipudi ¹ , Selvaraj N. ¹ , Kanmani Subbu S. ² , Rao C. S. P. ³	¹ Department of Mechanical Engineering, National Institute of Technology Warangal, Warangal- 506 004, Telangana, India. ² Discipline of Mechanical Engineering, Indian Institute of Technology Palakkad, Palakkad- 678 557, Kerala, India. ³ National Institute of Technology Andhra Pradesh, Tadepalligudem- 534 102, Andhra Pradesh, India.	
		ICP – 009	Base transesterification of ineffectual soybean oil using lab scale synthesized CaO catalyst	Ningthoujam Rakesh Singh , Naorem Ronaldo Singh , Langpokpam Denin Singh , Thokchom Subhaschandra Singh, TikendraNath Verma	Department of Mechanical Engineering, National Institute of Technology Manipur, Langol, Imphal - 795004, India	
		ICP – 037	On The Role of Amylum Additive Based Cutting Fluids in Machining – An Experimental Investigation	Padmini R ^a , Vamsi Krishna P ^b , Jeevan Kumar P ^c	^{a, c} Department of Industrial Engineering, GITAM Institute of Technology, Visakhapatnam – 530045, Andhra Pradesh, ^b Department of Mechanical Engineering, National Institute of Technology, Warangal - 506004, Telangana State, India	
		ICP – 046	Experimental and Numerical Modelling of ECMM on Al 7075 T6 Alloy	Samson praveenkumar K ¹ Dr. Jaya Chandra Reddy G ²	¹ Dept. of Mechanical Engineering, YSR Engineering college of YVU, Proddatur, Kadapa A.P- 516360 ² Dept. of Mechanical Engineering, YSR Engineering college of YVU, Proddatur, Kadapa A.P- 516360	

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03 rd May 2019 (Friday)	Technical Session -3	Paper ID	Paper Title	Authors	Affiliation	(2:45 PM – 3:45 PM)
		ICP – 002	Investigations on Corrosion Behaviour in Micro-Milling of Biomedical GradeTi-6Al-7Nb Alloy	S.P.Leo Kumar, D.Avinash	Department of Production Engineering, PSG College of Technology, Coimbatore-641004, India	
		ICP – 008	Characterisation and Performance Measure Evaluation of Nanofluid blended Thin film Temperature Gauges	Jayesh P, Sheikh Afridhi, Abhay Mohan	MVJ College of Engineering, Bangalore, India.	
		ICP – 094	Experimental and Finite Element Analysis of Fracture Toughness of chilled LM13 MMC	Harshith H S ¹ Joel Hemanth ²	¹ Mechanical Engineering Department, Channabasaveshwara Institute of Technology, Tumkur, 572216,Karnataka, India ² Mechanical Engineering Department, Presidency University, Bengaluru, 560064, Karnataka, India	
	Track -4 (Industrial/Production) Venue : Raman Hall	ICP - 029	Performance improvement of Nanofluid Minimum quantity lubrication (nanofluid mql) technique in surface grinding by optimization using Jaya algorithm	Sharad Chaudhari ^a , Rahul Chakule ^b , Poonam Talmale ^c	^{a,b} Department of Mechanical Engineering, Yeshwantrao Chavan College of Engineering , Nagpur 441110, Maharashtra ,India ^c Department of Mechanical Engineering, Late G.N. Sapkal College of Engineering , Nasik 422213, Maharashtra, India	

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03 rd May 2019 (Friday)	<div>Technical Session -3</div> <div>Track -1 (Thermal)</div> <div>Venue :HomiBhabha Hall</div>	Paper ID	Paper Title	Authors	Affiliation	(4:00 PM – 5:45 PM)
		ICT - 003	Computational Study of Mixed Convection of Electronic Chips with Surface Radiation	Arnab Deb ¹ S K Mandal ¹	Department of Mechanical Engineering, NIT-Arunachal Pradesh, Yupia-791112, Arunachal Pradesh, India	
