National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members

Curriculum Vitae

Brief Profile: 1-2 paragraphs (not exceeding 500 words)

1. Name: DUDUL DAS
2. Designation: ASSISTANT PROFESSOR
3. Office Address: Second Floor, Department of Mechanical Engineering (Old Building), NIT Tiruchirappalli-620015
4. Telephone (Direct) (Optional):

   Telephone : Extn (Optional):

   Mobile (Optional):+917099066983
5. Email (Primary):dududlas@nitt.edu Email (Secondary): dududlas11@gmail.com
6. Field(s) of Specialization: Thermal Engineering, Renewable Energy, Solar Thermal Collection, Thermal Energy Storage, Solar Refrigeration, Phase Change Material (PCM)

7. Employment Profile

Job Title	Employer	From	To
Assistant Professor	NIT Tiruchirappalli	Dec 2025	Till present
Assistant Professor	SRM University	Aug 2025	Dec 2025
Marie Curie Fellow	University of Glasgow	Dec 2022	Dec 2024
Project Engineer	IIT Guwahati	Nov 2020	Nov 2022

8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
PhD	IIT	2020	8.28/10	Energy Engineering

	Guwahati			
M.Tech	Tezpur University	2015	9.01/10	Energy Technology
B.Tech	Dibrugarh University	2013	8.33/10	Mechanical Engineering
10+2	CBSE	2009	78.8	Science
10	CBSE	2007	89.2	

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2021	Best Thesis Award	IIT Guwahati
2019	Best paper award	International Conference on Sustainable Energy and Green Technology 2019 (SEGT 2019), Bangkok, Thailand
2019	Bhaskara Advanced Solar Energy (BASE) Internship at University of Nevada, USA	Dept. of Science and Technology, Govt. of India (DST) and Indo-US Science and Technology Forum (IUSSTF)

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
2022	Marie Curie Fellowship	UK research and Innovation	Dec 2022	Dec 2022

13. Details of Academic Work
    (i) Curriculum Development
    (ii) Courses taught at Postgraduate and Undergraduate levels
    (iii)Projects guided at Postgraduate level
    (iv)Other contribution(s)

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of Activity	Level of Event (International/ National/ Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue

18. Invited Talks delivered

Topic	Date	Inviting Organization

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date

20. Academic Foreign Visits

Country	Duration of Visit	Programme

21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
Kamble, A.D., Das, D., Singh, P., Kalita,	Heat transfer and cooling uniformity enhancement in	Renewable Energy	263	1254961	2026	9.1

P.	PV/T collectors using a thermal absorber with Modified Hilbert-Serpentine flow configuration)					
Das, D., Paul, M.C. ,	Sustainable solution for direct absorption of solar thermal energy in biochar-based form stable thermal energy storage media for low radiation regions by integration of Cross Compound Parabolic Concentrator	Solar Energy	297,	113609	2025	6.0
Das, D., Crosby, R., Paul, M.C.	A comprehensive review on the form stable phase change materials for storing renewable heat preparation, characterization and application,	Journal of Energy Storage	110	115284	2025	8.9
Crosby, R., Das, D., Paul, M.C.	Numerical study and experimental validation of a porous biochar supported form stable composite for thermal energy storage,	Journal of Energy Storage,	99, Part B	113314	2024	8.9
Das, D.,	Development of	Journal of	84, Part	110995	2024	8.9

Masek, O., Paul, M.C.	novel form-stable PCM-biochar composites and detailed characterization of their morphological, chemical and thermal properties	Energy Storage	B			
Deka, M.J., Kamble, A.D., Das, D., Sharma, P., Ali, S., Kalita, P., Bora. B.J., Kalita, P.	Enhancing the performance of a photovoltaic thermal system with phase change materials: Predictive modelling and evaluation using neural networks	Renewable Energy	224	120091	2024	9.1
Deka, M.J., Kalita, P., Das, D., Kamble, A.D., Bora. B.J., Sharma, P., Medhi, B.J.	An approach towards building robust neural networks models using multilayer perceptron through experimentation on different photovoltaic thermal systems	Energy Conversion and Management	292	117395	2023	9.9
Bordoloi, U., Das, D., Kashyap, D., Patwa, D., Bora, P., Muigai, H., Kalita, P.	Synthesis and comparative analysis of biochar based form-stable phase change materials for thermal management of buildings	Journal of Energy Storage	55, Part D	105801	2022	8.9
Das, D., Kamble, A.D.,	Performance investigation of transparent	International Journal of Energy	46,1	239-253	2022	4.3

Kalita, P.	photovoltaic-thermal collector with horizontal oscillating and rectangular spiral flow patterns,	Research				
Das, D., Bordoloi, U., Muigai, H., Kamble, A.D., Pai, R.K., Kalita, P.	Performance investigation of a rectangular spiral flow PV/T collector with a novel form stable composite material	Applied Thermal Engineering,	182	116035	2021	6.1
Das, D., Bordoloi, U., Muigai, H., Kalita, P.	A novel form stable PCM based bio composite material for solar thermal energy storage applications,	Journal of Energy Storage	30	101403	2020	8.9
Das, D., Bordoloi, U., Kalita, P., Boehm, R., Kamble, A.D.	Solar still distillate enhancement techniques and recent developments,	Groundwater for Sustainable Development	10	100360	2020	5.6
Das, D., Kalita, P.	Experimental analysis of photovoltaic-thermal collectors with closely spaced tubes	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	46(1)	15990–16012	2020	2.9
Das, D., Kalita, P., Dewan, A., Tanweer, S.	Development of a novel thermal model for a PV/T collector and its experimental analysis	Solar Energy	188	631-643	2019	6.0
Das, D.,	Flat plate hybrid	Renewable	84	111-130	2018	16.3

Kalita, P., Roy, O.	photovoltaic-thermal (PV/T) system: A review on design and development	and Sustainable Energy Reviews				
Kalita, P., Borah, S., Das, D.	Design and performance evaluation of a novel solar distillation unit	Desalination	416	65–75	2017	8.3

(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
Kamble, A.D., Singh, A., Singh, D., Das, D., Kapil, S., Kalita, P.,	Feasibility Study of Heat Transfer Enhancement in Solar Photovoltaic-Thermal Systems Using FDM Generated Novel Curved Thermal Absorbers	Proceedings of the ASME 2023 Gas Turbine India Conference		ASME 2023 Gas Turbine India Conference	Bangalore, India.	2023
Das, D., Kalita, P.	Feasibility Study of Photovoltaic-Thermal (PV/T), Collector in Assam (India) Using Polysun,	Advances in Mechanical Engineering, Springer	1331-1337	Mechanical Engineering	NIT Meghalaya	2020
Das, D., Kalita, P.	Performance improvement of a novel flat plate photovoltaic	Springer Proceedings in Energy	97-104	Nanotechnology for Energy and Water	Dehradun, India	2018

	thermal (PV/T) system using copper oxide nanoparticle-water as coolant					

(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number