Subrata Kumar Ghosh
Department of Mechanical Engineering
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1.	Name in full (in block letters)		**SUBRATA KUMAR GHOSH**					
2.	Father's/Husband's Name		Mr. Amiya Kumar Ghosh					
3.	Mother's Name		Mrs. Mridula Rani Ghosh					
4.	Date of Birth		02.05.1977					
	Age as on 02.06.2025		48	Year	0	Month	0	Day
5.	a) Marital Status: Married/~~Unmarried~~		b) Gender: Male/~~Female~~					
6.	a) Permanent address: Village + Post: Bachhanari Dist: Hooghly Pin: 712413 (WB)		b) Correspondence address: Department of Mechanical Engineering IIT (ISM) Dhanbad Jharkhand – 826004					
	Phone (with STD)/ Mobile No.	9430187029	E-mail	subrata@iitism.ac.in				
7.	Nationality		Indian					
8.	Category under which seeking reservation/relaxation		GEN/~~SC/ST/OBC/PWD~~					

Educational Qualification:

Exam. Passed	Specialization	Board/University	Passing year	Class/ Division	%marks/ CGPA
B.E	Mechanical Engineering	R.E.College, Durgapur (Burdwan University)	2000	First Class	71.1
M. Tech	Mechanical Engineering	R.E. College, Durgapur (Burdwan University)	2003	First Class	75.6
Ph. D	Thermal Engineering	NIT Rourkela	2008		
Post Doc	Tribology	Trento University, Italy	Dec. 14 to May 15		

Scholarship/Awards

Sl. No	Name of Scholarship	Year	Awarded By
1	Erasmus Mundus Action 2 AREAS+	2014	Erasmus Mundus
2	DUO-India Professor Fellowship Award	2020	ASEM-DUO Fellowship
3	Top 2% of Scientists on the basis of research publication	2021	Survey conducted by Stanford University
4	Top 2% of Scientists on the basis of research publication	2022	Survey conducted by Stanford University
5	Top 2% of Scientists on the basis of research publication	2023	Survey conducted by Stanford University
6	Top 2% of Scientists on the basis of research publication	2024	Survey conducted by Stanford University

Details of employments:

Teaching: Total: 17 years 8 months Post PhD: 15 years 9 months

Sl.No.	Name and address of employer	Designation	Pay-scale	From	To	Duration	Type of organization
1	BIT Mesra Ranchi	Lecturer	Basic 8000	31.01.2007	30.03.2008	1 years 02 months	Private
2	IIT (ISM) Dhanbad	Assistant Professor	PB 3, AGP: 7000 (6th CPC)	01.04.2008	30.01.2010	1 year 10 months	Govt.
	IIT (ISM) Dhanbad	Assistant Professor	PB 3, AGP: 8000 (6th CPC)	31.01.2010	05.09.2013	3 years 07 months	Govt.
	IIT (ISM) Dhanbad	Assistant Professor	PB 4, AGP: 9000 (6th CPC)	06.09.2013	06.11.2017	4 years 02 months	Govt.
3	IIT (ISM) Dhanbad	Associate Professor	PB 4, AGP: 9500 (6th CPC)	07.11.2017	11.07.2024	6 years 09 months	Govt.
4	IIT (ISM) Dhanbad	Professor	PB 4, AGP: 10500 (6th CPC)	12.07.2024	Till date		Govt.

