#### PROGRAMME SCHEDULE

Day - 1 (28th December 2020) (10.00 am to 06.45 pm (IST))

10.00 am to 10.45 am

**Inauguration Ceremony** 

Venue: Admin Block, NIT Puducherry

Chief Patron: Prof. K. Sankaranarayanasamy

Director

National Institute of Technology Puducherry, Karaikal, India.

Patron: Prof. G. Aghila

Professor & Registrar (i/c)

National Institute of Technology Puducherry, Karaikal, India.

Chief guest: Prof. Joydeep Dutta

Professor, Department of Applied Physics,

KTH Royal Institute of Technology,

Stockholm, Sweden.

10.45 am to 12.00 noon

Keynote address - 1 (Introduction by **Dr.M.V.A. Raju Bahubalendruni, AP/MED**)

Venue: Admin Block, NIT Puducherry

Prof. Joydeep Dutta

Professor, Department of Applied Physics,

KTH Royal Institute of Technology, Stockholm, Sweden.

12.00 noon to 1.00 pm

Paper presentation (Session - 1) (Three parallel sessions)

Session	Stream	Venue	Paper ID
1.1	Manufacturing	SF7	7, 10, 13, 19.
1.2	1.2 Automation		18, 21, 24, 36.
1.3 Energy		GF R12	6, 9, 14. 33.

1.00 pm to 2.30 pm

Lunch break

Venue: Ground Floor, Science Block, NIT Puducherry

2.30 pm to 3.30 pm

Keynote address - 2 (Introduction by **Dr. N. Sendhil Kumar HoD & AP - MED**)

Venue: GF R12 - Science Block, NIT Puducherry

**Prof. K.Srinivas Reddy** 

Professor

Heat Transfer and Thermal Laboratory Department of Mechanical Engineering

Indian Institute of Technology Madras (IIT M), Chennai, India.

3.30 pm to 6.45 pm

Paper presentation (Session - 2) (Three parallel sessions)

Tuper presentation (Session 2) (Timee p			paramet sessions)
Session	Stream	Venue	Paper ID
2.1	Manufacturing	SF7	121, 40, 56, 88, 91, 92, 95, 96, 111, 113, 116, 119, 125.
2.2	Automation	GF R8	175, 176, 59, 60, 66, 106, 127, 128, 132, 141, 142, 168, 174.
2.3	Energy	GF R12	16, 20, 76, 117, 79, 101, 102, 103, 107, 108, 115, 17, 44.

#### PROGRAMME SCHEDULE

Day - 2 (29th December 2020) (10.00 am to 06.45 pm (IST))

10.00 am to 11.15 am Keynote address - 3 (Introduction by **Dr. N. M.Sivaram AP - MED**)

Venue: GF R12 - Science Block, NIT Puducherry

Mr. C. Jebasihamony

Scientist - G, Deputy Director/ EAIE

ISRO Propulsion Complex, Government of India, India.

11.15 am to 1.00 pm Paper presentation (Session - 3) (Three parallel sessions)

Session	Stream Venue		Paper ID
3.1	Manufacturing	SF7	67, 69, 70, 72, 75 123.
3.2	Design	GF R8	8, 12, 23, 43, 53, 179.
3.3	Energy	GF R12	34, 35, 45, 73, 90, 109.

1.00 pm to 2.30 pm

Lunch break

Venue: FF 04 - Science Block, (For scholars)

Venue: GF R 8 - Science Block (For Faculty)

2.30 pm to 3.30 pm

Keynote address - 4 (Introduction by **Dr. Vadivukkarasan M, Inspire Faculty - MED**)

Venue: GF R12 - Science Block, NIT Puducherry

Prof. Rajiv Prakash

Professor, School of Materials Science and Technology Indian Institute of Technology (BHU) Varanasi, India

3.30 pm to 6.45 pm

Paper presentation (Session - 4) (Three parallel sessions)

Session	Stream	Venue	Paper ID	
4.1	Manufacturing	SF7	41, 42, 46, 47, 48, 49, 55, 58, 61, 63, 64, 65, 85, 134.	
4.2	4.2 Design GF R8		100, 120, 130, 131, 135, 137, 138, 143, 150,152, 153, 158, 180.	
4.3	Energy	GF R12	11, 32,15, 22, 25, 26, 30, 83, 84, 110, 114, 118, 126.	

