

International Conference on  
**Recent Innovations and Developments in  
Mechanical Engineering**  
(IC-RIDME 2018)

## Program Schedule



Department of Mechanical Engineering  
**National Institute of Technology Meghalaya**  
(An Institute of National Importance)  
Shillong, Meghalaya-793003, India

~\*~Day Wise Schedule~\*~

## Day 1 (November 8, 2018)

Time	Event	Venue
08.00 AM to 10.00AM	Registration	Registration Desk
	Break fast	Dinner Hall
10.00 AM to 11.00 AM	Inaugural Program	
11.00 AM to 12.00 AM	Keynote Lecture-1: <b>Prof. G. Biswas</b>	Cultural Hall
12.00 AM to 12.30 AM	Invited Talk – 1.1: <b>Prof. P. S. Robi</b>	
12.30 AM to 02.00PM	Poster Presentation	
	<b>Paper ID: 9, 20, 52, 56, 89, 136, 161, 170, 196, 214, 250, 269, 308, 350 (Thermal Engineering); 84, 168, 206, 235, 270, 309, 367, 368 (Vibration and Acoustics); 201, 314 (Turbo-Machinery); 355 (Experimental Aerodynamics)</b>	Dinner Hall
01.00 PM to 02.00 PM	Lunch	
02.00 PM to 02.30 PM	Invited Talk – 1.2: <b>Dr. S.K. Saha</b>	
02.30 PM to 03.45 PM	Parallel Oral Presentation Session 1.1: <i>Fluid Mechanics</i> <i>Paper ID: 8, 28, 194, 203, 245, 251</i>	Cultural Hall
	Parallel Oral Presentation Session 1.1: <i>Materials and Manufacturing</i> <i>Paper ID: 326, 42, 207, 222, 262, 316</i>	Conference Hall - 1
03.45 PM to 04.00 PM	Tea Break	Dinner Hall
04.00 PM to 05.15 PM	Parallel Oral Presentation Session 1.2: <i>Fluid Mechanics</i> <i>Paper ID: 95, 193, 233, 273, 277, 346</i>	Cultural Hall
	Parallel Oral Presentation Session 1.2: <i>Materials and Manufacturing</i> <i>Paper ID: 349, 385, 276, 323, 329, 295</i>	Conference Hall - 1

## Day 2 (November 9, 2018)

Time	Event	Venue
08.00 AM to 09.00AM	Registration	Registration Desk
	Break fast	Dinner Hall
09.00 AM to 10.00AM	Keynote Lecture-2: <b>Prof. S. Gopalakrishnan</b>	
10.00AM to 11.15 AM	Parallel Oral Presentation Session 2.1: <i>Renewable Energy</i> <i>Paper ID: 254, 187, 186, 14, 46, 72</i>	Cultural Hall
	Parallel Oral Presentation Session 2.1: <i>Materials and Manufacturing</i> <i>Paper ID: 19, 313, 283, 357, 365, 335</i>	Conference Hall - 1
11.15 AM to 11.45 AM	Invited Talk – 2.1: <b>Dr. U. Bharali</b>	
11.45 AM to 01.00 PM	Parallel Oral Presentation Session 2.2: <i>Renewable Energy</i> <i>Paper ID: 123, 13, 128, 247, 148, 369</i>	Cultural Hall
	Parallel Oral Presentation Session 2.2: <i>Vibration and Acoustics</i> <i>Paper ID: 59, 103, 111, 125, 156, 353</i>	Conference Hall - 1
12.30 AM to 02.00 PM	Poster Presentation <b>Paper ID: 160, 252, 301, 347, 363, 383, 88, 179, 22, 21, 10, 384, 376, 176, 145, 266, 162</b> <b>(Materials and Manufacturing)</b>	Dinner Hall
01.00 PM to 02.00 PM	Lunch	
02.00 PM to 02.30 PM	Invited Talk – 2.2: <b>Dr. R. C. Damodara</b>	
02.30 PM to 03.45 PM	Parallel Oral Presentation Session 2.3: <i>Thermal Engineering</i> <i>Paper ID: 32, 163, 169, 324, 341, 364</i>	Cultural Hall
	Parallel Oral Presentation Session 2.3: <i>Robotics and Mechatronics</i> <i>Paper ID: 45, 138, 202, 217, 330, 331, 336</i>	Conference Hall - 1
03.45 PM to 04.00 PM	Tea Break	Dinner Hall
04.00 PM to 05.15 PM	Parallel Oral Presentation Session 2.4: <i>Thermal Engineering</i> <i>Paper ID: 121, 166, 172, 182, 228, 237, 291</i>	Cultural Hall
	Parallel Oral Presentation Session 2.4: <i>Materials and Manufacturing</i> <i>Paper ID: 87, 110, 24, 209, 344, 352</i>	Conference Hall - 1
05.15 PM to 05.30 PM	Tea Break	Dinner Hall
05.30 PM to 07.00 PM	Cultural Program	Cultural Hall
7.00 PM	Gala Dinner	Dinner Hall

### Day 3 (November 10, 2018)

Time	Event	Venue
08.00 AM to 09.00 AM	Registration	Registration Desk
	Break fast	Dinner Hall
09.00 AM to 10.00 AM	Keynote Lecture-3: <b>Prof. A. D. Sahasrabudhe</b>	
10.00 AM to 11.15 AM	Parallel Oral Presentation Session 3.1: <i>Experimental Aerodynamics + Turbo Machinery</i> <i>Paper ID: 373, 377, 216, 286, 372, 374</i>	Cultural Hall
	Parallel Oral Presentation Session 3.1: <i>Materials and Manufacturing + Vibration and Acoustics</i> <i>Paper ID: 366, 333, 284, 351 (MM), 167, 260 (VA)</i>	Conference Hall - 1
11.15 AM to 11.45 PM	Invited Talk – 3.1: <b>Prof. P. Mahanta</b>	
11.45 PM to 01.00 PM	Parallel Oral Presentation Session 3.2: <i>Thermal Engineering</i> <i>Paper ID: 85, 91, 133, 240, 282, 289, 307</i>	Cultural Hall
	Parallel Oral Presentation Session 3.2: <i>Materials and Manufacturing</i> <i>Paper ID: 261, 319, 299, 126, 157, 359</i>	Conference Hall - 1
12.30 PM to 02.00 PM	Poster Presentation <b>Paper ID: 31, 39, 78, 124, 180, 234, 322, 327, 358 (Fluid Mechanics); 26, 33, 76, 100, 117, 120, 122, 139, 195, 343, 386 (Renewable Energy); 41, 141, 155, 200, 213, 265, 345, 356 (Robotics and Mechatronics)</b>	Dinner Hall
01.00 PM to 02.00 PM	Lunch	
02.00 PM to 03.15 PM	Parallel Oral Presentation Session 3.3: <i>Renewable Energy</i> <i>Paper ID: 310, 158, 178, 225, 290, 18</i>	Cultural Hall
	Parallel Oral Presentation Session 3.3: <i>Materials and Manufacturing</i> <i>Paper ID: 197, 315, 34, 279, 219, 296</i>	Conference Hall - 1
03.30 PM to 4.00 PM	Valedictory Function	Cultural Hall