Details of ProjectR&D Project

Sl No	Title of the Project	Sanctioning Authority	Amount (Rs)	Time Period and Duration	Status	Role
1	Experimental Investigation on the Heat Transfer Enhancement of Hybrid Nano Fluids in a Plate Heat Exchanger	ARDB, DRDO	20,53,500/-	01.06.17 - 07.12.20 3 years	Completed	PI
2	Nano lubricating fluids (NLF) and thermally conducting fluids (TLF): Study of microstructural changes in I C engine components and thermal property evaluation	DMSRDE, DRDO	950,000/-	02.04.2018 - 30.09.2019 1.5 years	Completed	PI
3	Investigation of heat transfer enhancement in some novel geometries using nanofluids for electronic cooling application	SERB, DST	33,22,300/-	27.09.2016 – 26.09.2019 3 years	Completed	Co-PI
4	Design and deployment of Ventilation Fan Wind Power Recovery System as an alternate source of Electrical Energy in Underground Coal Mines"	CIL	66,70,000/-	08.02.2021 – 07.02.2024 3 years	Completed	Co-PI
5	Collaborative work for laboratory study on nano-lubrication in hot rolling	SAIL	6,49,000/-	03.09.2022 – 02.07.2023 10 months	Completed	PI
6	Performance Evaluation of Nano Lubricants in Cryogenic	DMSRDE, DRDO	48,82,900/-	14.06.2023 –	Ongoing	PI

	Environment for Low-Temperature Applications			13.06.2026		
7	Development of the performance parameters for commercial Potentizer in Homeopathy.	BIS	9,97,200/-		Sanctioned on 31.12.2024	PI
8	Environmental Impact of Nano-Emulsion in Hot Rolling of Steel	Ministry of Steel	**2,96,80,200/-**	Principally agreed		PI

Industrial Consultancy

Sl No	Title of the Project	Sanctioning Authority	Amount (Rs)	Time Period	Status	Role
1	Investigation Report-Explosion in Cold Box of LOX Plant	Electro Steel Casting, Bokaro	2,30,000/-	03.06.2016 – 30.09.2016	Completed	PI

Departmental Project

Sl No	Title of the Project	Sanctioned Authority	Amount (Rs)	Time Period	Status	Role
1	Development of Condition Monitoring Laboratory through Lube Oil Analysis	DST (FIST)	50,00,000/-	01.04.2013 to 31.03.2018 5 years	Completed	PI
2	Augmentation of Research Facility In the Department of Mechanical Engineering	DST (FIST)	18700000/-	14.07.2019 to 31.07.2024	Ongoing	Co-PI

Institutional Project

Sl No	Title of the Project	Sanctioned Authority	Amount (Rs)	Time Period	Status	Role
1	Performance Study of Pulse Tube Refrigerator	IIT (ISM) Faculty Research Scheme (FRS) Project	12,10,000/-	01.05.2011 to 30.04.2014 3 years	Completed	PI
2	Condition Monitoring and the Performance Analysis of 4-Stroke Petrol Engine by Using Nanolubricant	IIT (ISM) Minor Research Project (MRP) under TEQIP-II	200,000/-	25.11.2016 to 31.03.2017 4 months	Completed	PI

Seminars/Short Term Courses /Summer Schools/ Winter Schools organized

Sl. No	From	To	Name of the course	As Chairman /Coordinator	Number of Participants
1	17.06.13	21.06.13	Condition Based Maintenance of Mining Equipment	Coordinator	22
2	01.09.14	05.09.14	Condition Based Maintenance of Mining Equipment	Co-Coordinator	12
3	07.08.17	11.08.17	Tribology and Lubrication Technology in Mining Industry	Coordinator	24

4	12.10.17	13.10.17	Maintenance of HEMM for HPCL executives	Co-Coordinator	10
5	07.05.18	12.05.18	Maintenance, Lubrication and Automation of Mining Equipment	Coordinator	11
6	01.11.18	02.11.18	Tribology for Industry	Coordinator	40
7	23.09.24	27.09.24	Condition-Based Maintenance: Integrating Oil Analysis, Vibration Analysis, and Tribology	Coordinator	24
8	28.02.25	11.03.25	Computational Fluid Dynamics in Engineering	Co-Coordinator	115
9	09.06.25	13.06.25	Condition-Based Maintenance: Integrating Oil Analysis, Vibration Analysis, and Tribology	Co-Coordinator	10