#### PROGRAMME SCHEDULE

Day - 3 (30<sup>th</sup> December 2020) (09.00 am to 07.00 pm (IST))

09.00 am to 10.15 am Keynote address - 5 (Introduction by **Dr. Johnney Mertens A, AP - MED**)

Venue: GF R12 - Science Block, NIT Puducherry

**Prof. Dilip Kumar Pratihar** 

Professor, Department of Mechanical Engineering, Indian Institute of Technology Kharagpur, India.

10.15 am to 1.00 pm Paper presentation (Session - 5) (Three parallel sessions)

Session	Stream	Venue	Paper ID
5.1	Manufacturing	SF7	27, 29, 38, 39, 136, 140, 151, 155, 159, 165, 169, 170.
5.2	Design	GF R8	37, 54, 62, 86, 87, 89, 145, 161, 163, 181.
5.3	Energy	GF R12	81, 94,146, 148, 164, 167, 172, 173, 177, 178.

1.00 pm to 2.30 pm

Lunch break

Venue: FF 04 - Science Block, NIT Puducherry

2.30 pm to 3.30 pm

Keynote address - 6 (Introduction by **Dr. N. Sendhil Kumar HoD & AP - MED**)

Venue: Admin Block, NIT Puducherry

**Prof. Tapas K Mallick** 

Professor and chair in Clean Technologies,

Renewable Energy,

College of Engineering, University of Exeter,

Cornwall, UK.

3.30 pm to 4.00 pm

Valedictory Ceremony

Venue: Admin Block, NIT Puducherry

Chief Patron: Prof. K. Sankaranarayanasamy

Director

National Institute of Technology Puducherry, Karaikal, India.

Patron: Prof. G. Aghila

Professor & Registrar (i/c)

National Institute of Technology Puducherry, Karaikal, India.

Chief guest: Prof. Tapas K Mallick

Professor and chair in Clean Technologies,

Renewable Energy,

College of Engineering, Mathematics and Physical Sciences,

University of Exeter, Cornwall, UK.

7.00 pm Gala Dinner

Page **3** of **16** 

Venue: AVS Imperia, Karaikal

#### **PRESENTATION SCHEDULE**

**Session 1 (28th December 2020)** Time: 12.00 noon to 01.00 pm (IST)

#### Session 1.1 (Manufacturing) (28th December 2020) (12.00 noon to 01.00 pm) (IST) Venue: SF7

Sl.No	ID	Title of the paper	Presenting authors
1	7	Smart materials for 4D printing: a review on Developments, Challenges and Applications	Reddy Sreenivasulu R.V.R & J.C. College of Engineering (Autonomous)
2	10	Examining the build properties of PolyJet printed multi-material parts in additive manufacturing	Arivazhagan Pugalendhi Coimbatore Institute of Technology
3	13	Design of Workplace in Assembly Unit Using Ergonomic Principles	Manivel Muralidaran V Kumaraguru College of Technology
4	19	Experimental Investigation on Electrochemical Discharge Machining of Zirconia	Vijay Manoharan Government College of Technology, Coimbatore, Tamilnadu

## Session 1.2 (Automation) (28<sup>th</sup> December 2020)(12.00 noon to 01.00 pm) (IST) Venue: GF R8

Sl.No	ID	Title of the paper	Presenting authors
1	18	Attractor plot as an emerging tool in ECG signal processing for improved health informatics	Varun Gupta KIET Group of Institutions, Delhi - NCR, Ghaziabad, UP, India
2	21	Quanser Qube Twinning	Phanindra Burada Velagapudi Ramakrishna Siddhartha Engineering College, Andhra Pradesh
3	24	Finite Element Analysis of Lightweight Robot Fingers Actuated by Pneumatic Pressure	Appadurai M Dr. Sivanthi Aditanar College of Engineering
4	36	Computation of the Crump weir discharge coefficient with multiple nonlinear regression analysis (MNLR)XLSTAT	Pankaj National Institute of Technology Kurukshetra