		ICT - 024	Exergy Modelling of a Coal-Fired MHD Power Plant	Prabin Haloi, Tapan Kumar Gogoi	Department of Mechanical Engineering, Tezpur University, Tezpur-784028, Assam, India	
		ICT - 030	Calibration of reference velocity and longitudinal static pressure variation in the test section of an open type subsonic wind tunnel	Neeraj Verma Beena D. Baloni	Sardar Vallabhbhai National Institute of Technology-Surat, 395007, India	
		ICT - 080	Thermoacoustic Refrigeration: An Overview	B. G. Prashantha ¹ , S.Seetharamu ² , g. S. V. L. Narasimham ³ bhimasen soragaon ¹	¹ Department of Mechanical Engineering, JSS Academy of Technical Education, Dr.Vishnuvardhana Road, Bangalore 560 060, India ² Formerly Central Power Research Institute, Bangalore 560 080, India ³ Department of Mechanical Engineering, Indian Institute of Science, Bangalore 560012, India	
		ICT – 041	Numerical Analysis of the effect of fluid-structure interaction on Heat Transfer in the square cavity using OpenFOAM	Nikhil Chitnavis , Trushar B Gohil	Department of Mechanical Engineering, Visvesvaraya National Institute of Technology, Nagpur-440010	
		ICT - 051	CFD analysis of wind turbine with different flange angles	S.M. Bichitkar P.P. Buddiyal, S.S.Chavan, A.A. Kulkarni, V. B. Gawande	V.P’s Kamalnayan Bajaj Institute of Engineering and Technology, Baramati-India-413133	
		ICT - 053	Solar hybrid electricity generator and water heater. (SHEGAWH)	Mr. Nishant kshirsagar, Mr. Suraj Sandhanshiv, Dr.Niharwalimbe	Department of Mechanical Engineering, Dhole Patil College of Engineering, Pune 412207	

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03 rd May 2019 (Friday)	Technical Session -3 Track -2 (Design) Venue : Bose Hall	Paper ID	Paper Title	Authors	Affiliation	(4:00 PM – 5:45 PM)
		ICD – 063	Dynamic Response of FGM Kirchhoff's Plate	Pratikshya Mohanty R.K. Behera	Dept. of Mechanical Engineering, National Institute of Technology Rourkela, 769008, India	
		ICD – 065	Comparative study of various defects in monolayer graphene using molecular dynamics simulation	Kritesh Kumar Gupta, Aditya Roy, SudipDey	Department of Mechanical Engineering, National Institute of Technology Silchar, India	
		ICD – 019	Quality, Time and Cost Effective Brush Seal Manufacturing for Industrial Gas Turbines through a Reconfigurable Complete Fixture	Dr.R.Saravanan, S.Rajeshwer	Department of Mechanical Engineering, Ellenki College of Engg. and Tech., Hyderabad, TS, India	
		ICD – 073	Influence of Surface Textures by Ink-Jet Print Followed by Chemical Etching Process on the Performance of HSS Cutting tool	K. Nagendra Prasad, Syed Ismail	<i>Department of mechanical engineering, NIT Warangal, Warangal-506004, Telangana, India</i>	
		ICD – 023	Design and vibration analysis of rotor blade disk and integrated bladed disk of a gas turbine compressor	Ch.Satyannarayana ^a , Dr.K.T.Balaram Padal ^a , K.Harish Kumar ^b , K.Mahesh ^c	^a Department of Mechanical Engineering, Andhra University, Visakapatnam, AP,India. ^b Department of Mechanical Engineering, Vignan's IIT, Visakapatnam AP,India. ^c Department of Design, Cyient Ltd, Hyderabad 500089, Telangana, India.	