Guest Lecture Organized

Sl. No.	Name of the External	Affiliation	Topic of Lecture	Date and	Duration	Sponsored	Lecture to
1	Shri Sujit Sen	GM Engg (Retd.),TRF, Jamshedpur	Crusher Design	10.8.13 & 11.8.13	6 hrs	TEQIP II	B. Tech MME/MLE, MTech MME/MLE students
2	Shri Banibrata Mukherjee	Assistant Manager, SAIL (Bokaro Steel Plant)	Condition Monitoring and Tribology	05.9.13	3 hrs	TEQIP II	B. Tech and M.Tech Mechanical Engineering
3	Dr. Dipanakar Chatterjee	Senior Scientist CMERI, Durgapur	Mathematical Modeling and Numerical Simulation of High Power Laser Assisted Manufacturing Processes	23.09.13	3 hrs	TEQIP II	B. Tech and M.Tech Mechanical Engineering
4	Prof. Prabal Kumar Ray	Professor (Retd.), NIT Rourkela	Metal Fatigue in Engineering Structure	23.02.18	2 hrs	TEQIP-III	M.Tech and JRF Mechanical Engineering

Details of PhD Students (Guided and Ongoing):

Sl. No.	Name of Student	Admn. No.	Year of enrolment	Title of the Dissertation	Status (Completed /Ongoing)
1	Mayukh Sarkar	2012DR0098	2012	Theoretical and Experimental Studies of Wear in Mine Excavator Bucket	Completed 2016
2	Ankit Kotia	2013DR0083	2013	Experimental and Mathematical Analysis of Nanolubricant for Performance Evaluation	Completed 2017
3	Vikas Kumar	2014DR1026	2014	Experimental investigation on the	Completed

				performance of nanofluids in a plate heat exchanger	2017
4	Animesh Biswas	2010DR0110	2010	Experimental and Numerical Analysis of G M Type Double Inlet Pulse Tube Refrigerator	Completed 2018
5	Naveen Kumar Gupta	2014DR1045	2014	Thermal Performance of Heat Pipe using Nanofluids	Completed 2018
6	Ashwani Kumar	2014DR0149	2014	Health Monitoring of Heavy Earth Moving Machinery through Used Oil Analysis19DR0099	Completed 2019
7	Rahul Kumar	2015DR0232	2015	Computational Analysis of Rayleigh Step Bearing Operating under Elastohydrodynamic Lubrication	Completed 2020
8	Jyoti Prakash Singh	17DP000009	2016	Experimental Investigation on Carbon Nanostructures-Based Lubricants and Coolants	Completed 2021
9	Subrata Bhowmik	17DP000232	2017	Experimental and Artificial Intelligence Analysis on Performance, Combustion and Exhaust Emission of Compression Ignition Engine Fuelled by Diesel-Kerosene-Ethanol-Hydrogen	Completed 2021
10	Saurav Manna	2016DR1047	2016	Heat Transfer from upward facing heat sinks having pin or radial fins under natural convection	Completed 2022
11	Rakesh Ranjan	2016DR1086	2016	Study of wear debris for predicting the machine condition	Completed 2022
12	Santosh Kumar	17DR000313	2017	Theoretical and Experimental Investigation on Wear in Brake Pad System	Completed 2022
13	Ashutosh Pare	17DP000440	2017	Theoretical and Experimental Studies on Pool Boiling of Nanofluids	Completed 2022
14	Shiva Singh	18DR0129	2018	Performance Analysis of Plate Heat Exchanger using Hybrid Nanofluids	Completed 2022
15	Akhilesh Tripati	2016DR1009	2017	Flow simulation of non-Newtonian liquid metals passing through a channel with obstruction	Completed 2023
16	Isha Srivastava	17DP000226	2017	Experimental and Mathematical Analysis on the Effect of Additives in Behaviour of Lubricants	Completed 2024
17	Abhisek Haldar	17DP000211	2017	Experimental and Mathematical Analysis of Alternative Nanofuels in I C Engines	Completed 2024
18	Gaurab Kr Ghosh	18DP000369	2018	Experimental and Mathematical Analysis of Gear Oil Based Nanolubricants	Completed 2024
19	Kuwar Mausam	18DP000378	2018	Solar Energy Harvesting and Storage by Nanoparticles	Completed 2023
20	Nikunj Upadhyay	19DR0099	2019	Experimental and Numerical Investigation on CI Engine using Alge-Biodiesel	Completed 2025
21	Harshit Pandey	22DR0096	2022	Battery Thermal Management System	Ongoing
22	Yashwant Kr. Singh	22DR0274	2022	Wind Turbine	Ongoing
23	Ritesh Kr. Patel	23DR0207	2023	Nano-lubricant in Hot Rolling Process	Ongoing
24	Equbal Hassan	23DP0052	2024	Tribology	Ongoing