# Session 1.3 (Energy) ( $28^{th}$ December 2020)(12.00 noon to 01.00 pm) (IST) Venue: GF R12

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Sl.No	ID	Title of the paper	Presenting authors
1	6	Control Strategies for Transient Stability of Power Grid for Large Sudden Change in Electrical Load	Subash Parida Amity University, Noida
2	9	Improved Control Design for AGC of Two Area Thermal-Thermal Power System using Hybrid Fuzzy-PID Control	Subash Parida Amity University, Noida



3	14	Performance Analysis of Crossflow Turbine: A Case Study	Nithin Bali New Horizon College of Engineering, Bengaluru, Karnataka
4	33	Williff-Dimensional Heasibility Study of Small Hydro	Syed Azzaam Ahmed New Horizon College of Engineering, Bengaluru, Karnataka

# $Session~2~(28^{th}~December~2020)~Time:~03.30~pm~to~06.45~pm~(IST)\\ Session~2.1~(Manufacturing)~(28^{th}~December~2020)\\ (03.30~pm~to~06.45~pm)~(IST)~Venue:~SF7$

Sl.No	ID	Title of the paper	Presenting authors
5	121	Wood Plastic Composite Processing And Mechanical Characteristics – A Brief Literature Review	Sachin S Raj Gnanamani College of Technology
6	40	Review on Materials and Method used to Develop Antimicrobial Coatings in Medical and Food Processing Industry	Chintada Vinod Babu GMR Institute of Technology
7	56	Experimental Investigation on Properties of Acetic Acid Treated Banana Fiber Polymer Composites	J. Ronald Aseer National Institute of Technology Puducherry
8	88	Application of Taguchi procedure to decide optimum variable levels for Powder Blended EDM	Santarao K GMR Institute of Technology
9	91	Numerical and experimental investigation on pressure drop across process optimized micro-milled aluminium heat sink	Subhajit Bhattacharyya Indian Institute of Information Technology, Design and Manufacturing, Jabalpur (IIITDMJ)
10	92	Effect of initial conditions on microstructure and mechanical properties of dual phase steel during intercritical annealing with varied soaking time	Chavan Akash Naik University of Hyderabad, Telangana
11	95	Parameter Optimization of Wire-cut EDM of Inconel Alloy for Maximizing Material Removal Rate	S Arulselvan National Engineering college, Kovilpatti
12	96	Experimental investigation on mechanical properties of hemp-jute and hybrid e-glass GFRP (glass fibre reinforced polymer) composite	Raviteja Surakasi Lendi Institute of engineering and Technology
13	111	Microstructural analysis of Friction Stir Processed Al5083 alloy	Hari D IFET college of Engineering
14	113	Performance Evaluation Through Audit of 519 Organizations	Karri Naveen Lincoln University College, Malaysia
15	116	Effect of varying tool parameters on chip formation and reaction force	Jeet Desai, Vellore Institute of Technology, Vellore

16	119	Study of Sisal and Jute based Natural Fiber Reinfored Polymer (NFRP) Composites for sustainable habitat	Ankit Government Engineering College Jhalawar
17	125	Effect of Filler Content on the Performance of Epoxy/Haritaki Powder Composite	Narmada Devi N IFET College of Engineering, Villupuram

#### Session 2.2 (Automation)(28<sup>th</sup> December 2020) (03.30 pm to 06.45 pm) (IST) Venue: GF R8

Sl.No	ID	Title of the paper	Presenting authors
5	175	Analysis of Cache Memory Architecture Design Using Low Power Reduction Techniques for Microprocessors	Reeya Agrawal GLA University
6	176	Low Power SRAM Memory Architecture for IoT Systems	Reeya Agrawal GLA University
7	106	Automation to find adulteration in downstream petroleum monitoring using machine learning: An overview	Hemachandiran S National Institute of Technology Puducherry
8	127	Smart dispensing of ingredients using VL53LOX & Piezoelectric Polymer sensor	Guruprasad V The National Institute of Engineering, Karnataka
9	128	Implementation of industrial IoT laboratory for sensors	Pratiksha Narake The National Institute of Engineering, Karnataka
10	132	A Novel Mechatronic system to distribute tennis balls using Pneumatics	Pradnya Avinash Patil Dr. J. J. Magdum College of Engineering, Jaysingpur, Maharashtra,India
11	141	Weld Microstructural Image Segmentation for Detection of Intermetallic Compounds Using Support Vector Machine Classification	Pavan Kumar Nalajam Vellore Institute of Technology
12	59	Design And Development Of Home Automation System	Bavithran N Pondicherry University
13	60	Design And Development Of Automatic System To Protect Crop From Animals And Birds	Preetha A     Gnanavalli S     National Institute of Technology     Puducherry
14	66	Spectrogram as an emerging tool in ECG signal processing	Varun Gupta KIET Group of Institutions, Delhi -NCR, Ghaziabad, UP, India