		ICD – 075	Topology optimization using strain energy distribution for 2-d structures	Srinivas Bairy, Rafaque Ahmad Hari K. Voruganti	Department of Mechanical Engineering, National Institute of Technology Warangal, Telangana, India-506004	
		ICD - 017	Application of kinect for reverse engineering: a case study	A. Sri Harsha ^a , Ch. R. VikramKumar ^b ,	^a Mechanical Department, JNTUA, Ananthapuramu, 515002, Andhra Pradesh, India ^b Mechanical Department, N.B.K.R.I.S.T., Vidyanagar, 524413, Andhra Pradesh, India	

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03 rd May 2019 (Friday)	Technical Session -3 Track -3 (Production)	Venue : Ramanujan Hall	Paper ID	Paper Title	Authors	Affiliation
			ICP – 005	The Effect of ZrO ₂ and TiO ₂ Reinforcing Agent on the Microstructure and Mechanical Properties of Hydroxyapatite Nanocomposites	V. Ajay Kumar ¹ , P. Rama MurthyRaju ¹ , N. Ramanaiah ² , S. Rajesh ^{1*}	¹ Department of Mechanical Engineering, S.R.K.R. Engineering College, China Amiram, Bhimavaram-534204, Andhra Pradesh, India ² Department of Mechanical Engineering, A.U. College of Engineering, Andhra University, Visakhapatnam-530003, Andhra Pradesh, India
			ICP – 045	Tensile Property of Ultra High Molecular Weight Polyethylene Fibre and Its Composite Laminate	Arun Kumar Singh ¹ , Dharmendra Kumar Shukla ² N Eswara Prasad ¹	¹ Defence Materials & Stores R & D Establishment, DRDO, Kanpur-208013 India ² Mech. Engg. Dept., Motilal Nehru National Inst. of Tech., Allahabad-211004 India
			ICP – 095	Design and Fabrication of Die Back Door for Manufacturing of Cylinder Liners	T Vadivelu ^a , Dr.C.Vijaya Bhaskar Reddy ^b , Dr.G.Prasanthi ^c	^a JNTUA, Ananthapuramu-515002, A.P, India ^b Department of Mechanical Engineering, SVCET, RVS Nagar, Chittoor-517127, A.P, India ^c Department of Mechanical Engineering, JNTUA, Ananthapur-515002, A.P, India
			ICP – 048	Effect of Graphene Nanofluid on Machining Inconel 718	Siva Bevara, Sanjay Kumar Kamesh Amrita M	Gayatri Vidya Parishad College of Engineering(A), Visakhapatnam-48, Andhra Pradesh, India
			ICP – 053	Mechanical Properties of AA7075-Nano ZrO ₂ Reinforced Matrix Composites	Prasanna Nagasai B, Srikanth S, J A RangaBabu	Department of Mechanical Engineering, Gudlavalleru Engineering College, India
			ICP – 077	Experimental Investigation of Electro Discharge Machining on NIMONIC 80A through Response Surface Methodology	G. Vishnu Pramod Teja ¹ , K. Saraswathamma ¹ , P. Murali Krishna ² G. Tejeswara Rao ³	¹ Department of Mechanical Engineering, University College of Engineering (A), Osmaina University, Hyderabad 500007, Telangana, India ² Department of Mechanical Engineering, Government Polytechnic, Srikakulam 532001, Andhra Pradesh, India ³ Department of General Section, Government Polytechnic, Amadalavalasa 532185, Andhra Pradesh, India
			ICD - 074	Effect of Temperature on the Tribological Performance of MoS ₂ -TiO ₂ Coating Material	A.V. Borgaonkar, S. Ismail	<i>Department of mechanical engineering, NIT Warangal, Warangal-506004, Telangana, India</i>

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03 rd May 2019 (Friday)	Track -4 (Industrial/Production)	Venue : Raman Hall	Technical Session -3		Paper ID	Paper Title	Authors	Affiliation	(4:00 PM – 5:45 PM)
					ICI – 007	Redesigning of electric plug for assembly time reduction using DFA	V.Naga Malleswari, B.Surendra Babu Ch.Praneeth	Industrial Engineering, GITAM Institute of Technology, Visakhapatnam, A.P, India	
					ICP – 093	Performance Analysis of Different Tool Shape in Electric Discharge Machining Process with Vegetable oil as Dielectric Fluid	B. Singaravel, K. Chandra Shekar', G. Gowtham Reddy S. Deva Prasad,	Department of Mechanical Engineering, Vignan Institute of Technology and Science, Deshmukhi, Hyderabad, Telangana State, India.	