25	Swaraj Aditya	24DP0119	2024	Heat Exchanger	Ongoing
26	Rahul Kumar	24DP0103	2024	Renewable Energy	Ongoing
27	Amitesh Kumar	24DR0315	2025	Cooling System in I C Engine	Ongoing

Patents Applied

Sl. No.	Title of the Patent	Filed No.	Publication Date	Grant No	Grant Date
1	Process for Preparation of Nano graphite and Implementations thereof.	201811040824, 2018	01.05.2020	356189	20.01.2021
2	Lubricant Composition and Process of Preparation thereof.	201811047505, 2018	19.06.2020	380316	27.10.2021
3	A Composite Material, Its Process of Preparation, and Application thereof	201911024643, 2019	25.12.2020	469662	16.11.2023
4	Composite Material for Brake Pad	202031005648, 2020	13.08.2021	513520	21.02.2024
5	Novel gear oil-based nanolubricants and their application thereof	202531011416, 2025	21/02/2025		
6	Bio- nanolubricant for heavy-load-bearing applications and a process for the preparation thereof	202531021040, 2025	28/03/2025		

PhD Examined

Sl No	Title of the PhD Thesis	Student's Name	Institute Name	Month & Year
1	Experimental Investigations of Thermo-hydraulic Performance of Solar Air Heater using V-Shaped ribs with Symmetrical Gap and Staggered Elements	Piyush Kumar Jain (Scholar No. 143116004)	MANIT Bhopal	July, 2020
2	Performance analysis of a triangular solar air heating system	Rahul Kumar (Roll No: 18912003)	GLA University, Mathura	April, 2022
3	Performance analysis of a solar still using nanofluids	Ajit (Roll No: 189121005)	GLA University, Mathura	August, 2022
4	Experimental investigations of the effect of compression ratio and fuel injection strategies on combustion, performance, and emission characteristics of Undi biodiesel blended fuel in DI engine	Pravin Ashok Madane (17EDMER001)	NIT Agartala	April, 2024
5	Analysis and simulation of fluidised bed drying of soybeans	Kunwar Sandip PhD/ 15/ME/2027	AKTU, Lucknow	July, 2024
6	A study on the impact of acetylene in CI engines at advanced RCCI combustion strategies	Parthasarathi Deb 19-3-02-112	NIT Silchar	October, 2024
7	LCA of Thermal Power Generation and Comparative Assessment with Solar PV System	Satyajit Malode 2020RME11	MNNIT Allahabad	November, 2024
8	Studies on Analytical and Numerical Solution on Free Vibration of Cylindrical Shell to Beam Mode Structure	G Tarakrishna Manahor CN32500313	Osmania University	May, 2025

