

# CURRICULUM VITAE – Dr. KULDEEP AWASTHI

<b>PERSONAL INFORMATION</b>	<a href="https://orcid.org/0000-0001-9786-8620">https://orcid.org/0000-0001-9786-8620</a> 	
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	Date of Birth	26 <sup>th</sup> September 1992
	Contact Address	B-398, Avas Vikas Colony, Unnao Uttar Pradesh, India - 209801
	Nationality	Indian
	Languages	Hindi and English
		
<b>RESEARCH INTEREST</b>	Solar Concentrators, Solar Thermal Technologies Heat Transfer Flow Visualization	
<b>Current EMPLOYMENT</b>	Post-Doctoral Fellow at <b>Indian Institute of Technology, Kanpur</b> Department of Sustainable Energy Engineering Duration: Feb 2023 to present	
<b>EMPLOYMENT HISTORY</b>	Post-Doctoral Fellow at <b>Indian Institute of Technology, Bombay</b> Department of Mechanical Engineering Duration: Feb 2022 to Feb 2023 Worked as Assistant professor in the Department of Mechanical Engineering at RBCET, Bareilly (Aug 2021- Feb 2022) Worked as Teaching Assistant at Indian Institute of Technology Patna, Department of Mechanical Engineering (2016-2021)	
<b>EDUCATION</b>	Ph.D.	<b>Indian Institute of Technology Patna, Bihar, India</b> Department of Mechanical Engineering Thesis Title: <i>Design and Performance Evaluation of a Fresnel lens Solar Concentrator with Conical Serpentine Receiver Coils</i> Advisor: Dr. Mohd. Kaleem Khan Duration: 2016 to 2021
	M. Tech	<b>National Institute of Technology, Kurukshetra, Haryana, India</b> Department of Mechanical Engineering Thesis Title: <i>Thermal Performance of Scheffler Reflector for Medium Temperature Applications: Experimental Analysis</i> Advisor: Dr. Chandrashekara M Duration: 2014 to 2016
	B. Tech	<b>Greater Noida Institute of Technology, Greater Noida, UP, India</b> Department of Mechanical Engineering Duration: 2009 to 2013

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<b>PATENTS</b>	<p><b>K. Awasthi</b>, D.S. Reddy and M.K. Khan, High Concentration Fresnel Lens with Spherical Facets, Indian Patent Office, App. no.: 202031047971, Ref. No.: E-99/257/2020/KOL Date 05/11/2020, (<i>Published and under examination</i>)</p> <p>D.S. Reddy, <b>K. Awasthi</b> and M.K. Khan, Curved Serpentine Flow Inverter, Indian Patent Office, App. no.: 201931031533, Ref. No.: E-137/2587/2019/KOL Date 31/07/2019, (<i>Published and under examination</i>)</p> <p>M.V. Rane, <b>K. Awasthi</b> and A.M. Rane, A Novel Compact Fresnel Lens Design for Low f-number, (<i>Draft prepared</i>)</p>
<b>JOURNAL PUBLICATIONS</b>	<p><b>K. Awasthi</b> and M.K. Khan, 2019, Performance Evaluation of Coiled Tube Receiver Cavity for a Concentrating Collector, Renewable Energy, vol.138, pp.666-674. (<i>Impact factor: 8.001</i>) <a href="https://doi.org/10.1016/j.renene.2019.02.015">https://doi.org/10.1016/j.renene.2019.02.015</a></p> <p><b>K. Awasthi</b>, D.S. Reddy and M.K. Khan, 2020, Design of Fresnel lens with Spherical Facets for Concentrated Solar Power Applications, International Journal of Energy Research, vol. 44(1), pp. 460-472. (<i>Impact factor: 5.164</i>) <a href="https://doi.org/10.1002/er.4947">https://doi.org/10.1002/er.4947</a></p> <p><b>K. Awasthi</b>, D.S. Reddy and M.K. Khan, 2021. Performance comparison among the variants of curved serpentine coil. Physics of Fluids, 33(7), p.073604. (<i>Impact factor: 3.521</i>) <a href="https://doi.org/10.1063/5.0056606">https://doi.org/10.1063/5.0056606</a></p> <p><b>K. Awasthi</b>, D.S. Reddy and M.K. Khan, 2021. A Novel High Concentration Fresnel Lens as a Solar Concentrator. Journal of Solar Energy Engineering, 144(1), p.011006. (<i>Impact factor: 2.384</i>) <a href="https://doi.org/10.1115/1.4051975">https://doi.org/10.1115/1.4051975</a></p> <p>D.S. Reddy, M.K. Khan, and <b>K. Awasthi</b>, 2020, Thermohydraulic Performance of a Novel Curved Serpentine Coil, <i>Physics of Fluids</i>, Vol. 32, 083609, pp. 1-24, (<i>Impact factor: 3.521</i>) <a href="https://doi.org/10.1063/5.0007469">https://doi.org/10.1063/5.0007469</a></p>
<b>CONFERENCE PUBLICATIONS</b>	<p><b>K. Awasthi</b> and M.K. Khan, 2018, Performance evaluation of coiled tube receiver cavity for a concentrating collector, 11th International Conference on Sustainable Energy &amp; Environmental Protection (SEEP 2018), 8-11 May 2018, UWS Paisley Campus, Scotland, United Kingdom.</p> <p><b>K. Awasthi</b> and M.K. Khan 2018, Thermohydraulic Performance of Single Stage and Multistage Conical Receiver Cavities, 7th International and 45th National Conference on Fluid Mechanics and Fluid Power, IIT Bombay, India 10-12 December 2018.</p> <p><b>K. Awasthi</b>, D.S. Reddy, M.K. Khan, S. Dubey and V. Rawat, Simplified design methodology for truncated compound parabolic concentrator, 25th National and 3rd International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2019), IIT Roorkee, 28-31 December 2019.</p>