15	142	Navigation of Mobile Robot through mapping using orbbec astra camera and ROS in an Indoor environment	
16	168	Automation in retail 'follow-me-auto shopping cart': A self-propelled computer vision based shopper following cart with auto-billing feature using IIoT	Ayaskanta Mishra Kalinga Institute of Industrial Technology, Bhubanewar
17	174	An Intelligent and Robust Fault Diagnostics for an Electromechanical System using Vibration and Current Signals	<u> </u>

Session 2.3 (Energy) (28<sup>th</sup> December 2020) (03.30 pm to 06.45 pm) (IST) Venue: GF R12

Session 2	3 (Energy)	(28 <sup>th</sup> December 2020) (03.30 pm to 06.45 pm	) (IST) Venue: GF R12
Sl.No	ID	Title of the paper	Presenting authors
5	16	PV Solar System Modelling and Design using PVSyst Software: A Case Study	Prashanth N Prasad New Horizon College of Engineering, Bengaluru, Karnataka
6	20	Design and Implementation of a 3 level Battery Management System (BMS) for an Electric Vehicle	Vinay Phatarpekar Amity University Uttar Pradesh, Noida
7	76	Power Quality Solution using Energy Storage Technology for PV based Islanded Microgrids	Jayachandran M Puducherry Technological University, Puducherry
8	79	Biogeography-based Centralized PID Controller for ALFC in Presence of Wind Farms	Erinena Sri Lalitha SRKR Engineering College
9	117	Comparative analysis of Transformer less Bi- Directional DC-DC Converter and Conventional Converter for Battery Charging- Discharging Applications	Radhika Swarnkar Symbiosis Institute of Technology, Symbiosis International Deemed University
10	17	Application of PVSyst for Stand alone Roof Top PV Solar Project: A Case Study	Syed Zaid Huq New Horizon College of Engineering, Bengaluru, Karnataka
11	44	Sliding Mode Control in MPPT Photovoltaic System	Sivagama Sundari M S Amrita College of Engineering and Technology, Nagarcoil
12	115	A study on the combustion characteristics of dieseline blend in HCCI engines	S. Soma Sundaram National Institute of Technology Puducherry& University of Melbourne

13	101	Effect of nozzle inclination angle on the performance of hybrid jet impingement microchannel heat sink	Jyoti Pandey PDPM-IIITDMJ& SQU Oman
14	102	System Performance Evaluation of Plant Auxiliaries under different operating condition of a Nuclear Power plant	Suganya P National Institute of Technology Trichy
15	103	Numerical Investigation Of Swirl Flow On Heat Transfer Enhancement In A Stepped Pipe	Prince Abraham B National Engineering College, Kovilpatti
16	107	A Review on different Machine Learning Approaches for Fault Detection and Classification for protection of Low Voltage Microgrid	Vishwas K Singh Vidyavardhaka College of Engineering, Mysuru
17	108	Rooftop PV Solar System Performance Analysis: A Case Study	Saravana S New Horizon College of Engineering, Bangalore, India