					ICP – 107	Fuzzy Logic and RegressionModelling of Machining Parameters in Turning AISI 1040 Steel using Vegetable Based Cutting Fluids with Extreme Pressure Additive	B. Satheesh Kumar ¹ , Neelam Parimala ² , P. Vamsi Krishna ³	¹ Department of Mechanical Engineering, N.B.K.R.I.S.T., Vidyanagar - 524 413, India ^{2,3} Department of Mechanical Engineering, NIT Warangal, Warangal - 506 004, India	
					ICP – 014	Tribological Behavior of Carbon Fiber Polymer Composites Reinforced with Nano-fillers	Shylesh K Siddalingappa ^a , Bhaskar Pal ^b , Haseebuddin ^c , K Gopalakrishna ^d .	^{a,b} Department of Mechanical Engineering, School of Engineering, Presidency University, Bengaluru-560064, Karnataka State, India. ^c Department of Mechanical Engineering, Dayananda Sagar College of Engineering, Bengaluru-560078, Karnataka State, India ^d Jyothy Institute of Technology, Bengaluru-560082, Karnataka State, India.	
					ICP – 071	Optimizing microhardness of electroless Ni-P coated copper substrate using PSO	R. P. Saw ^a , S. Dutta ^b , S. Dey ^c	^{a, c} Department of Mechanical Engineering, National Institute of Technology Silchar 788010, Assam, India ^b Department of Civil Engineering, National Institute of Technology Silchar 788010, Assam, India	
					ICP – 092	A Review on Magnetic nanofluids	Bhargava Kumar P, Ranga Babu J A, MR Ch Sastry	Mechanical Engineering Department, Gudlavalleru Engineering College, Gudlavalleru 521356, Andhra Pradesh, India	
					ICD – 076	Kinematic Analysis for Optimum Manipulability and Trajectory Planning of Human Leg	Abhijeet Dhoke, V. V. M. J. Satish Chembuly Hari K. Voruganti	Department of Mechanical Engineering, NIT Warangal, Telangana State, India-506004	

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04 th May 2019 (Saturday)	Technical Session -4 Track -1 (Thermal) Venue :HomiBhabha Hall	Paper ID	Paper Title	Authors	Affiliation	(9:30 AM – 11:45 AM)
		ICT - 082	Design, Development and Experimental analysis on economic and portable smokeless oven	Mainak Bhaumik	Department of Mechanical Engineering, MGM's CET, Kamothe, New Mumbai -410209, India	
		ICT - 006	Thermally Developing Region of a Parallel Plate Channel Partially Filled with a Porous Material with the Effect of Axial Conduction and Viscous Dissipation: Uniform Wall Heat Flux	J. Sharath Kumar Reddy ¹ D. Bhargavi ²	^{1,2} Dept. of Mathematics, NITW, Warangal, Telangana India.	