Expert Lecture

Sl No	Title of the Lecture	Seminar/Workshop Details	Institute Name	Month & Year
1	Expansion Turbines in Cryogenic Process	Cryogenics in Space Exploration & Superconductivity	Jadavpur University	March, 2016
2	Lubricants and Lubrication	Interdisciplinary Approach of Tribology in Engineering and Biomedical Research	NIT Silchar	August, 2020
3	Basics of Tribology	Lecture under TEQIP	UEM Kolkata	October, 2020
4	Nanolubricants	Recent Trends in Mechanical Engineering	IGIT Sarang	February, 2021
5	Oil Condition Monitoring	Condition Monitoring of Mechanical Systems	NIT Hamirpur	September, 2024

Membership of Professional Bodies

S.No.	Name of Professional Body	Membership no. with validity
1.	The Institution of Engineers (India)	AM-0972234, Life Member
2.	ISTE	LM-52150, Life Member
3.	Indian Cryogenic Council	LM-709, Life Member
4.	Tribology Society of India	LM 5845, Life Member

Administrative/Institute Support work:

Sl.No.	Section/office/ Institute level committee	From	To	Position held	Responsibilities
1	Departmental Purchase Committee	2011	2015	Member	To look after general purchase in the department
2	Departmental PG coordinator (Maintenance Engineering & Tribology)	2013	2018	Coordinator	To coordinate different activities like elective & project allotment of M.Tech (MET)
3	TEQIP-II	2013	2017	Departmental Coordinator	To look after procurement under TEQIP-II in the department
4	B.Tech Final Year Incharge	2013	2015	Professor Incharge	To conduct the project and comprehensive viva, allot the student for project work to the faculty
5	Examination	2014	2016	Departmental Professor Incharge	To coordinate the examinations and prepare the invigilation duty chart for the department
6	Moderation Board of Examination MTech/MET	2014	2015	Convenor	To look after the Examination results
7	Moderation Board of Examination MTech/MET	2017	2018	Convenor	To look after the Examination results
8	TEQIP-III	2017	2020	Departmental Coordinator	To look after procurement under TEQIP-III in the dept.
9	Departmental PG coordinator (Maintenance Engineering & Tribology)	2019	2022	Coordinator	To coordinate different activities like elective & project allotment of M.Tech (MET)
10	Wardenship of Emerald Hostel	2019	2021	Warden	To look after regular work with Hall Manager
11	DPGC	2020	2022	Convenor	To see the final registration, guide selection for MTech and PhD

					student
12	Chief Wardenship of Emerald Hostel	2021	2022	Chief Warden	To look after regular work with Hall Manager
13	3 Yr MTech	2023	Till Date	Co-Ordinator	
14	DPAC	2024	Till Date	Member	

MTech Supervised

Sl No.	Name of the student	Admn No.	Title of Dissertation	Specialization	Year of Passing
1	Mayukh Sarkar	2010MT0130	Experimental and numerical analysis of erosive wear in un-lubricated area of excavator bucket	MET	2012
2	Abhishek Kumar Singh	2010MT 0026	Numerical study of a radial journal foil bearing for crygonic turboexpander		
3	Shavetabhra Shukla	2011MT0122	Numerical Analysis of Diesel Injector Nozzle Geometry	MET	2013
4	Vimal K Patak	2011MT0116	Fluid flow analysis through nozzle injector by using CFD		
5	Barnali Paul	2011MT0065	Effect of Surface Texturing on Oil control ring-cylinder liner contact under mixed lubrication regime		
6	Abhinava Chatterjee	2012MT0097	Detection and diagnosis of leakages in hydraulic system	MET	2014
7	Rakesh Kumar Shaw	2012MT0146	Numerical Analysis of stresses in Excavator Bucket used in HEMM		
8	Niharika Gupta	2013MT0088	Lubricating oil analysis of coal mining equipment using analytical ferrography method	MET	2015
9	Dhruv Mathur	2013MT0241	Equipment criticality analysis: a case study		
10	Soumya Sikdar	2013MT0248	Tribological study of human spinal cord implant materials		
11	Gaurab Kr. Ghosh	2013MT0118	Analytical analysis of heat transfer for nanofluids		
12	Abhisek Haldar	14MT000147	Experimental and analytical studies Of cuo based nanofluid	MET	2016
13	Bhabani Ranjan Pal	14MT000197	Numerical analysis of wear in excavator bucket using DEM & FEM		
14	Priyatash Raha	14MT000159	Theoretical and Experimental Studies of Spike Parameter		
15	Pawan Kumar Singh	14MT000253	Experimental of Studies of Wear for Implant Material Under Dry Sliding Conditions		
16	Manish Kumar Thakur	14MT000535	Characterization of Wear Particles by Fractal Method		
17	Rajeev Kumar	14MT000182	Wear debris analysis of transmission oil		
18	Ravindra Kumar	14MT000542	Experimental study of wear for Implant materials under lubricated conditions		
19	Soumyajit Mojumder	14MT000450	Theoretical Analysis of GM type Double Inlet Pulse Tube Refrigerator		
20	Tarun Kumar	14MT000402	Theoretical Analysis of GM type Double Inlet Pulse Tube Refrigerator	THERMAL	2016
21	Sudhir	14MT0	CFD Analysis of GM type Double Inlet Pulse Tube		