## Session 3 (29th December 2020) Time: 11.15 am to 01.00 pm (IST)

### Session 3.1 (Manufacturing) (29th December 2020)(11.15 am to 01.00 pm) (IST) Venue: SF7

Session 3.1 (Manufacturing) (2) December 2020/(11.13 am to 01.00 pm) (13.1) Venue. 317				
Sl.No	ID	Title of the paper	Presenting authors	
18	67	Experimental Studies on Material Removal Rate of Die Steel in Electrochemical Micromachining process using Taguchi Method	Vijayakumar K TPEVR Government Polytechnic College, Vellore, Tamilnadu	
19	69	Microstructural Characterization and Microhardness Investigations on Friction Stir Additive Manufactured Commercially Pure Aluminium Alloy	Balaji B IFET College of Engineering	
20	70	Finite Element Modeling to predict the defect formation in Friction Stir Welds of AA6061	Karpagaraj National Institute of Technology - PATNA	
21	72	Effect of turning parameters on surface roughness of EN-9 steel using Taguchi robust design Ananalysis	Shahid Khurshid Institute of technology, zakura campus, University of Kashmir	
22	75	Study and analysis of milk run model for minimum cost under upstream supply chain of a dairy plant	Sanjay Kumar National Institute of Technology Patna	
23	123	Influences of compaction parameters on compressive and physical properties of AZ91D/ SiC metal matrix composite through powder metallurgy	Packia Antony Amalan A National Institute of Technology Puducherry	

#### Session 3.2 (Design) (29th December 2020)(11.15 am to 01.00 pm) (IST) Venue: GF R8

Sl.No	ID	Title of the paper	Presenting authors
18	8	Design and structural analysis of Nano-satellite	Balaji R Jawaharlal college of engineering and Technology
19	12	Unbalance identification and balancing using model sensitivity based approach	Dinesh Kumar Pasi Shri G. S. Institute of Technology & Science, Indore
20	23	8-Bit Electromechanical Processor Design for Education in Digital Computation	Shashwath Sundar Amity University, Noida
21	43	Effect of non-linearly varying loads and position of stiffener on buckling behaviour of stiffened composite panels	Subash Chandra K S BMS College of Engineering
22	53	Determination of Exact Optimal Tuning of Dynamic Vibration Absorbers to Control Vibration due to Rotating Mass Unbalance	Sheth Anant Jitendrakumar Gujarat Technological University, Gujarat, India.
23	179	Vibrations Characteristics Analysis of Rotor- Bearings System due to Surface Defects Based on Response Surface Analysis in CNC Machines	Jagadeesha T NIT Calicut

#### Session 3.3 (Energy) (29th December 2020)(11.15 am to 01.00 pm) (IST) Venue: GF R12

Sl.No	ID	Title of the paper	Presenting authors
18	34	Multi Dimensional Feasibility Study of WindPower Plant: A Case Study	Anees Ahmed New Horizon College of Engineering, Bengaluru, Karnataka
19	35	Multi Dimensional Feasibility Study of PV Solar Plant: A Case Study	Shamroz Ahmed New Horizon College of Engineering, Bengaluru, Karnataka
20	90	Working fluids for ejector refrigeration systems: A comprehensive review	Manimaran C IFET College of Engineering
21	45	Impact of Graphene Nanoparticles Addition to Jatropha Biodiesel Blend on the Performance and Emission Characteristics of a Diesel Engine	Mallikarjuna Rao Dandu Lakireddy Bali Reddy College of Engineering
22	73	Numerical Investigation on the Thermal charac-	Priya Chaudhary



		teristics of a single Lithium-ion 18650 battery cell using different Phase change Materials	National Institute of Technology Agartala
23	109	An Integrated approach using DEMATEL, ENT-ROPY and TOPSIS MCDM Methods for a Green Supplier Selection problem	

Session 4 (29th December 2020) Time: 03.30 pm to 06.45 pm (IST)

Session 4.1 (Manufacturing) (29<sup>th</sup> December 2020) (03.30 pm to 06.45 pm) (IST) Venue: SF7