~\*~ **Room Wise Schedule** ~\*~

# Technical Oral Sessions

# Cultural Hall

## Day 1

SN	ID	AUTHORS NAME	TITLE OF THE PAPER	CODE
Date: 08/11/2018, Time: 02.30 PM to 03.45 PM (FLUID MECHANICS-I)				
1	8	Nirmalendu Biswas, Nirmal K. Manna and Amrendra Kumar	MHD CONVECTION WITH HEAT GENERATING POROUS SUBSTRATE USING LOCAL THERMAL NON-EQUILIBRIUM MODEL	1.1-FM-01
2	28	Rahul Goswami, Lukesh Kumar Mahato and Deepak Kumar Mandal	THE EFFECT OF RESTING TIME ON THE SHEDDING OF A DROP	1.1-FM-02
3	194	Hiranya Deka, Gautam Biswas and Amaresh Dalal	A COUPLED LEVEL SET AND VOLUME-OF-FLUID METHOD FOR MODELLING TWO-PHASE FLOWS	1.1-FM-03
4	203	Subrat Kotoky, Amaresh Dalal and Ganesh Natarajan	THE ROLE OF PARTICLE DIAMETER ON THE FLUIDIZATION BEHAVIOR IN A BUBBLING GAS-SOLID FLUIDIZED BED	1.1-FM-04
5	245	Binita Nath, Manash Pratim Borthakur, Gautam Biswas and Amaresh Dalal	INFLUENCE OF ELECTRIC FIELD IN THE LATERAL MIGRATION OF A DROP INSIDE A MICROCHANNEL	1.1-FM-05
6	251	Amaresh Dalal, Dipankar Bandyopadhyay and Dipankar Narayan Basu	PREDICTION OF SAUTER MEAN DIAMETER OF SPRAY DURING ELECTRIC DISCHARGE MEDIATED BURSTING OF A DROPLET	1.1-FM-06
Date: 08/11/2018, Time: 04.00 PM to 05.15 PM (FLUID MECHANICS-II)				
1	95	Satyabrata Sahoo and Subhendu Maity	CFD ANALYSIS OF RESPONSES OF TWO-EQUATION TURBULENCE MODELS FOR FLOW OVER NACA 0012, NACA 4412 AND S809 AEROFOILS	1.2-FM-01
2	193	Saurabh Sharma and Koushik Das	FLOW ANALYSIS OF VORTEX GENERATORS IN THE SHROUD OF A HORIZONTAL AXIS WIND TURBINE	1.2-FM-02
3	233	Rajni Kant and Dr. Subhendu Maity	A NOVEL PASSIVE FLOW CONTROL METHOD FOR UNDERWATER VEHICLES	1.2-FM-03
4	273	Chetan Teki Bheema Venkata and Somnath Chakrabarti	NUMERICAL STUDY OF AN ISOTHERMAL FLOW THROUGH A MODIFIED DUMP DIFFUSER OF A COMBUSTOR FOR DIFFERENT DOME SHAPES AND	1.2-FM-04

## Technical Oral Sessions

## Cultural Hall

SN	ID	AUTHORS NAME	TITLE OF THE PAPER	CODE
PREDIFFUSER ANGLES				
5	277	Sunil Manohar Dash, Sahdev Dineshkumar Chavda and Kim Boon Lua	A STUDY ON THE WAKE REGIME CONTROL AND DRAG REDUCTION USING SINGLE SPLITTER PLATE FOR A FLOW PAST A SEMICIRCULAR CYLINDER	1.2-FM-05
6	346	Debayan Bhowmick, Dr. Pitambar Randive and Dr. Sukumar Pati	EFFECT OF THICKNESS OF POROUS LAYER ON THERMO-HYDRAULIC CHARACTERISTICS AND ENTROPY GENERATION IN A PARTIALLY POROUS WAVY CHANNEL	1.2-FM-06

### Day 2

SN	ID	AUTHORS NAME	TITLE OF THE PAPER	CODE
Date: 09/11/2018, Time: 10.00 AM to 11.15 AM (2.1 Renewable Energy - Solar Energy Applications)				
1	254	Abhishek Mishra, Alka Bharti and Bireswar Paul	MATHEMATICAL MODELING AND OPTIMIZED DESIGN ASPECTS OF VARIOUS SECONDARY REFLECTORS FOR SOLAR PARABOLIC TROUGH COLLECTOR	2.1-RE-01
2	187	Jayanarayan Mahakud and Balaram Kundu	TRAPEZOIDAL APPROACH TO ESTABLISH ONE-DIMENSIONAL ANALYSIS OF AN ABSORBER PLATE FOR TWO-DIMENSIONAL HEAT FLOW	2.1-RE-02
3	186	Gaurav Singh and Ranjan Das	ENERGY SAVING POTENTIAL OF AN AIR-CONDITIONING SYSTEM WITH DESICCANT AND SOLAR ASSISTED VENTILATION	2.1-RE-03
4	14	Suresh Vishwakarma, Dr. Biplab Kumar Debnath and Dr. Kishore Debnath	COMPARATIVE ANALYSIS OF ABSORBER TUBES OF PARABOLIC TROUGH SOLAR COLLECTOR USING THERMINOL VP-1 AS HEAT TRANSFER FLUID	2.1-RE-04
5	46	Santosh Bopche and Suraj Bharadwaj	EFFECT OF SIZE AND CASCADING OF RECEIVERS ON THE PERFORMANCE OF A SOLAR COLLECTOR SYSTEM	2.1-RE-05
6	72	Susant Kumar Sahu, N Sendhil Kumar, T Ganapathy and R Vaikunta	EXPERIMENTAL INVESTIGATION OF SOLAR POWERED VAPOR COMPRESSION AIR CONDITIONER WITH INDIAN CLIMATIC CONDITION	2.1-RE-06



## Technical Oral Sessions

## Cultural Hall

SN	ID	AUTHORS NAME	TITLE OF THE PAPER	CODE
Rao				
Date: 09/11/2018, Time: 11.45 AM to 01.00 PM (2.2 Renewable Energy - Solar Energy and Energy Storage)				
1	123	Chandrmani Yadav and Rashmi Rekha Sahoo	EXPERIMENTAL ANALYSIS FOR CHARGING AND DISCHARGING TIME OF VARIOUS PCMS IN THERMAL ENERGY STORAGE SYSTEM	2.2-RE-01
2	13	Laxman Mishra, Abhijit Sinha and Rajat Gupta	THERMO-ECONOMIC STUDY OF PHASE CHANGE MATERIALS (PCMS) FOR THERMAL ENERGY STORAGE	2.2-RE-02
3	128	Sujit Roy, Biplab Das, Agnimitra Biswas and Biplab Kumar Debnath	COMPUTATIONAL ANALYSIS OF SENSIBLE ENERGY STORAGE FOR LOW TEMPERATURE APPLICATION	2.2-RE-03
4	247	Kedumese U Mekrisuh	INTERFEROMETRIC MEASUREMENT OF THE THERMAL BEHAVIOR OF A PHASE CHANGE MATERIAL	2.2-RE-04
5	148	Anand M Sharan, Manabendra Pathak and Manish Vermak	AN ANALYTICAL INVESTIGATION OF SOLAR WATER HEATER PERFORMANCE DURING WINTER PERIOD IN JHARKHAND REGION	2.2-RE-05
6	369	Siddhant Mohapatra, Chanchal Gupta, Sujit Nath and Dipankar Bhanja	A NUMERICAL STUDY ON MICROCHANNEL COOLING FOR PHOTO VOLTAIC CELLS	2.2-RE-06
Date: 09/11/2018, Time: 02.30 PM to 03.45 PM (2.3 Thermal Engineering - I)				
1	32	Sanjeev Kumar Manjhi, Digvijaysinh Barada and Rakesh Kumar	CONDUCTION BASED STANDARDIZATION OF K-TYPE TYPE OF COAXIAL THERMOCOUPLES FOR SHORT DURATION TRANSIENT HEAT FLUX MEASUREMENT	2.3-TE-01
2	163	Arupjyoti Das, Shikha Bhuyan	PERFORMANCE ANALYSIS OF MIXED CONVECTION IN T-SHAPED GEOMETRY FOR ENTROPY GENERATION USING LATTICE BOLTZMANN METHOD	2.3-TE-02
3	169	Lakka Suneetha, Pitambar Randive, K. M. Pandey	A COMPARATIVE EVALUATION OF COMBUSTION CHARACTERISTICS OF STRUTS AND WALL INJECTION TECHNIQUE IN A CAVITY BASED SCRAMJET COMBUSTOR	2.3-TE-03