	Kumar	00194	Refrigerator		
22	Prashant Srivastava	14MT0 00383	Experimental Analysis of Nano Fluid for Advance Heat Transfer Application		
23	Vivek Yadav	15MT0 00117	Experimental analysis on Graphene and Silicon Oxide based nanolubricants	MET	2017
24	Nageshwar Kumar Das	15MT0 00221	Experimental investigation on used transmission oil of HEMM		
25	Pradeep Singh Chauhan	15MT0 00486	Wear debris analysis of engine oil using Ferrography		
26	Ashish Kumar Ojha	15MT0 00507	Experimental investigation on used engine oil of HEMM		
27	Santosh Kumar	15MT0 00721	Experimental analysis of Copper Oxide and Silicon Oxide based Nanolubricant		
28	Abhimanyu Sharma	15MT0 00095	Wear debris analysis of transmission systems using Ferrography		
29	Amrit Bhattacharjee	15MT0 00010	Experimental Investigation of Effect of Ethanol-Gasoline Blends on Performance of SI Engine.	THERMAL	2017
30	Uday Kumar	15MT0 00021	Experimental investigantion of effect of Butanol Gasoline Blends on performance of SI engine		
31	Pritosh Kumar Chaudhari	15MT0 00322	Blade Profile Design of Cryogenic Turbine		
32	Ashutosh Pare	15MT0 00381	Experimental Studies of Pool Boiling Characteristics of Nanofluids.		
33	Sanjay Kumar	16MT0 00874	Performance Evaluation of MWCNT-SiO2 Engine Oil Based Hybrid Nanolubricants	THERMAL	2018
34	Anuj Kumar	16MT0 00878	Optimal Selection of Metal Oxide-based Nanofluids using TOPSIS Method		
35	Rakesh Kumar	16MT0 00889	CFD Analysis of a Double Pipe Heat Exchanger with Helical Wire Insert		
36	Anjani Kumar Singh	16MT0 00893	Thermal Analysis of Pool Boiling for Metal Oxide-Based Nanofluids.		
37	Atul Kumar Harmukh	16MT0 00938	Effect of CNT-Ni-P Composite Coating on Tribological Behaviour for Brake Pad System	MET	2018
38	Shiva Singh	16MT0 01044	Thermo Tribological Behaviour of Nanofluids/Nanolubricants		
39	Amitesh Kumar	16MT0 01271	Heat Transfer Analysis of Nanofluid in a Heat Exchanger		
40	Ekta Singh Shrinet	16MT0 01282	Magnetorheological Studies on Stable Suspension of Iron Oxide Nanofluids		
41	Sushma Bharti	16MT0 01311	Wear and Friction Behaviour of Electroless Coated Nano Al2O3-Ni-P Mild Steel		
42	Chetan Kumar	16MT0 01323	Wear Behaviour of Piston Rings in the Presence of Used Oil		
43	Indermani Tiwari	16MT0 01481	Study of ZDDP Additive and its Role in Lubrication		
44	Shilpa Sharma	17MT0 01519	Numerical Analysis on Wavy Type Plate Heat Exchanger using Hybrid Nanofluids	THERMAL	2019
45	Sudeep Roy	17MT0 01589	Temperature Estimation for Thermal Management of Central Processing Unit Package		
46	Patel Mehul Kumar	17MT0 01675	Numerical Analysis on Asterisk Type Plate Heat Exchanger using Hybrid Nanofluids		