Sl.No	ID	Title of the paper	Presenting authors
24	41	Effect of drilling operation parameters on sur-face roughness and thrust force of Aluminium re-inforced with 10% Al2O3 functionally graded met-al matrix	S. Prathap Singh St.Joseph's Institute of Technology, Chennai
25	42	Effect of laser scan speed on microstructure and mirco-hardness on Titanium clad Magnesium	Ganesa Balamurugan K IFET College of Engineering
26	46	Detonation Gun Spray Coatings on Martensitic Stainless Steels	Jhansi Jadav Mahatma Gandhi Institute of Technology, Hyderabad
27	47	Joining of dissimilar aluminum alloys AA2024 and AA7075: A review	Ajay Kaushal IIT (ISM) DHANBAD
28	48	Experimental Characterization of Metal Matrix Composite Aluminium-6069 (Al) Percentage Varying Reinforced with Molybdenum (Mo) and Coconut Shell Ash (CSA)	Sasidhar Gurugubelli GMR Institute of Technology
29	49	Recent advances in machining of composites and super alloys by using wire-EDM. A Review	Tariq Ahmad National Institute of Technology Srinagar
30	55	Effect of buffer layer on crack susceptibility, mechanical and microstructural properties of Ni hard coatings	T. V. K. Gupta Visvesvaraya National Institute of Technology, Nagpur
31	58	Laser Beam Welding of Advanced High Strength Steels (Dual Phase Steels)	P V S Lakshminarayana Mahatma Gandhi Institute of Technology
32	61	Plasma Cladding of Copper on Cylindrical SS 316L Surface	Atria Institute of Technology

33	63	Study of various curvilinear weld profile shapes and its effect on the movement of weld line in tailor welded blanks	1
34	64	The effect of HSS and carbide tool on the mechanism of chip formation during turning of medium carbon steel (AISI1030)	Kalyan Chakraborty
35	65	General Regression Neural Network Based Frame Work for the Evaluation of Ultimate Tensile Strength of Vibratory Assisted Welded Joints	M Vykunta Rao GMR Institute of Technology
36	85	EffectofMicro-milling Parameters on Surface Roughness of Soft Metal Cutting and its Regression Model	Subhajit Bhattacharyya Indian Institute of Information Technology, Design and Manufacturing (IIITDM)
37	134	Surface alteration and effect of fiber dimensions on the optimization of natural fibers reinforced Composites	V Sunil Kumar

# Session 4.2 (Design) (29<sup>th</sup> December 2020) (03.30 pm to 06.45 pm) (IST) Venue: GF R8

Sl.No	ID	Title of the paper	Presenting authors
24	120	Low-cost Portable Smart Ventilator	Sourabh Dogra Indian Institute of Technology Mandi
25	130	Investigation on the effect of patternised holes on energy absorption characteristics of aluminium square tubes	Sivaprasad R Sri Sivasubramaniya Nadar(SSN) College of Engineering, Kancheepuram
26	131	Ansys Fluent Analysis of a Thermo Hydrodynamically Lubricated Journal Bearing.	Vaithianathan N IFET College of Engineering, Villupuram
27	135	Investigation on deflection characteristics of auxetic beam structures using FEM	Hrishikesh Gopakumar Menon Amritha School of Engineering, Kerala
28	137	Interdependence of eccentric force, torque, joint angle and angular velocity during human multi-joint leg extension	Ashutosh Swain National Institute of Technology Manipur
29	138	Design and analysis of 3D printable prosthetic foot	Prakash T Bannari Amman Institute of



			Technology, Sathyamangalam, Erode
30	143	Prediction of gear loss factor for high contact	Ravivarman R
30	143	ratio spur gear drive with optimised root stress	Easwari Engineering College, Chennai
			1. Palani Raja G
31	100	Redesign of Automotive Brake Pedal using	2. Esakkimuthu M
31	100	FEA Based Topology Optimization	3. Manickam S
			National Engineering college
			Prerona Dey
32	150	Rotary Car Parking with Solar Roofing	Assam Engineering College,
			Guwahati
			Sivaprasad R
33	152	Experimental investigation on adhesive	Sri Sivasubramaniya Nadar(SSN)
33	132	bonded fold tubes under quasi-static loading	College of Engineering,
			Kancheepuram
			Sivaprasad R
34	153	Numerical crashworthiness investigation of	Sri Sivasubramaniya Nadar(SSN)
34	133	Multi-section Tubes	College of Engineering,
			Kancheepuram
		Design of Table-Top Automated Plane	Gagan Keerthi M
35	158	Polariscope for Digital Photoelastic	Amrita Vishwa Vidyapeetham,
		Measurements	Amritapuri, India
		The Diagnostic Analysis of the Rolling	
36	180	Element Bearings for Machine Tool	Jagadeesha T
30	100	applications using Dimension Theory and	NIT Calicut
		Response Surface Methodology	

