

CV of Dr. Oveepsa Chakraborty

Name: DR.OVEEPSA CHAKRABORTY

Designation: Assistant Professor

Address for Communication:(office):Department of Mechanical Engineering
Girijananda Chowdhury University, Guwahati

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Sex: Female

Date of Birth: 10th December

Educational Qualifications:

Sl. No.	Examination Passed	Year of passing	Board/Council/ University	Specialization
1	HSLC/10 th Std.	2002	SEBA	
2	HSSLC/10+2Std.	2004	AHSEC	Science
3	Degree B.Tech in Mechanical Engineering	2009	Sikkim Manipal Institute of Technology	Mechanical Engineering
4	Master's Degree M.Tech in Thermal Engineering	2011	NIT Silchar	Thermal Engineering
5	Ph.D. Mechanical Engineering (Solar Energy)	2021	NIT Silchar	Parabolic Solar Trough Collector

Languages known: Bengali, English, Assamese, Hindi (Read, Write & Speak)

Academic/ Administrative Experience:

1. Teaching Experience: 12 years
2. Deputy Superintendent of Examination from Nov 2021 to July 2023 (GIMT-Tezpur).
3. Departmental NAAC coordinator.

List of Publications:

1. Publications: Books/ Book Chapters, Journal Articles

Total Publications: 17

Sl. No.	Title of the Research Paper Published	Name of the journal	Type of Journal (Peer Reviewed/UGC Care/Scopus/Web of Science or equivalent)	Nature of Publication (Book/Book Chapter/Journal/Article)	National / International	Impact Factor	Year of publication, Vol. & No.
1	Influence of spinning flower structure inserts in the thermal performance of LS-2 model of parabolic trough collector with ternary hybrid nanofluid	Renewable Energy	SCI	Journal	International	9 (1 st Author)	2023, vol. 210, page no- 215-228
2	Effects of helical absorber tube on the energy and exergy analysis of parabolic solar trough collector – A computational analysis	Sustainable Energy Technologies and Assessments	SCI	Journal	International	7.1 (1 st Author)	2021, Vol 44, Page no- 101083
3	Heat transfer enhancement analysis of parabolic trough collector with straight and helical absorber tube	Thermal Science and Engineering Progress	SCI	Journal	International	5.1 (1 st Author)	2020, Vol 20. Page no- 100718
4	Performance of parabolic trough collector having rotating receiver: Effect of elliptical insert and hybrid nanofluid	International Journal of Energy Research	SCI	Journal	International	4.3 (1 st Author)	2022, Vol-46,
5	Effect of spherical balls insert in collector tube of parabolic trough collector by considering Al ₂ O ₃ -based water	Journal of the Brazilian Society of Mechanical Sciences and Engineering	SCI	Journal	International	1.8 (1 st Author)	2022, Vol-44, Article no-38
6	Computational analyses of Parabolic Trough Solar Collector in the presence of Helical Coil-Insert	International journal of Environmental Science and Technology	SCI	Journal	International	3 (1 st Author)	2022, Vol-20, Page no-683-702
7	Thermal performance evaluation of parabolic trough collector having different inserts and working with hybrid nanofluid	Energy & Environment	SCI	Journal	International	4 (1 st Author)	2023, Vol-35, Issue-6
8	Performance of parabolic trough solar collector with spinning star inserts in receiver tube with	Proceedings of the Institution of Mechanical Engineers Part E Journal of Process	SCI	Journal	International	2.3 (1 st Author)	2023, Vol-238, Issue-4