## Technical Oral Sessions

## Cultural Hall

SN	ID	AUTHORS NAME	TITLE OF THE PAPER	CODE
4	324	H. Barman, R. S. Das	SIMULTANEOUS HEAT AND MASS TRANSFER ANALYSIS IN FALLING FILM ABSORBER	2.3-TE-04
5	341	Virendra Vishnu Bhagwat, Biplab Das	THERMAL PERFORMANCE OF HEAT PIPE WITH PCM JACKET	2.3-TE-05
6	364	P. J. Bezbaruah, R. S. Das, B. K. Sarkar	CFD BASED STUDY ON THERMAL AND FLUID FLOW DYNAMICS DUE TO MILLER TEETH SHAPED RIBS OVER ABSORBER PLATE OF SOLAR AIR COLLECTOR	2.3-TE-06
Date: 09/11/2018, Time: 04.00 PM to 05.15 PM (2.4 Thermal Engineering - II)				
1	121	K. Roy, B. Das, S. Dutta	NATURAL CONVECTIVE HEAT TRANSFER FROM AN INCLINED ISOTHERMAL FIN ARRAY	2.4-TE-01
2	166	Jaideep Dutta, Balaram Kundu	ANALYTICAL MODEL FOR TRI-DIMENSIONAL FOURIER BIOHEAT TRANSFER ENCOUNTERED IN REGIONAL HYPERTHERMIA	2.4-TE-02
3	172	Badyanath Tiwary, Ritesh Kumar, Pawan K Singh	EFFECT OF VARYING OBLIQUE ANGLES ON HEAT TRANSFER ENHANCEMENT IN OBLIQUE CHANNEL	2.4-TE-03
4	182	Alok Ranjan, Koushik Das	PERFORMANCE ANALYSIS OF SPLIT DROP SHAPED PIN FINS FOR IMPROVED HEAT TRANSFER RATE	2.4-TE-04
5	228	Prabhakar Bhandari, Yogesh Kumar Prajapati	NUMERICAL ANALYSIS OF DIFFERENT ARRANGEMENT OF SQUARE PIN-FIN IN MICROCHANNEL HEAT SINK	2.4-TE-05
6	237	Sujit Saha, Balaram Kundu	EXACT ANALYTICAL DETERMINATION OF NUSSELT NUMBER FOR FLOW THROUGH A MICROCHANNEL UNDER ELECTRIC AND MAGNETIC FIELD	2.4-TE-06
7	291	Souradeep Bhowmick, Raghavendra Gupta, Koushik Das	THERMAL ANALYSIS AND ESTIMATION OF TUMOR PROPERTIES IN BREAST TISSUE	2.4-TE-07

## Technical Oral Sessions

## Cultural Hall

### Day 3

SN	ID	AUTHORS NAME	TITLE OF THE PAPER	CODE
Date: 10/11/2018, Time: 10.00 AM to 11.15 AM (3.1 Experimental Aerodynamics + Turbo Machinery)				
1	373	Bruce Ralphin Rose J.	A FESIBILITY STUDY OF SUPER HYDROPHOBIC COATING ON AL 6061 FOR AIRPLANE ANTI-ICING APPLICATIONS	3.1-EA-01
2	377	Sushmita Deka, Ramesh Babu Pallekonda and Maneswar Rahang	DYNAMIC CALIBRATION OF A THREE COMPONENT ACCELEROMETER FORCE BALANCE SYSTEM USING DECONVOLUTION	3.1-EA-02
3	216	A. Gupta, N. Mondal and R. Saha	STRESS & DEFORMATION ANALYSIS OF SWASH PLATE TYPE AXIAL PISTON PUMP	3.1-TM-01
4	286	P. Majumder, K. M. Pandey, N. V. Deshpande and S. Maity	COMPARATIVE STUDY OF STRESS ANALYSIS FOR THREE BLADED UNDERWATER VEHICLE PROPELLERS WITH TWO DIFFERENT COMPOSITE MATERIALS	3.1-TM-02
5	372	Vinod J, Bikash Kumar Sarkar, Saikat Mookherjee and Dipankar Sanyal	ACTIVE POWER CONTROL OF THE FRANCIS TURBINE SYSTEM BY MODEL FREE ADAPTIVE CONTROLLER	3.1-TM-03
6	374	Bhaskar Ranjan Tamuli, Sujit Nath and Dipankar Bhanja	NUMERICAL STUDY OF CO-AXIAL EVACUATED TUBE COLLECTOR WITH NANOFLUID	3.1-FM-01
Date: 10/11/2018, Time: 11.45 AM to 01.00 PM (3.2 Thermal Engineering - III)				
1	85	Prasanta Majumder, Abhijit Sinha, Laxman Mishra, Rajat Gupta	PREDICTION OF MOISTURE RATIOS (MRS) DURING FLUIDIZED BED DRYING OF GINGER (ZINGIBER OFFICINALE) CUBES BY USING MATHEMATICAL MODELLING AND EXPERIMENTAL VALIDATION	3.2-TE-01
2	91	Prabhansu, S. Ganguli, K. K. Dwivedi, P. Chandra, M. K. Karmakar, P. K. Chatterjee	HYDRODYNAMICS OF A CFB GASIFIER WITH TWO DIFFERENT CROSS SECTIONS IN THE RISER	3.2-TE-02
6	133	Raghav Mundhra, Achintya Mukhopadhyay	THERMODYNAMIC ANALYSIS OF IRREVERSIBLE REVERSED BRAYTON CYCLE HEAT PUMP WITH FINITE CAPACITY FINITE CONDUCTANCE HEAT RESERVOIRS	3.2-TE-03