Session 4.3 (Energy) (29th December 2020) (03.30 pm to 06.45 pm) (IST) Venue: GF R12

Bession 4.5 (Energy) (2)		<b>December 2020</b> ) (03.30 pm to 00.43 pm) (131)	Venue, of K12
Sl.No	ID	Title of the paper	Presenting authors
24	15	Performance Analysis of VAWT: A Case Study	Jeffrin Immanuel A New Horizon College of Engineering, Bengaluru, Karnataka
25	32	Selective depolymerization of waste biomass into bio-based platform chemicals using sustainable carbon materials	Uplabdhi Tyagi GGS Indraprastha University, Dwarka, New Delhi
26	11	Experimental investigation of a line focus solar collector using flat and parabolic reflector	Gunjan Kumar Shroff S R Rotary Institute of Chemical Technology, Ankleshwar



27	22	Effect of Flow Velocity on the Performance of the	Vimal Patel Sardar Vallabhbhai National
		Savonius Hydrokinetic Turbine	Institute of Technology, Surat
20	25	Review on pragmatic refrigerants deployed in	Shaik Abdulla
28	25	Refrigeration and Air-conditioning system	Hindustan University Chennai
20	26	Optimization of nanofluid parameters for double	Manjunath K
29	26	pipe heat exchanger	Delhi Technological University
		CFD Analysis Of A Mixed Convection Heat	Chinta Rajeev Durga Sai
30	30	Transfer Inside Square Cavity With Hybrid Nano	Gayatri Vidya Parishad College of
		Fluids	Engineering
			Sonic Somanna P K
31	83	Performance Analysis of HAWT: A Case Study	New Horizon College of
			Engineering, Bangalore, India
		T ( 4 F : D ( 14 C ) 1	Lakshmi Sankar S
32	110	Testing the Engine Performance with Cotton seed oil Biodiesel	Sathyabama Institute of Science
		OII DIOGIESEI	and Technology
		Prediction of Unburnt Carbon in Pulverized Coal	Arun M
33	114	Fired High Capacity Boilers Using Response	National Institue of Technology
	11.	Surface Methodology and Artificial Neural	Trichy
		Network	·
	0.4	Performance Analysis of Food Dryer (Microwave	Vedeeswaran D
34	84	Oven Type): A Case Study	New Horizon College of
			Engineering, Bangalore, India
		Effect of nanoparticles as fuel catalyst on the	Seelam Rami Reddy
35	118	performance and emission characteristics of the	Lakireddy Balireddy College of
		diesel engine powered with mango seed biodiesel blend	Engineering
		Comparative Exergo-Enviro-Economic Analysis of	Kirti Tewari
36	126	transparent water heating systems and conventional	
30	120		National Institute of Technology Sikkim
		systems	SIKKIIII

Session 5 (30<sup>th</sup> December 2020) Time: 10.15 am to 01.00 pm (IST)

### Session 5.1 (Manufacturing) (30th December 2020)(10.15 am to 01.00 pm) (IST) Venue: SF7

	Sl.No	ID	Title of the paper	Presenting authors
Γ			Risk Management for e-Commerce Supply Chain	Pradeep Kumar
	38	27	Network Using Robust Optimization Approach:	MBM Engineering College, JNVU,
		A Case Study	JODHPUR	
	39	29	Calculation of Filling Characteristic Of Cast Al -	Samavedam Santhi
	39		Si Alloy	MGIT Hydrebad