		ICT - 054	Performance and Emission Characteristics of Thermal Barrier Coating on Diesel Engine Fueled with Cottonseed Biodiesel	Badal Kudachi ¹ , Nitin Satpute ² , Nilaj N Deshmukh ¹ Bipin Mashilkar ¹	¹ Department of Mechanical Engineering, Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai, PIN-400703, Maharashtra, India ² Department of Mechanical Engineering, Faculty of Science and Technology, Vishwakarma University, Pune, PIN- 411037, Maharashtra, India	
		ICT - 056	Performance and Emission analysis of Rapeseed Methyl Ester on DI diesel engine using Artificial Neural Network	V.Amosu ¹ , S.K. Bhatti ² , S. Jai kumar ³	¹ Dept. of Mechanical engineering, Andhra University, Visakhapatnam 530003 , Andhra Pradesh, India ² Dept. of mechanical engineering, College of Engineering for women, Andhra University, Visakhapatnam 530003, Andhra Pradesh ³ Mechanical engineering dept., GITAM University, Visakhapatnam 530045, Andhra Pradesh,	
		ICT - 062	Numerical study on the effect of impeller geometry on pump performance	Arshdeep Singh ^a , Siga Satya Sekhar ^a , Jayavel S ^a , Sudhir Varadarajan ^a	^a Mechanical department, Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram Chennai 600 127, Tamilnadu, India	
		ICT - 067	Numerical Simulation of Heat Transfer and Fluid Flow Characteristics of Triangular Corrugated Wavy Channel	Meghna Das Chaudhury, Raju	Department of Mechanical Engineering, National Institute of Technology, Rourkela 769008, Odisha, India	
		ICT - 071	Emission and performance characteristics of CI engine with Diesel - Butanol blends using intake pressure boost	Hemant Gowardhan, Amit Karwade, Dr.J.G.Suryawan shi	Department of Mechanical Engineering, Visvesvaraya National Institute of Technology, Nagpur 440010, Maharashtra, India	
		ICT - 075	Computational Studies of Shock Wave Boundary Layer Interactions in Hypersonic Flow over Double Cone Geometries	Vayala Siva, R K. Peetala	Department of Mechanical Engineering, Visvesvaraya National Institute of Technology, Nagpur-440010, Maharashtra, India	
		ICT - 001	A Comparative Study on Electric Vehicle Testing Standards	Sachin B. Lokhande ^a , Satyajit R. Patil ^a	^a Dept. of Automobile Engineering, Rajarambapu Institute of Technology, Sakharale Shivaji University, Kolhapur, Maharashtra, INDIA 415414	

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04 th May 2019 (Saturday)	Track -2 (Design) Technical Session -4 Venue : Bose Hall	Paper ID	Paper Title	Authors	Affiliation	(9:30 AM – 11:45 AM)
		ICD – 005	Experimental Studies on Steel Beam- to- Column Connections under Elevated Temperature	Cinitha.A , V.Nandhini	CSIR-Structural Engineering Research Centre, Chennai-600113, Tamil Nadu, India Department of Civil Engineering, Nandha Engineering College, Erode-638052, Tamil Nadu, India	
		ICD – 006	Investigating the Influence of Higher-order NURBS Discretization on Contact Force Oscillation for Large Deformation Contact Using Isogeometric Analysis	Vishal Agrawal, Sachin S. Gautam	Department of Mechanical Engineering, Indian Institute of Technology Guwahati, Guwahati -781039, India	
		ICD – 045	Thermo-Mechanical Analysis of Unidirectional PALF Composites Using Micromechanical Approach	Anurag Jasti, Sandhyarani Biswas	National Institute of Technology Rourkela, Rourkela -769008, India	
		ICD – 048	Electro-Mechanical Responses of Dielectric Elastomers	Moumita Tewary, Tarapada Roy	National Institute of Technology, Rourkela, 769008, India	
		ICD – 051	Design, Manufacturing and Testing of Feeding & Bending Mechanism	Vijay V. Mehta, Vedant K Parmar, Dr.Nirav P. Maniar, Jasmin P. Bhimani	<i>Mechanical Engineering Department, V.V.P. Engineering College, Rajkot-360005, Gujarat, India</i>	