## Technical Oral Sessions

## Cultural Hall

SN	ID	AUTHORS NAME	TITLE OF THE PAPER	CODE
3	240	Rajesh Kumar, Ravi Anand, Sujit Karmakar	THERMODYNAMIC ANALYSIS OF A 500-MWE SUBCRITICAL COAL-FIRED THERMAL POWER PLANT WITH SOLAR-AIDED POST COMBUSTION CO <sub>2</sub> CAPTURE	3.2-TE-04
4	282	Binayak Pattanayak, Siba Shankar Mohapatra, Harish Chandra Das	BED HYDRODYNAMICS OF FLUIDIZED BED PADDY DRYING: AN EXPERIMENTAL STUDY	3.2-TE-05
5	289	Sameer S. Gajghate, Anil Acharya, Swapan Bhaumik	EXPERIMENTAL STUDIES ON ENERGY CONSERVATION IN POOL BOILING HEAT TRANSFER USING ECO- FRIENDLY ADDITIVE	3.2-TE-06
6	307	P. Nimalipuri, H. C. Das, M. K. Pradhan	SIMULATION OF EMISSION FROM COAL FIRED POWER PLANT	3.2-TE-07
Date: 10/11/2018, Time: 02.00 PM to 03.15 PM (3.3 Renewable Energy and Power)				
1	310	Uddipta Das and Prasanta Kumar Choudhury	PARAMETRIC OPTIMIZATION FOR YIELD OF BIODIESEL FROM WASTE COOKING OIL FEEDSTOCK	3.3-RE-01
2	158	Badal Kudachi, Nitin Satpute and Nilaj Deshmukh	PERFORMANCE AND EMISSION CHARACTERISTICS OF THERMAL BARRIER COATING ON DIESEL ENGINE FUELED WITH COTTONSEED BIO DIESEL	3.3-RE-02
3	178	R. Krishnan, L. Hauchhum, Rajat Gupta, S. Pattanayak and G. Gopan	THE FEASIBILITY OF EXTRACTION OF BIO-OIL FROM SAW DUST AND BEETLE NUT SHELL	3.3-RE-03
4	225	Sangjukta Devi, Niranjana Sahoo and P Muthukumar	STUDY OF LPG AND BIOGAS COMBUSTION IN A DOUBLE LAYER SIDEWAY FACED POROUS RADIANT BURNER (SFPRB)	3.3-RE-04
5	290	Emanuel Khrawbor Mawson, Neeraj Kumar and Bikash Kumar Sarkar	WIND TURBINE TRANSMISSION SYSTEM DESIGN AND CONTROL FOR SMOOTH POWER GENERATION	3.3-RE-05
6	18	S. P. Singh and B. K. Debnath	EXERGY ANALYSIS OF A VARIABLE COMPRESSION RATIO ENGINE OPERATED ON DIESEL AND PINE SEED OIL BIODIESEL BLENDS	3.3-RE-06

## Technical Oral Sessions

## Conference Room-I

### Day 1

SN	ID	AUTHORS NAME	TITLE OF THE PAPER	CODE
Date: 08/11/2018, Time: 02.30 PM to 03.45 PM (1.1 Materials and Manufacturing - I)				
1	326	Rashed Mustafa Mazarbhuiya and Maneswar Rahang	APARAMETRIC STUDY OF PHOTOCHEMICAL MACHINING OF ALUMINIUM USING TAGUCHI APPROACH	1.1 MM: 01
2	42	Anshuman Das, Saroj Kumar Patel, Bibhuti Bhusan Biswal and Rabindra Narayan Mahapatra	COMPARATIVE STUDY OF SOME MACHINING CHARACTERISTICS DURING HARD TURNING OF ALLOY STEEL WITH UNTREATED AND CRYOTREATED CERMET INSERTS	1.1 MM: 02
3	207	Sumith S, Shankar K and Krishna Kannan	A NUMERICAL STUDY OF THE EFFECT OF GROUSER SHAPES ON TRAFFICABILITY OF EXTREMELY SOFT SEABED SOILS	1.1 MM: 03
4	222	Gurdeep Singh, Ravindra K Saxena and Sunil Pandey	FINITE ELEMENT BASED PREDICTION OF TRANSIENT TEMPERATURE DISTRIBUTION, HEAT AFFECTED ZONE AND RESIDUAL STRESSES IN AISI 304 STAINLESS STEEL WELDMENT	1.1 MM: 04
5	262	Upasana Sarma and Shrikrishna N. Joshi	TWO-DIMENSIONAL NUMERICAL INVESTIGATION ON THE EFFECT OF LASER PARAMETERS DURING LASER INDIRECT MACHINING OF GLASS	1.1 MM: 05
6	316	Anjani Kumar, Rana Singh, Rahul Rathore and Anil Das	MICROSTRUCTURE AND MICROHARDNESS CHARACTERISTICS OF TIC-TIN CERAMICS COATING BY TIG PROCESS ON MILD STEEL	1.1 MM: 06
Date: 08/11/2018, Time: 04.00 PM to 05.15 PM (1.2 Materials and Manufacturing - II)				
1	349	Enni Krishna, D Sam Dayala Dev and Manas Das	INDUCTION OF CONDITIONING AND ITS OPTIMIZATION IN NON-CONVENTIONAL PLASMA MACHINING PROCESS OF FUSED SILICA	1.2 MM: 01
2	385	Hariom Tripathi, Ajaya Bharti, Ankur Vishal and Naveen Kumar	EFFECT OF TOOL ROTATION ON MICRO-STRUCTURE AND HARDNESS OF AZ31 MG ALLOY PROCESSED BY FSP	1.2 MM: 02
3	276	Rahul Kumar, Gaurav Kumar and Sumit Bhowmik	SYNTHESIS AND RESPONSIVE STUDY OF TENSILE AND FLEXURAL PROPERTIES OF BAMBOO FILLER BASED FUNCTIONALLY GRADED COMPOSITE	1.2 MM: 03

## Technical Oral Sessions

## Conference Room-I

SN	ID	AUTHORS NAME	TITLE OF THE PAPER	CODE
4	323	Mridusmita Roy Choudhury and Kishore Debnath	DRILLING ANALYSIS OF NATURAL FIBER-REINFORCED POLYLACTIC ACID COMPOSITES FABRICATED BY HOT COMPRESSION MOULDING	1.2 MM: 04
5	329	Nitish Kumar, Petta Avinash, Abhishek Singh and Kishore Debnath	EFFECT OF FIBER ORIENTATION ON THE TENSILE AND WEAR PROPERTIES OF FLAX FIBER-REINFORCED COMPOSITES	1.2 MM: 05
6	295	Sanjib Kr Rajbongshi, Deba Kumar Sarma and Meinam Annebushan Singh	A BRIEF REVIEW OF WHITE LAYER FORMATION IN HARD MACHINING WITH A CASE STUDY	1.2 MM: 06

### Day 2

SN	ID	AUTHORS NAME	TITLE OF THE PAPER	CODE
Date: 09/11/2018, Time: 10.00 AM to 11.15 AM (2.1 Materials and Manufacturing - III)				
1	19	M. K. Singh, N. Verma, N. Pundhir, S. Zafar and H. Pathak	OPTIMIZATION OF MICROWAVE POWER AND REINFORCEMENT IN MICROWAVE CURED COIR/ HDPE COMPOSITES	2.1 MM: 01
2	313	Arvind Kumar and Ram Naresh Rai	EVALUATION OF DRY SLIDING WEAR PROPERTIES OF STIR CAST AA7050/10B4C COMPOSITES THROUGH FUZZY-ARAS	2.1 MM: 02
3	283	S. Datta, N. Dana, S. Bhagat, K. Bhowmik and A. R. Chowdhury	ACHIEVING DESIRED MODULUS BY VARYING PORE PARAMETERS USING FINITE ELEMENT ANALYSIS	2.1 MM: 03
4	357	S. Kar, P. Sarmah, B. K. Baroi and P. K. Patowari	DRILLING OF MICRO HOLES IN TITANIUM USING MICRO EDM: A PARAMETRIC INVESTIGATION	2.1 MM: 04
5	365	S. K. Bose, S. Patra, A. Kundu and P. K. Bardhan	PARAMETRIC OPTIMIZATION OF PROCESS PARAMETERS IN WEDM OF AISI 316 STAINLESS STEEL	2.1 MM: 05
6	335	T. Debnath and P. K. Patowari	DRILLING AN ARRAY OF SQUARE MICRO HOLES USING MICRO-EDM	2.1 MM: 06
Date: 09/11/2018, Time: 11.45 AM to 01.00 PM (2.2: Vibration and Acoustics)				