47	Amar Kumar Sahu	17MT002046	Numerical Analysis on Chevron Type Plate Heat Exchanger using Hybrid Nanofluids		
48	Zishan Uddin	17MT001496	Codeless CAD Customization	MET	2019
49	Raghwesh Kumar	17MT001619	Performance Evaluation of single-Cylinder Four stroke Diesel Engine Employing Ceria Based Nano fluids		
50	Uday Ranjan	17MT001679	Experimental Investigation of Physico-Chemical Properties and Tribological Behaviour on Gear and Engine Oil.		
51	Shubham Tyagi	17MT001833	Performance Analysis of 4-stroke Diesel Engine Employing Graphite-Based Lubricant.		
52	Vivek Kumar Singh	17MT002096	Experimental and numerical Studies on Additive Manufacturing of AlSi10Mg alloy.		
53	Vikas Kumar	17MT002099	Dry sliding wear and friction behaviour of Ni-P-MWCNT composite Electroless coating on Mild Steel		
54	Aditya Pratap Singh	17MT002106	Friction Stir Processing of Aluminium alloy		
55	Md Shahbaz	17MT002131	Effect of Nano SiC-Ni-P Composite electroless coating on Tribological Behaviour of Brake Pad material		
56	Diwakar Kr Vidyarthi	17MT002132	Wear and debris analysis of Nano lubricant		
57	Shivendra Kumar	17MT002161	Complete Modification of Muck Discharge System of CRM-III Tandem Mill.		
58	Arijit Mukherjee	16KT000092	Comparative Study of Wear Behaviour of Heat-Treated 304 Austenitic and 410 Martensitic Stainless Steel	IIIF Kolkata	2019
59	Laltu Chandra Das	16KT000098	Commissioning and Performance Analysis of Turboexpander		
60	Pravesh Kumar Mishra	18MT0029	Emission Analysis of IC Engine Using Nanolubricants	MET	2020
61	Om Prakash	18MT0149	Performance Analysis of Modified Bio-lubricant-Advancement in Green Tribology		
62	Shahrukh Ehtram	18MT0211	Oil analysis of the geared motor used in coal based rotary kiln		
63	Goli Rohith	18MT0367	Tribological performance Analysis of SS 304 coated with Ni-P-SiC composite		
64	Nikhil Kumar Mishra	18MT0368	Experimental Analysis of Indian Railway Brake Pad		
65	Abhishek Kumar	18MT0060	Experimental Analysis of Plate Heat Exchanger Using Copper Oxide Nanofluids	THERMAL	2020
66	Deepak Kumar Rathour	18MT0469	Experimental Studies on Pool Boiling of Nanofluids		
67	Yashwant Kumar Singh	17KT000269	Experimental and Numerical Studies on Tribological Properties of Stainless Steel 304	IIIF Delhi	2020
68	Sumit Kumar	17KT000270	Performance Analysis of Hybrid Nanofluids on Flat Plate Solar Collector		
69	Manjesh Mahaseth	19MT0207	ANN Modelling and Corelation prediction for viscosity, density and thermal conductivity of nanofluids	MET	2021