		ICD – 062	Measurement of elastic modulus and damping properties of friction stir processed pure metals using impulse excitation technique	K. Venkateswara Reddy ^a , R. Bheekya Naik ^a , Sandeep Yadav ^a , G. Madhusudhan Reddy ^b , R. Arockia Kumar ^a	^a Department of Metallurgical and Materials Engineering, National Institute of Technology, Warangal, Telangana – 506 004, India ^b Defence Metallurgical Research Laboratory, Kanchanbagh, Hyderabad, Telangana-500 058, India	
		ICD – 021	A Review on Design and static Analysis of Chassis Frame and properties of material used in Commercial Vehicle	Akash Kumar, V P Singh	Department of Mechanical engineering, National institute of Technology, Kurukshetra, 136119, Haryana, India	
		ICD – 072	Optimum Geometry of Steering Mechanism for an Automobile	R. Venkatachalam ¹ , A. PadmaRao ²	¹ Department of Mechanical Engineering, National Institute of Technology, Warangal 506004India. ² Department of Mechanical Engineering, B.V. Raju Institute of Technology, Narsapur, 502313, India	
		ICD - 026	Fabrication of intelligent braking system	Kamesh B, Amrita M	Mechanical engineering, GVP College of engineering, Madhurawada 530038, AP, India	
		ICD- 061	Ultrasonic waveguide based liquid Level Measurement using Flexural mode F(1,1)	Nishanth Raja ^a , Krishnan Balasubramaniam ^a Suresh Periyannan ^b	^a Centre for Non destructive Evaluation, Department of Mechanical Engineering ,Indian Institute of Technology Madras, Chennai 600 036,Tamilnadu, India, ^b Department of Mechanical Engineering, National Institute of Technology Warangal 506004, Telangana, India	

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04 th May 2019 (Saturday)	Technical Session -4 Track -3 (Production) Venue : Ramanujan Hall	Paper ID	Paper Title	Authors	Affiliation
		ICP – 006	Optimization of Machining Parameters for Vibration Assisted Turning of Ti6Al4V Alloy Using Analysis of Variance	D. Venkata Sivareddy, P.Vamsi Krishna, A.Venu Gopal	¹ Department of Mechanical Engineering, National Institute of Technology Warangal, Warangal-506004,India
		ICP – 102	Effect of Nanoparticles addition on microstructural and mechanical properties of friction stir welded 2014 Aluminium alloy	Kethavath Kranthi Kumar, Adepu Kumar, Divya Sachan	Department of Mechanical Engineering, National Institute of Technology, Warangal 506004, Telangana, India
		ICP – 031	Experimental Investigation on Laser Beam Welded Joints of Dissimilar Metals and Optimization of Process Parameters using Firefly Algorithm	B Narayana Reddy , P Hema, Y Prasanth Reddy, G Padmanabhan	Department of Mechanical Engineering, Sri Venkateswara University, Tirupati-517502, India
		ICP – 070	Multi objective optimization of submerged friction stir welding process parameters for improved mechanical strength of Aa6061 weld bead by using taguchi-l18 based gray relational analysis	Laxmanaraju Salavarvu ^a , Lingaraju Dumpala ^b	^a Mechanical Engineering Department, Sri Sivani College Of Engineering, Chilakapalem-532402, Andhra Pradesh, INDIA ^b Mechanical Engineering Department, JNTUK UCEK, Kakinada-533003, Andhra Pradesh, INDIA
		ICP – 076	Numerical Modeling of High Energy Density Beam Assisted Machining of Hardened Armour Steel	A. Sahu ¹ , A.N. Jinoop ^{2,3} , C. P. Paul ^{2,3} , Adepu Kumar ¹ , K. S. Bindra ^{2,3}	¹ National Institute of Technology, Warangal-506004, Telangana, India. ² Laser Development & Industrial Applications Division, Raja Ramanna Centre for Advanced Technology, Indore-452013, Madhya Pradesh, India. ³ Homi Bhabha National Institute, Anushaktinagar, Mumbai-400094, Maharashtra, India.