## Technical Oral Sessions

## Conference Room-I

SN	ID	AUTHORS NAME	TITLE OF THE PAPER	CODE
1	59	Gireesh Sharma N, T Sundararajan and Sachin Singh Gautam	DESIGN OF INERTIAL CLASS GYROSCOPE RESONATOR WITH ULTRA HIGH QUALITY FACTOR FOR INTERPLANETARY SPACE MISSIONS	2.2 VA: 01
2	103	Bhuvnesh Sharma, Shekhar Baghel and M.K. Paswan	NUMERICAL ANALYSIS OF SUSPENSION SYSTEM WITH FRACTIONAL ORDER CONTROLLER OF QUARTER CAR MODEL	2.2 VA: 02
3	111	Preeti Gulia and Arpan Gupta	MULTI-DIRECTIONAL SOUND REDUCTION BY SLITTED SONIC CRYSTAL	2.2 VA: 03
4	125	Shitendu Some and Sisir Kumar Guha	EFFECT OF JOURNAL MISALIGNMENT AND COUPLED-STRESS LUBRICANT ON THE FILM PRESSURE OF A DOUBLE-LAYERED POROUS JOURNAL BEARING	2.2 VA: 04
5	156	Suresh K, Shankar Krishnapillai and Sujatha C	A NOVEL PASSIVE MECHANISM TO IMPROVE INDUCED STRAIN IN TWO DOF PIEZOELECTRIC ENERGY HARVESTER	2.2 VA: 05
6	353	Sibananda Mohanty, Saptarshi Sikder and Santosh K Dwivedy	NONLINEAR ANALYSIS OF ROTATIONAL INERTIAL DOUBLE TUNED MASS DAMPER BY HARMONIC BALANCE METHOD	2.2 VA: 06
Date: 09/11/2018, Time: 02.30 PM to 03.45 PM (2.3 Robotics and Mechatronics)				
1	45	B. Halder	SEMI-ISOTROPICALLY OPTIMIZED STEWART PLATFORM MANIPULATOR DESIGN WITH ACTUATOR STROKE CONSTRAINT	2.3 RM: 01
2	138	A. Rout, G.Mohanta, B.Gunji, BBVL Deepak, B.B.Biswal	KINEMATIC AND DYNAMIC OPTIMAL TRAJECTORY PLANNING OF INDUSTRIAL ROBOT USING MULTI-OBJECTIVE ANT LION OPTIMIZER	2.3 RM: 02
3	202	P. K. Sahu, B. K. Khamari, B. K. Balabantaray, B. B. Biswal	GEODESIC APPROACH FOR TRAJECTORY PLANNING OF MOBILE ROBOT MANIPULATORS	2.3 RM: 03
4	217	Gaurav Kumar Mandal, Sohag Sutar, Anindya Datta, Pranibesh Mandal	ELECTRO-HYDRAULIC MOTION TRACKING CONTROL OF A HOT MS PLATE OF A LABORATORY SCALE RECIPROCATING ROT	2.3 RM: 04
5	330	M.K. Muni, P. B. Kumar, D.R. Parhi,	PATH PLANNING OF A HUMANOID ROBOT USING RULE BASED	2.3 RM: 05

## Technical Oral Sessions

## Conference Room-I

SN	ID	AUTHORS NAME	TITLE OF THE PAPER	CODE
		A.K. Rath, H. C. Das, A. Chhotray, K. K. Pandey	TECHNIQUE	
6	331	R. Patra, H. C. Das, J. Sahoo S. M. Ali and A.K. Rath	IDENTIFICATION OF MAXIMUM STRESSED REGION IN HIP PROSTHESIS	2.3 RM: 06
7	336	Alok Balhwan, Ashwani Kumar, M K Kalra, L K Sinha DRDO	RADIAL-PLY TYRE DEFLECTION AND CONTACT LENGTH: EXPERIMENTATION AND VALIDATION OF EXTANT MODELS	2.3 RM: 07
Date: 09/11/2018, Time: 04.00 PM to 05.15 PM (2.4 Materials and Manufacturing - IV)				
1	87	Dipraj Banik, Rahul, Himanshu Ranjan Sinha, Bibhuti Bhusan Biswal	PROCESS PARAMETERS OPTIMIZATION OF EDMED SURFACE OF TITANIUM GRADE-4 ALLOY USING TOPSIS COUPLED WITH TAGUCHI PHILOSOPHY	2.4 MM: 01
2	110	Nayan Pundhir, Gaurav Arora, Himanshu Pathak and Sunny Zafar	BALLISTIC IMPACT RESPONSE OF HDPE/UHMWPE POLYMER COMPOSITE	2.4 MM: 02
3	24	Gaurav Arora and Himanshu Pathak	MULTI-SCALE COMPUTATIONAL ANALYSIS OF CARBON NANOTUBE-POLYMER COMPOSITE	2.4 MM: 03
4	209	Saransh Tiwari, Biplab K. Roy and Amitava Mandal	MACHINABILITY ANALYSIS OF TI GRADE 12 USING WEDM PROCESS	2.4 MM: 04
5	344	Rita Kumari Sahu, Ratnakar Das and B. C. Routara	FINITE ELEMENT ANALYSIS OF DIE DESIGNS IN MULTI-HOLE EXTRUSION PROCESS	2.4 MM: 05
6	352	Jibin T Philip, Basil Kuriachen and Jose Mathew	FACTOR EFFECT ON CRATER SHAPES IN ELECTRICAL DISCHARGE MACHINING	2.4 MM: 06



## Technical Oral Sessions

## Conference Room-I

### Day 3

SN	ID	AUTHORS NAME	TITLE OF THE PAPER	CODE
Date: 10/11/2018, Time: 10.00 AM to 11.15 AM (3.1 Materials and Manufacturing + Vibration and Acoustics)				
1	366	Saurav Suman, Avinish Tiwari, Pardeep Pankaj and Dr. Pankaj Biswas	NUMERICAL STUDY OF WELDING DISTORTION IN SAW WELDED CREEP STRENGTH ENHANCED FERRITE STEEL JOINT	3.1 MM: 01
2	333	Rajesh Verma, Prakhar Kharwar, Arpan Mandal and Kumar Abhishek	EXPLORATION OF MOORA BASED HYBRID TAGUCHI METHOD FOR MULTI-RESPONSE OPTIMIZATION- A CASE STUDY	3.1 MM: 02
3	284	Agradeep Deb, Anjali Ladha, Manish Baruah, Arunav Kar, Monoj Baruah and Anil Borah	A STUDY OF EFFECT OF MICRO-ALLOYING OF TIN ON AGEING BEHAVIOUR OF 6XXX SERIES ALUMINIUM ALLOYS	3.1 MM: 03
4	351	Pranesh Dutta, Anwesa Barman, Abhinav Kumar and Manas Das	DEVELOPMENT OF ELECTROCHEMICAL MICRO MACHINING (ECMM) EXPERIMENTAL SET-UP FOR FABRICATION OF MICRO-HOLES	3.1 MM: 04
5	167	Sankar Kumar Roy, Amiya Ranjan Mohanty and Cheruvu Siva Kumar	CEPSTRUM ANALYSIS OF INSTANTANEOUS ANGULAR SPEED FOR GEARBOX FAULT DETECTION	3.1 VA: 01
6	260	Subhankar Roy, Tanmoy Bose and Kishore Debnath	DETECTION OF LOCAL DEFECT RESONANCE FREQUENCIES FOR DEFECT IMAGING: A NONLINEAR ULTRASOUND BASED APPROACH	3.1 VA: 02
Date: 10/11/2018, Time: 11.45 AM to 01.00 PM (3.2 Materials and Manufacturing - V)				
1	261	Vivek Singh, Muthumari Chandrasekaran and Sutanu Samanta	MODELLING AND OPTIMIZATION GAS METAL ARC WELDING OF NITROGEN STRENGTHENED AUSTENITIC STAINLESS STEEL (AISI 201GR)	3.2 MM: 01
2	319	Chandan Kumar and Manas Das	MICROSTRUCTURAL CHARACTERIZATION IN FIBER LASER WELDMENTS OF TI-6AL-4V ALLOY	3.2 MM: 02
3	299	Anupam Alok and Manas Das	ANALYSIS OF CHIP FORMATION OF AISI 52100 STEEL DURING	3.2 MM: 03