40	38	Evaluation of Mechanical and Tribological behaviour of Novel Agro waste ash reinforced	Palanivendhan M SRM Institue of Science and
		Aluminium metal Matrix hybrid composites	Technology, Kanchipuram
41	39	Influence of Ceramic Coatings on the Tribological Characteristics of Stainless-Steel Piston Rings	Dhulipalla Srikar Hari Vishnu     Jennifer Philip     SRM Institue of Science and     Technology, Kattankalathur
42	136	Optimization of Specific cutting energy in turning of AISI 304 Stainless steel using Taguchi method	Annamalai S IFET College of Engineering, Villupuram
43	140	Influence of squeeze time on fracture mode of SS304 spot weldments	Swagat Dwibedi Veer Surendra Sai University of Technology, Burla
44	151	Finite Element Modelling of Temperature Evolution During Selective Laser Melting	S K Nithya Srimurugan National Institute of Technology Calicut
45	155	Mechanical Alloying of Ti20Nb20Mo20Ta20W20 High Entropy Alloy System	Amritava Sarkar Indian Institute of Technology Guwahati
46	159	Effects on Mechanical Properties of High-Density Polyethylene (HDPE) reinforced with Walnut Shell Powder	Adnan Ali Khan Aligarh Muslim University
47	165	Grey-Fuzzy Modeling And Analysis Of Optimizing Turning Process Parameters For Stainless Steel Material	Jegan Prasath V National Engineering College
48	169	The Study of Hybrid fibre content on Mechanical properties of biopolymer CNSL -Epoxy matrix blend composites	Prabhakaran R IFET College of Engineering, Villupuram
49	170	Study of hardness and wear resistance on the newly formulated Aluminium alloy (6082) matrix composite reinforced with boron carbide (B_4 c) and rice husk ash	Thirumaran V IFET College of Engineering, Villupuram

## Session 5.2 (Design) (30<sup>th</sup> December 2020)(10.15 am to 01.00 pm) (IST) Venue: GF R8

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Sl.No	ID	Title of the paper	Presenting authors
37	37	A Study on Effect of Operating Conditions on Gerotor Pump Performance	Tarique Hussain GTRE Bangalore
38	54	Finite Element Analysis for Material Optimization of a Spur Gear by Radial Holes	G. C. Mohan Kumar National institute of technology karnataka ,Surathkal

39	62	Design of vending cum disposal unit of 3 ply/ 4 ply face mask with preventive sterilization	Aniruddha Ghosh Cooch Behar Government
		process to avoid COVID 19 transmission in India	Engineering College, West Bengal
40	86	Investigation on mechanical behaviour of kenaf fabric/bio-epoxy/egg shell powder reinforced composites for medical applications	G.VR. Sakthivel Sri Sivasubramaniya Nadar(SSN) College of Engineering, Kalavakkam, Kancheepuram
41	87	Effect of wall thickness variation on the energy absorption efficiency of cylindrical tubes under axial loading	M. Nalla Mohamed Sri Sivasubramaniya Nadar(SSN) College of Engineering, Kalavakkam, Kancheepuram
42	89	Parametric Study of Capacitive MEMS Accelerometer in COMSOL Multiphysics	Saurabh Mishra Shri G S Institue of Technology and science
43	145	Automatic Guided Food Serving Robot(Agfsr)	Pediredla Shankar Sanketika Vidya Parishad Engineering College
44	161	Structural And Vibration Analysis Of Barge Ship Hull	Baswani Harikrishna Raju Sanketika Vidya Parishad Engineering College, Visakhapatnam
45	163	Investigation of failure in L-shape Woven Carbon fiber Re-enforced Polymer composite under pull-out and 4-point bending	Bipin Kumar Chaurasia National Institue of Technology Jamshedpur
46	181	Topology Optimization of Bench problems – Stress and deformation Perspective	Dara Ashok National Institute of Technology Puducherry

# Session 5.3 (Energy) ( $30^{th}$ December 2020)(10.15 am to 01.00 pm) (IST) Venue: GF R12

Sl.No	ID	Title of the paper	Presenting authors
37	94	Experimental Study on Heat and Mass Exchanger of a Dew Point Indirect Evaporative Cooler	Deepak C B.M.S. College of Engineering
38	81	CFD Analysis of Heat Transfer Through Natural Convection Inside Square Cavity Using Various Nano Fluids	Veeranki Hari Kishan Gayatri Vidya Parishad College of Engineering
39	146	Harvesting electric energy from waste vibrations of an electric motor using the piezoelectric principle	Nitin Yadav Sant Longowal Institute of Engineering and Technology, Longowal



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<sup>\*\*\*</sup> End of the First International Conference ICoFT 2020 (MADE@NITPY)\*\*\*