70	Priyadarshan	19MT0289	Comparative Tribological Performance Analysis on automotive and Railway Semi-metallic brake pad under dry and wet condition using ANN		
71	Amit Kumar	19MT0046	Numerical Studies on Pool Boiling of Nanofluids	Thermal	2021
72	Anupam Yadav	20MT0075	Predictive and Experimental Analysis of Railway Brake Pad	MET	2022
73	Krishan Kumar Singh	20MT0184	Prediction of optimal process parameters for braking action using a different optimization technique		
74	Ashwani Gupta	20MT0094	The transient interfacial dynamics for boiling heat transfer using nanofluids	Thermal	2022
75	Sidhant Kumar Sabar	21MT0407	Experimental and Numrical Investigation on the effect of nanolubrication in the hot rolling process	Mechanical	2023
76	Kumar Shubham Mahato	22MT0174	Tribological Behaviour of brake pad under wet environmental conditions	Mechanical	2024
77	Sonu Kumar Suman	22MT0334	Numerical simulation of battery thermal management system	Mechanical	2024
78	Akash Singh	23MT0032	Numerical Simulation of the Hot Rolling Process using Nanolubricants	Mechanical	2025

List of Journal Publications:

2007-2012

1. Mathematical modeling of the working cycle of oil injected rotary twin screw compressor; Applied thermal engineering; 27; 1; 145-155; 2007; **Q1**
2. Ghosh, Subrata K; Sahoo, Ranjit K; Sarangi, Sunil K; Experimental performance study of cryogenic turboexpander by using aerodynamic thrust bearing; Applied thermal engineering; 30; 12-Nov; 1304-1311; 2010; **Q1**
3. Ghosh, Subrata K; Sahoo, RK; Sarangi, Sunil K; Mathematical analysis for off-design performance of cryogenic turboexpander; Journal of fluids engineering; 133; 3; 2011; **Q2**
4. Ghosh, Subrata; Mukherjee, Parboti; Sarangi, Sunil; Development of bearings for a small high speed cryogenic turboexpander; Industrial Lubrication and Tribology; 64; 3-10; 2012; **Q4**

2013-2015

1. Rizvi, Imbesat Hassan; Jain, Ayush; Ghosh, Subrata Kr; Mukherjee, PS; Mathematical modelling of thermal conductivity for nanofluid considering interfacial nano-layer; Heat and mass transfer; 49; 4; 595-600; 2013; **Q2**
2. Jain, Ayush; Rizvi, Imbesat Hassan; Ghosh, Subrata Kumar; Mukherjee, PS; Analysis of nanofluids as a means of thermal conductivity enhancement in heavy machineries; Industrial Lubrication and Tribology; 66/2; 238-243; 2014; **Q4**
3. Sarkar, Mayukh; Ghosh, Subrata Kumar; Mukherjee, PS; Analysis of wear generation in mine excavator bucket; Industrial Lubrication and Tribology; 67/1; 52-58; 2015; **Q4**
4. Sarkar, Mayukh; Shaw, Rakesh Kr; Ghosh, Subrata Kr; Numerical analysis of stresses in mine excavator bucket; Journal of Mining Science; 51; 2; 309-313; 2015; **Q4**
5. Kotia, Ankit; Ghosh, Subrata Kumar; Experimental analysis for rheological properties of aluminium oxide (Al2O3)/gear oil (SAE EP-90) nanolubricant used in HEMM; Industrial Lubrication and Tribology; 67/6; 600-605; 2015; **Q4**
6. Kumar, Vikas; Tiwari, Arun Kumar; Ghosh, Subrata Kumar; Application of nanofluids in plate heat exchanger: a review; Energy conversion and management; 105; 1017-1036; 2015; **Q1**

2016

1. Kumar, Vikas; Tiwari, Arun Kumar; Ghosh, Subrata Kumar; Effect of chevron angle on heat transfer performance in plate heat exchanger using ZnO/water nanofluid, Energy Conversion and Management; 118; 142-154; 2016; **Q1**

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"I hereby declare that the statements made by me in the above form are true, complete, and correct to the best of my knowledge and belief."

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