## Technical Oral Sessions

## Conference Room-I

SN	ID	AUTHORS NAME	TITLE OF THE PAPER	CODE
			HARD TURNING WITH NEWLY DEVELOPED HSN2 COATED CARBIDE INSERT	
4	126	D Devarasiddappa, Muthumari Chandrasekaran and Nabam Teyi	PCA-GRA INTEGRATED MULTI RESPONSE OPTIMIZATION OF WIRE EDM PROCESS PARAMETERS ON SURFACE ROUGHNESS AND POWER CONSUMPTION OF TI-6AL-4V ALLOY FOR SUSTAINABLE PRODUCTION	3.2 MM: 04
5	157	Borad M. Barkachary and Shrikrishna N. Joshi	NUMERICAL MODELING AND SIMULATION OF PLUNGE CUTTING OF SILICON USING FINITE ELEMENT METHOD	3.2 MM: 05
6	359	S. Jambukar, S. Chandra Mohan	EFFECTS OF KINGPIN AND CASTER OFFSET ON BRAKING STABILITY OF LONG WHEELBASE BUS	3.2 RM: 08
SN	ID	AUTHORS NAME	TITLE OF THE PAPER	CODE
Date: 10/11/2018, Time: 02.00 PM to 03.15 PM (3.3 Materials and Manufacturing - VI)				
1	197	Dhrubajit Sarma, Jadab Sonowal, Madhurya Paul, Anal Bezborah, Muthumari Chandrasekaran and Ashok K. Sahoo	HARD TURNING INVESTIGATION OF AISI 4340 STEEL AND MULTI RESPONSE OPTIMIZATION	3.3 MM : 01
2	315	Meinam Annebushan Singh, Dr. Deba Kumar Sarma, Sanjib Kr Rajbongshi, Dr. Ondrej Hanzel and Dr. Pavol Sagjalik	INVESTIGATION OF MACHINING CAPABILITIES OF 2.5 VOL. % MWCNT AL2O3 COMPOSITES IN $\mu$ -EDM	3.3 MM : 02
3	34	Subhasish Sarkar, Sameer Lamichaney, Rishav Baranwal, Isita Koley, Tapendu Mandal and Gautam Majumdar	AN EXPERIMENTAL AND THEORETICAL APPROACH IN DETERMINING THE OPTIMIZED PROCESS PARAMETERS ON THE RESPONSE OF CORROSION RESISTANCE OF ELECTROLESS NI-CO-P COATING	3.3 MM : 03
4	279	Arnab Saikia. Manash Bhuyan and Anil Borah	A STUDY ON THE EFFECT OF MICRO-ALLOYING OF TITANIUM IN 2XXX SERIES ALUMINIUM ALLOY	3.3 MM : 04

## Technical Oral Sessions

## Conference Room-I

SN	ID	AUTHORS NAME	TITLE OF THE PAPER	CODE
5	219	Dr. Ratnakar Das, Umasankar Das, Vijay Toppo and S. Muthukumarian	CHARACTERIZATION OF FRICTION STIR WELDED JOINTS OF AA6101-T6 AND AA6351-T6 ALUMINIUM ALLOYS	3.3 MM : 05
6	296	Basil Kuriachen and Jose Mathew	EFFECT OF $\mu$ EDM MILLING PROCESS PARAMETERS ON SURFACE ROUGHNESS DURING MACHINING TI-6AL-4V	3.3 MM : 06

# Technical Poster Presentations

Dinner Hall

## Day 1

Date: 08/11/2018, Time: 12.30 PM to 02.00 PM

SN	ID	AUTHORS NAME	TITLE OF THE PAPER
<b>Thermal Engineering</b>			
1	9	K. Roy, A. Giri, M. R. Singh	EXPERIMENTAL INVESTIGATION OF FORCED CONVECTIVE COOLING OF RECTANGULAR BLOCKS
2	20	R. Roy, B. K. Mandal	THERMO-ECONOMIC ANALYSIS OF VAPOUR COMPRESSION REFRIGERATION SYSTEM WITH DEDICATED SUBCOOLER
3	52	Prabin Haloi , Dr. Tapan Kumar Gogoi	PERFORMANCE ANALYSIS OF A COAL-FIRED OPEN CYCLE MHD PLANT AT CONSTANT SUBSONIC INLET NOZZLE MACH NUMBER
4	56	A. Chatterjee, B.K. Mandal	A SIMPLIFIED APPROACH FOR THE RAPID EVALUATION OF THERMODYNAMIC PROPERTIES OF SATURATED WATER AND STEAM
5	89	Dipankar Saha, Abhijit Sinha	PERFORMANCE AND EMISSION CHARACTERISTICS OF VARIABLE COMPRESSION RATIO (VCR) ENGINE USING DIFFERENT BIOFUELS -A REVIEW
6	136	K. K. Dwivedi, Prabhansu, A.K.Pramanick, M.K .Karmakar, P.K.Chatterjee	INDIAN SUB-BITUMINOUS AND LOW RANK COAL GASIFICATION EXPERIMENTS IN A CIRCULATING FLUIDIZED BED GASIFIER UNDER AIR ATMOSPHERE
7	161	S.Sukumar, A. Sinha, S.P. Kar	A THERMAL MODEL FOR TEMPERATURE CONTROL OF BUILDING SUBJECTED TO VARIABLE SOLAR RADIATION
8	170	Lakka Suneetha, Pitambar Randive, K. M. Pandey	NUMERICAL INVESTIGATION ON THE EFFECT OF TURBULENCE MODELS ON PREDICTION OF COMBUSTION CHARACTERITCS OF SCRAMJET COMBUSTOR
9	196	S. Harikrishnan, Shaligram Tiwari	SIMULATION OF FULLY DEVELOPED FLOW AND HEAT TRANSFER IN WAVY CHANNELS USING OPENFOAM
10	214	Dhruv R. Karana, Tanubhav K. Srivastava, R.R. Sahoo	MODELING AND PERFORMANCE COMPARISON OF TEG WITH COOLANT IN PARALLEL AND COUNTER FLOW CONFIGURATIONS
11	250	Dhananjay Singh Yadav, Bireswar	PERFORMANCE ANALYSIS OF LPG COOK STOVES WITH