		ICP – 087	Characterization of Kenaf/ Aloevera fiber reinforced PLA Hybrid biocomposite	P Ramesh ¹ , B Durga Prasad ² KL Narayana ³	¹ JNTUA Ananthapuramu-515002, AP-India ² Mechanical Engineering Department, JNTUA Ananthapuramu-515002, AP-India ³ Mechanical Engineering Department, SVCET, Chittoor-517127, AP-India
		ICP – 024	Effect of Temperature, coarse grain and loading on fatigue of different materials	Dr. Pravin Nerkar, Mr. Sanket Tawale, Mr. Prachit Shrikhande, Mr. Aamos Sawale	<i>Mechanical Engineering Department, St Vincent Pallotti College of Engineering and Technology, Nagpur-441108, Maharashtra, India</i>
		ICD - 077	Structural Topology Optimization: Methods and Applications	Rafaque Ahmad, Hari K. Voruganti	Department of Mechanical Engineering, NIT Warangal, Telangana State, India-506004
		ICD - 078	A Multi-Objective Optimization Method Based on Simplex Search Method	Vivek Kumar Mehta Bhaskar Dasgupta	Department of Mechanical Engineering, IIT, Kanpur—208 016, India

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04 th May 2019 (Saturday)	Track -4 (Industrial/Production)	Venue : Raman Hall	Technical Session -4	Paper ID	Paper Title	Authors	Affiliation
				ICP – 096	Fabrication and Characterization of Functionally Graded Composites using Friction Stir Processing	B.Venkatesh, T.Sadasiva Rao, Adepu Kumar	Department of Mechanical Engineering, National Institute of Technology, Warangal, Telangana, 506004, India
				ICP – 065	Effect of tool geometry and heat treatment on friction stir processing of AA6061	Karan Chauhan, M.V.N.V. Satyanarayana, Adepu Kumar	Department of Mechanical Engineering, National Institute of Technology, Warangal 506004, Telangana. India
				ICP – 075	Investigation on wear behaviour of AA5052/SiC/Al ₂ O ₃ hybrid composite fabricated using stir casting process	Shanmuga PriyanV.G ^a , R. Malayalamurthi ^b , S. Kanmani Subbu ^c	^{a,c} Mechanical Engineering, Indian Institute of Technology Palakkad, Palakkad 678557, Kerala, India ^b Department of Mechanical Engineering, A.C College of Engineering and Technology, Karaikudi 630004,Tamilnadu, India
				ICP – 084	Experimental Investigation of Ultrasonic flaw Defects in weld clad materials using NDT Technique	P.Ravindra Kumar ¹ , G.Vijay Kumar ² , K.NagaMurali ³ R.B .S.S.Kishore ⁴	^{1, 3, 4} Department of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram 521456, Andhra Pradesh,India ² The Future NDT Pvt. Ltd
				ICP – 044	Investigating High Temperature Oxidation of Hastelloy-XFabricated by Laser assisted Directed Energy Deposition	K Dileep ^a , A N Jinoop ^{b,c} , C P Paul ^{b,c} , M Baral ^{b,d} , Y Ravikumar ^a , K S Bindra ^{b,c}	^a National Institute of Technology, Warangal- 506004, Telangana, India. ^b HomiBhabha National Institute, Anushaktinagar, Mumbai-400094, Maharashtra, India. ^c Laser Development and Industrial Applications Division, Raja Ramanna Centre for Advanced Technology, Indore-452013, ^d Synchrotrons Utilization Section, Raja Ramanna Centre for Advanced Technology, Indore-452013, Madhya Pradesh, India.
				ICP – 054	Measurement and Control of Temperature and Speed using LabVIEW	Nilaj Deshmukh , Shamim S Pathan, Praseed Kumar	Department of Mechanical Engineering, Fr. C. Rodrigues Institute of Technology, Vashi, NaviMumbai , 400 703, Maharashtra, India.
				ICP – 056	Influence of tool profiles on mechanical properties in Al-5083 alloy using friction stir welding	M.Bala Chennaiah, K.Sai Ram, K.V.B.N.S. Rama Krishna, I.Lohit, I.V.S.Nikhil, S.Madhav	ME Department, V.R.Siddhartha Engineering college, Vijayawada-07 A.P
				ICP – 063	A review on effect of reinforcement silicon carbide (SiC) on mechanical properties of aluminium metal matrix composite	Ajay R. Bhardwaj ^a , Dr. A M. Vaidya ^b	^a Mechanical Engineering, S.S.B.T's College of Engineering & Technology Bambhori, Jalgaon 425001,Maharashtra, India ^b Mechanical Engineering, Gangamai College of Engineering Nagaon 424005, Maharashtra, India
				ICP - 033	Parametric optimization of Electrical Discharge Grinding on Ti-6Al-4V alloy using Response Surface Methodology	Murahari kolli ¹ , Adepu Kumar ²	^a Department of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, , Mylavaram-521 230, Andhra Pradesh, India ^b Department of Mechanical Engineering, National Institute of Technology Warangal, , Warangal-506004, Telangana State, India

(9:30 AM – 11:45 AM)