	hybrid nanofluid	Mechanical Engineering					
9.	Thermal performance simulation of parabolic trough collector with ternary nanofluid flows and half-star-shaped fins inserts in different receivers	Journal of the Brazilian Society of Mechanical Sciences and Engineering	SCI	Journal	International	1.8(1 st Author)	2024, vol-46, Article no-114
10.	Energy, exergy, environment and techno-economic analysis of parabolic trough collector: A comprehensive review	Energy & Environment	SCI	Journal	International	4(1 st Author)	2023, Vol-35, Issue-2
11.	Numerical Study on Solar Trough Collectors: Optimizing Heat Transfer with Ternary Nanoparticles in Ionic Base Fluid and Spinning Tube Fins	RenewableEnergy	SCI	Journal	International	9(1 st Author)	2024, In Press, Journal Pre-proof, 121473
12.	Optimizing the Thermal Performance in Parabolic Solar Trough Collectors: Investigating the Impact of Ionic Nanofluid and Revolving Fins Inserts	Clean Technologies and Environmental Policy	SCI	Journal	International	4.2 (1 st Author)	https://doi.org/10.1007/s10098-024-03076-7
13.	Performance Analysis of a Parabolic Solar Trough Collector with Multiple Revolving Tubes for Ternary Nanofluid and Different Base Fluid	Journal of Thermal Analysis and Calorimetry	SCI	Journal	International	3 (1 st Author)	Accepted
14.	CFD Analysis of Cavity Based Combustion of Hydrogen at Mach Number 1.4	Current Trends in Technology and Sciences	Peer Reviewed	Journal	International	(1 st Author)	2012, Vol-1, Issue-3
15.	CFD Analysis of Spiral Absorber Tube for Parabolic Solar Collector with Straight Absorber Tube	Energy and Exergy for Sustainable and Clean Environment,	Scopus	Book Chapter	International	(1 st Author)	2022, Vol-1, Page no-15-32
16.	Impact of Helical Coil Insert in the Absorber Tube of Parabolic Trough Collector	Modelin, Simulation and Optimizatio n	Scopus	Book Chapter	International	(1 st Author)	2021, Vol-1, Page no-177-187
17.	Parabolic Solar Trough Collector: Design, Development and Uses	Springer Briefs in Thermal Engineering and Applied Science	Scopus	Book	International	(1 st Author)	Accepted, 2024

2. Details of Conference Papers Indexed in Internationally Renowned Conferences

Title of the Paper	No. of Authors	List of Authors	Publication Details	Conference Name & Organizer	First Author
Impact of Helical Coil Insert in the Absorber Tube of Parabolic Trough Collector	3	Oveepsa Chakraborty, Biplab Das, Rajat Gupta	Presented, Cosmo 2020, National Institute of Technology Silchar, Assam, India	Cosmo 2020, National Institute of Technology Silchar, Assam, India	Yes
Impact of Ternary Nanofluid in the Thermal Performance of Parabolic Trough Collector for Semi-Elliptical Receiver with Inserts	3	Oveepsa Chakraborty, Biplab Das, Sourav Nath	Presented, 5th International Conference on Recent Advancements in Mechanical Engineering, NIT Silchar, Assam, India	5th International Conference on Recent Advancements in Mechanical Engineering, National Institute of Technology Silchar, Assam, India	Yes
CFD Analysis of Spiral Absorber Tube for Parabolic Solar Collector with Straight Absorber Tube	4	Oveepsa Chakraborty, Biplab Das, Rajat Gupta, Jagannath Reddy	Presented, 11th International Exergy, Energy and Environmental Symposium, Department of Automobile Engineering, SRM IST, Kattankulathur, Chennai, India	11th International Exergy, Energy and Environmental Symposium, Department of Automobile Engineering, SRM IST, Kattankulathur, Chennai, India	Yes
Impact of Nanofluid in the Thermal Performance of	4	Oveepsa Chakraborty, Biplab Das, Rajat	Presented, Proceedings of SEEP 2019, University of Sharjah, Sharjah, United	SEEP 2019, University of Sharjah, Sharjah, United Arab Emirates	Yes

Title of the Paper	No. of Authors	List of Authors	Publication Details	Conference Name & Organizer	First Author
Parabolic Solar Trough Collector for Straight and Helical Absorber Tube		Gupta, Sumita Deb Barma	Arab Emirates		

Research Experience:5 years

Award, Fellowship & Recognition:

1. Own 1st Prize for paper presentation in NIT Mizoram Conclave 2021

Date: 03.01.2025

Oveepsa Chakraborty

Dr.Oveepsa Chakraborty