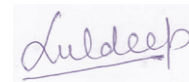
## CURRICULUM VITAE – Dr. KULDEEP AWASTHI

- K. Awasthi**, D.S. Reddy, and M.K. Khan, 2020, Design of Fresnel Lens with Constant Height Spherical Facets, ASME 2020 14th International Conference on Energy Sustainability (ES2020), June 17-18, 2020, Virtual, online, V001T02A008,
- K. Awasthi** and M. Chandrashekar, 2016, Experimental investigation of Thermal Performance of Scheffler reflector in India, National Conference on Solar Thermal Energy Technologies (NCSTET), IIT Jodhpur, India 26-28 February 2016
- K. Awasthi** and M. Chandrashekar, 2016, A Review of Multi Effect Solar Still: Developments and Applications, Advancements in Electrical Engineering and Energy Sciences (AEEES), NIT Hamirpur, India 24-25 May 2016

<b>REVIEWER</b>	Physics of Fluids IHMTTC-2019, IHMTTC-2021 FMFP-2018	
<b>TECHNICAL SKILLS</b>	Simulation software Programming software Design software	Ansys Fluent, SolTrace, ICEM MATLAB SOLIDWORKS
<b>RESPONSIBILITIES</b>	Elected overall Ph.D. representative of student gymkhana, IIT Patna (April 2019-August 2020) Elected Ph.D. welfare secretary of student gymkhana, IIT Patna (April 2019-August 2020) Successfully organized Research Scholars' Day 2020 on 7 <sup>th</sup> March at IIT Patna as RSD coordinator	
<b>EXTRACURRICULAR ACTIVITIES</b>	Badminton and volleyball player in Ph.D. team of IIT Patna and participated in different Inter and Intra college events. Won 1 <sup>st</sup> Prize in Cycle rally in Azadi ka Amrut Mahotsav Cycle Rally 2021 Volunteered in blood donation camp under National road safety week at IIT Patna on 12 <sup>th</sup> January 2020.	
<b>DECLARATION</b>	The above-mentioned information is true and correct to the best of my knowledge.	

Place: IIT Kanpur  
Date: 07<sup>th</sup> May 2023

Yours Faithfully



Kuldeep Awasthi