## Technical Poster Presentations

Dinner Hall

SN	ID	AUTHORS NAME	TITLE OF THE PAPER
		Paul	MODIFICATIONS
12	269	R. Kumar, B. Tiwary, P. K. Singh	PARAMETRIC STUDY OF WAVY MICROCHANNEL USING NANO FLUID
13	308	Vasujeet Singh, Dr. Harish Chandra Das, Pruthiviraj Nimalipuri	NUMERICAL ANALYSIS OF HEAT TRANSFER AND FLUID FLOW IN MINI CHANNEL HEAT SINK WITH INTERCONNECTING CHANNELS
14	350	Tanmoy Majhi, Balaram Kundu	NEW APPROACH FOR DETERMINING FIN PERFORMANCES OF AN ANNULAR DISC FIN WITH INTERNAL HEAT GENERATION
<b>Vibration and Acoustics</b>			
1	84	Praveen Sharma, Dr. Subhas Chandra Rana and Dr. Rabindra Nath Barman	EXPERIMENTAL STUDY ON VIBRATION ANALYSIS OF A NEEDLE ROLLER BEARING USING VARIOUS GRADES OF LUBRICANT VISCOSITY
2	168	Sankar Kumar Roy	COMBUSTION DETECTION IN IC ENGINE BY ANALYSIS OF INSTANTANEOUS ANGULAR ACCELERATION
3	206	Anish R and Shankar K	IDENTIFICATION OF NONLINEAR STRUCTURAL PARAMETERS USING COMBINED POWER FLOW AND ACCELERATION MATCHING APPROACHES
4	235	Ranjan Kumar Behera, Nitin Sharma and Sambit Kumar Parida	FINITE ELEMENT ANALYSIS OF FLEXURAL, BUCKLING AND FREE VIBRATION OF CLAMPED LAMINATED COMPOSITE PLATES IN VARIABLE THERMAL ENVIRONMENT
5	270	K Sreeraj, P Ramkumar and Praveen Varma	ANALYSIS ON HYDROGEN UPTAKE INTO STEEL FROM LUBRICATED SLIDING CONTACT USING IN-SITU MONITORING TECHNIQUE
6	309	M. Haq, T. Naqvi and S. Bhalla	NUMERICAL ASSESSMENT OF FATIGUE LIFE FOR CONCRETE COLUMN
7	367	Manjeet Keshav and Sujatha Chandramohan	COMPARATIVE STUDY OF PERFORMANCE OF OPTIMIZED VALVE FOR DIFFERENT FLOW INDICES OF RHEOLOGICAL MODEL
8	368	Dipesh Kumar Nayak and Pusparaj Dash	STATIC STABILITY INVESTIGATION OF AN ASYMMETRIC SANDWICH BEAM IN TEMPERATURE ENVIRONMENT

## Technical Poster Presentations

Dinner Hall

SN	ID	AUTHORS NAME	TITLE OF THE PAPER
<b>Turbo Machinery</b>			
1	201	Gyanendra Tiwari, Vishnu Prasad, S. N. Shukla and Vivek Kumar Patel	DERIVATION OF COMPLETE PERFORMANCE CHARACTERISTICS OF A LOW HEAD PROTOTYPE FRANCIS TURBINE USING CFD
2	314	Neeraj Kumar, Subhendu Maity and Bikash Kumar Sarkar	RECENT DEVELOPMENT AND APPLICATION ON HYDROSTATIC TRANSMISSION SYSTEM-A REVIEW
<b>Experimental Aerodynamics</b>			
1	355	S. Dey, T. Murugan and D. Chatterjee	A SIMPLE METHOD TO DESIGN A BLAST GENERATOR FOR PRODUCING A BLAST WAVE

## Day 2

Date: 09/11/2018, Time: 12.30 PM to 02.00 PM

SN	ID	AUTHORS NAME	TITLE OF THE PAPER
<b>Materials and Manufacturing</b>			
1	160	Sanjib Banerjee, Rakesh Bhadra, Ravi Dutta Dutta and Sanjib Gogoi	INVESTIGATING WELDABILITY IN MICROALLOYED AL ALLOYS
2	252	N. Devi, A. Bhar and R. Pandey	ISOGEOMETRIC FE ANALYSIS OF LAMINATED COMPOSITE PLATES
3	301	P. Hazarika and C. Kalita	MINIMISATION OF TRANSPORTATION COST OF PARAFFIN WAX: A PROPOSED APPROACH USING C
4	347	Kunal Sharma, Manas Das and Ambrish Singh	DEVELOPMENT OF A MAGNETIC FIELD ASSISTED FINISHING (MFAF) PROCESS FOR NANOFINISHING OF FERROMAGNETIC AIR COMPRESSOR CYLINDER
5	363	M. Vashum, S. Roy and T. Bose	SHEAR BEHAVIOUR OF THE DELAMINATED GLASS FIBER REINFORCED COMPOSITE LAMINATES
6	383	Naveen Kumar, Ajaya Bharti	INVESTIGATION OF MICROSTRUCTURAL AND MECHANICAL PROPERTIES OF

## Technical Poster Presentations

Dinner Hall

Date: 09/11/2018, Time: 12.30 PM to 02.00 PM			
SN	ID	AUTHORS NAME	TITLE OF THE PAPER
		and Hariom Tripathi	MAGNESIUM MATRIX HYBRID COMPOSITE
7	88	H. R. Sinha, Rahul and B. B. Biswal	ANALYTICAL STUDY FOR ENHANCING GEAR PERFORMANCE USING AL2O3 PAINT COATING
8	179	Vinay Varier, Sachin Barve and Sachin Naik	APPLICATION OF NITRIDING TREATMENTS ON EN 3 AND EN 24 STEELS FOR ROTATING BENDING FATIGUE RESISTANCE
9	22	Lokeswar Patnaik, Saikat Ranjan Maity and Sunil Kumar	CONCEPTUALIZATION AND DEVELOPEMENT OF MACHINING FIXTURE FOR MACHINING IN CRANKCASE CYLINDER
10	21	Sunil Kumar and Lokeswar Patnaik	DESIGN AND SIMULATION STUDY OF HDFC FOR AUTOMOTIVE PARTS-PINION HOUSING BASED ON ADSTFEAN CASTING SIMULATION SYSTEM
11	10	J. T. Thimmaiha, A. K. Gajakhosh and R. J. Jinaga	TRIBOLOGICAL AND MECHANICAL CHARACTERISATION OF ELECTROLYTIC HARD CHROME AND WC-CO COATINGS
12	384	D. Kumar, A. Bharti, N. Kumar and H. Tripathi	INVESTIGATIONS OF MECHANICAL PROPERTIES OF COPPER MATRIX HYBRID COMPOSITE
13	376	Navneet Khare, Gorang Sharma and Yashwant K. Modi	FINITE ELEMENT ANALYSIS OF SOME SYNTHETIC BIOMATERIAL FOR PATIENT-SPECIFIC FEMUR BONE
14	176	Amrinder Singh Pannu, Sehijpal Singh and Vikas Dhawan	USE OF AGRO BASED BIODEGRADABLE WASTE AS NATURAL FIBERS – A REVIEW ON THEIR MECHANICAL AND ACOUSTIC PROPERTIES
15	145	T. Sarma, D. Pandey, N. Sahai, D. Bhatia and R. P. Tewari	MANUFACTURING OF PATIENT SPECIFIC ANKLE FOOT ORTHOTIC DEVICE USING 3D PRINTING
16	266	Jitendra Kumar, Sanghamitra Das and Shrikrishna N Joshi	THREE-DIMENSIONAL NUMERICAL MODELLING OF TEMPERATURE PROFILES ON THE WIRE ELECTRODE DURING WIRE ELECTRIC DISCHARGE MACHINING PROCESS
17	162	Ankit Saxena and Dr. Ravindra Kumar Saxena	THERMO-MECHANICAL ANALYSIS OF AL-7075 TO PREDICT RESIDUAL STRESSES BY USING 3-D FEM SIMULATION

# Technical Poster Presentations

Dinner Hall

## Day 3

Date: 10/11/2018, Time: 12.30 PM to 02.00 PM

SN	ID	AUTHORS NAME	TITLE OF THE PAPER
<b>Fluid Mechanics</b>			
1	31	S. Das, N. Mondal and N. Hossain	HULL SHAPE OPTIMISATION OF AUTONOMOUS UNDERWATER VEHICLE USING CFD ANALYSIS
2	39	V. Kumar, R. K. Singh and D. K. Mandal	IMPACT OF PALM OIL METHYL ESTER DROPS ON A SURFACE
3	78	A. Kumar, A. Singh and D. K. Mandal	SUCCESSIVE IMPACT OF TWO DROPS ON SURFACES WITH VARIOUS WETTABILITIES
4	124	Debayan Dasgupta, Sujit Nath and Dipankar Bhanja	LINEAR INSTABILITY ANALYSIS OF VISCOUS PLANAR LIQUID SHEET SANDWICHED BETWEEN TWO MOVING GAS STREAMS
5	180	H. S. R. Balla and S. R. Modampuri	FORCED CONVECTION PAST A SPHERE FOR LIQUID METALS
6	234	Yatish Baghel and Vivek Kumar Patel	EXPERIMENTAL AND COMPUTATIONAL ANALYSIS OF HEAT TRANSFER BY A TURBULENT AIR JET IMPINGEMENT ON A FLAT SURFACE
7	322	B. Hema Sundar Raju	FOURTH ORDER COMPUTATIONS OF MIXED CONVECTION PAST A SPHERE FOR LIQUID LITHIUM
8	327	Abdulrajak Buradi and Arun Mahalingam	NUMERICAL ANALYSIS OF WALL SHEAR STRESS PARAMETERS OF NEWTONIAN PULSATILE BLOOD FLOW THROUGH CORONARY ARTERY AND CORRELATION TO ATHEROSCLEROSIS
9	358	Alankrita Singh and Prasad Bvsss	COMPUTATIONAL STUDY OF SLOT JET IMPINGEMENT HEAT TRANSFER ON A COMBINED DIMPLED AND PROTRUDED CONCAVE SURFACE
<b>Renewable Energy</b>			
1	26	A. Maisanam, B. Podder, K. K. Sharma and A. Biswas	SOLAR RESOURCE ASSESSMENT USING GHI MEASUREMENTS AT A SITE IN NORTHEAST INDIA



## Technical Poster Presentations

Dinner Hall

Date: 10/11/2018, Time: 12.30 PM to 02.00 PM			
SN	ID	AUTHORS NAME	TITLE OF THE PAPER
2	33	S. Vishwakarma, P. K. Meher, B. K. Debnath and K. Debnath	COMPUTATIONAL ANALYSIS OF INTERNALLY GROOVED ABSORBER TUBES OF PARABOLIC TROUGH SOLAR COLLECTOR FOR CONSTANT MASS FLOW RATE OF THE HEAT TRANSFER FLUID
3	76	S. M. Rahman, H. Chattopadhyay and R. Laishram	FEASIBILITY OF WIND ENERGY AS POWER GENERATION SOURCE AT SHILLONG (MEGHALAYA)
4	100	Bhuvnesh Sharma, Abhishek Choudhary and M.K. Paswan	NONLINEAR INVESTIGATION FOR THERMAL ANALYSIS OF SOLAR AIR HEATER USING LEGENDRE OPERATION MATRIX METHOD
5	117	Swastika Palit, Sam Baskar and Pratibha Nalini	EFFECTS OF SI-BASED QUANTUM DOT INTRINSIC LAYER CONFIGURATION IN P-I-N SOLAR CELLS
6	120	Mridul Deka	KAPOK AND YELLOW OLEANDER OIL BIODIESEL: PRODUCTION AND PHYSICAL CHARACTERISTICS
7	122	Saurabh Gupta, Santanu De and Malay Karmakar	NUMERICAL ASSESSMENT OF DIFFERENT DRAG MODELS ON PARTICLE-LADEN FLOW IN A CIRCULATING FLUIDIZED BED
8	139	Dudul Das and Pankaj Kalita	FEASIBILITY STUDY OF PHOTOVOLTAIC-THERMAL (PV/T) COLLECTOR IN ASSAM USING POLYSUN AND SELECTION OF OPTIMUM TILT ANGLE
9	195	Amit Kumar, Apurba Layek and Partha Kumar Mondal	HEAT TRANSFER ANALYSIS OF A SOLAR AIR HEATER ROUGHENED WITH CHAMFERED RIB AND GROOVE ROUGHNESS ON THE ABSORBER PLATE USING CFD APPROACH
10	343	Pinku Kumar Goswami, Nabajit Dev Choudhury and Rupam Kataki	COMPARISON OF VARIOUS SOLAR RADIATION DATA SOURCES FOR FEASIBILITY STUDY OF PARABOLIC TROUGH COLLECTOR POWER PLANT IN ASSAM
11	386	D. Misra, S. Nandy, P. Pal and S. Goswami	MODELING AND ANALYSIS OF A SOLAR CHIMNEY FOR ROOM VENTILATION
Robotics and Mechatronics			
1	41	Anish Pandey	SPIDER MONKEY OPTIMIZATION ALGORITHM BASED COLLISION-FREE NAVIGATION AND PATH OPTIMIZATION FOR A MOBILE ROBOT IN THE STATIC

## Technical Poster Presentations

Dinner Hall

Date: 10/11/2018, Time: 12.30 PM to 02.00 PM			
SN	ID	AUTHORS NAME	TITLE OF THE PAPER
			ENVIRONMENT
2	141	Sourabh Rajwade, Akhilesh Kumar Tiwari, Anish Pandey	TYPE-1 FUZZY PULSE WIDTH MODULATION CONTROLLED MOTION PLANNING OF DIFFERENTIAL DRIVE 4-WHEELED POWER ROBOT
3	155	A. G. B. Mahanta, B. A. Rout, C. B. Gunji D. Deepak B.B.V.L. ,E. B.B.Biswal	MULTI-OBJECTIVE DESIGN OPTIMIZATION OF A BIOINSPIRED UNDER-ACTUATED ROBOTIC GRIPPER USING MULTI-OBJECTIVE GREY WOLF OPTIMIZER
4	200	K.E.Sai Kumar, Sourav Rakshit	IMPLEMENTATION OF TOPOLOGICAL DERIVATIVE AS AN EVOLUTIONARY APPROACH
5	213	Thomas Jacob, Dinesh Bhatia, Subhasis Bhaumik	STUDY OF MUSCLE COORDINATION IN ANKLE BIOMECHANICS DURING GAIT
6	265	S.S. Pranav, P. Moorthy, S. Khan, I.A. Palani, K.G. Satheesh	SHAPE MEMORY ALLOY (NITI) DRIVEN BIOMIMETIC HAND FOR INPIPE APPLICATIONS
7	345	L.B. Yadav, B. Halder	AUTOMATED VEHICLES PATH MODIFICATION FOR DESIGNATED VIAPOINT USING NONLINEAR SIMPLEX OPTIMIZER
8	356	A. Jogi, S. Chandra mohan	ZERO-SPEED OFF-TRACKING ANALYSIS OF TRACTOR-SEMITRAILER WITH SPLIT FIFTH WHEEL COUPLING FOR 90° AND 180° TURNING MANOEUVRES

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