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

Curriculum Vitae

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

Dr. Sarvesh Kashyap is currently serving as an Assistant Professor in the Department of Mechanical Engineering at NIT Tiruchirappalli. He obtained his Ph.D. in Mechanical Engineering from IIT (BHU), Varanasi, with specialization in thermal and fluid engineering. Prior to joining NIT Trichy, he worked as a Postdoctoral Fellow at the Institute of Plasma Research (IPR), Gandhinagar, and IIT Kharagpur, where he contributed to the design and development of advanced cryogenic systems (Cryocoolers) and hybrid cooling technologies.

His research focuses on refrigeration and air conditioning, evaporative cooling systems, cryocoolers (particularly high-frequency pulse tube cryocoolers), and computational fluid dynamics. He has published extensively in reputed SCI journals with high impact factors and holds a granted patent on dual-mode evaporative cooling systems. Dr. Kashyap has also delivered keynote and expert lectures at national forums and has strong academic credentials, including a GATE qualification with 99 percentile.

1. Name: **Dr. Sarvesh Kashyap**
2. Designation: Assistant Professor
3. Office Address: room no-3, 2ND Floor Mechanical Engineering Department
4. Telephone (Direct) (Optional):

   Telephone : Extn (Optional):

   Mobile (Optional): 8299017283
5. Email (Primary): skashyap@nitt.edu Email (Secondary) : skashyapvns@gmail.com
6. Field(s) of Specialization:
   - Thermal and Fluid Engineering
   - Refrigeration and Air Conditioning
   - Evaporative Cooling Systems
   - Cryogenic Engineering (High-frequency

Pulse Tube Cryocoolers)

- Computational Fluid Dynamics (CFD) and Numerical Modeling

7. Employment Profile

Job Title	Employer	From	To
Assistant Professor	NIT Trichy	19/12/2025	Till date
Postdoctoral Fellow	IIT Kharagpur	31/07/2025	18/12/2025
Postdoctoral Fellow	Institute for Plasma Research, Gandhinagar	01/03/2023	28/07/2025

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

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D	IIT (BHU) Varanasi	2022	First	Thermal and Fluids Engineering
MTech	MNNIT ALLAHABAD	2015	First	Fluids Engineering
BTech	Gautam Buddha Technical University	2012	Distinction	Mechanical Engineering
Intermediate	UP Board	2008	First	Physics, Chemistry, Mathematics
High School	UP Board	2006	Distinction	Social Science, Science, Hindi, English, Mathematics

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

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
2013-2025	MTech Fellowship	MHRD	July/2013	June/ 2015
2017-2021	Ph.D Fellowship	MHRD	January/2017	December/2021

13. Details of Academic Work

(i) Courses taught at Postgraduate and Undergraduate levels:
Operations Research -BTech 3rd Year

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
7th International & 45th National Conference on Fluid Mechanics & Fluid Power	International	Dec 2018	Paper Presenter	Mumbai, India
25th National & 3rd International ISHMT-ASTFE Heat and Mass Transfer Conference	International	Dec 2019	Paper Presenter	Roorkee, India
National Conference on Cryogenics and Superconductivity (NCCS-29)	National	Nov 2024	Paper Presenter	India
QIP Short Term Course on Efficient Energy Conversion in Harmony with Environment	National	29 Oct – 02 Nov 2018	Participant	Varanasi, India
Faculty Development Program on Nanofluid and its Engineering Applications	National	06–11 Nov 2017	Participant	Varanasi, India
Short-Term Course on Basics of Computational Fluid Dynamics: Theory and Programming	National	July 2017	Participant	Varanasi, India
National Conference on Critical Heat Flux and Multiphase Flow	National	Dec 2018	Participant	Varanasi, India
National Level Industry-Institute Symposium on Turbomachines (NIST-	National	2014	Participant	Allahabad, India

2014)				

18. Invited Talks delivered

Topic	Date	Inviting Organization
Efficient Technologies for Waste Heat Recovery (Keynote Speech)	Jan 2024	Sandeep Institute of Technology and Research Centre
Recent Advancement in Evaporative Cooling Technologies and Sustainable Cooling Solutions for India's Composite Climatic Conditions	Aug 2023	Sandeep Institute of Technology and Research Centre

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Associate Member	The Institution of Engineers (India)	AM3125265
Life Member	Indian Society for Technical Education (ISTE)	LM 139715
Life Member	Indian Cryogenics Council	LM 925

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)
Kashyap, S., Sarkar, J., Kumar, A.	Experimental exergy, economic and sustainability analyses of the dual-mode evaporative cooler	International Journal of Refrigeration	135	121-130	2021	3.8
Kashyap, S., Sarkar, J., Kumar, A.	Energy, exergy and economic assessments of the dual-mode evaporative cooler for various international climate zones	Building Services Engineering Research and Technology	43	179-196	2021	1.9
Kashyap, S., Sarkar, J., Kumar, A.	Performance assessment of dual-mode evaporative cooler for futuristic climatic scenarios considering climate change effect	Journal of Building Engineering	42	103043	2021	7.4
Kashyap, S., Sarkar, J., Kumar, A.	Development and experimental analysis of a novel dual-mode counter-flow evaporative cooling device	Building and Environment	205	108176	2021	7.6
Kashyap, S., Sarkar, J., Kumar, A.	Performance enhancement of regenerative evaporative	Energy	225	120199	2021	9.4

	cooler by surface alterations and using ternary hybrid nanofluids					
Kashyap, S., Sarkar, J., Kumar, A.	Effect of surface modifications and using hybrid nanofluids on energy-exergy performance of regenerative evaporative cooler	Building and Environment	189	107507	2020	7.6
Kashyap, S., Sarkar, J., Kumar, A.	Exergy, economic, environmental and sustainability analyses of possible regenerative evaporative cooling device topologies	Building and Environment	180	107033	2020	7.6
Kashyap, S., Sarkar, J., Kumar, A.	Comparative performance analysis of different novel regenerative evaporative cooling device topologies	Applied Thermal Engineering	176	115474	2020	6.9
Kashyap, S., Sarkar, J., Kumar, A.	Proposal and month-wise performance evaluation of a novel dual-mode evaporative cooler	Heat and Mass Transfer	55	3523–3536	2019	2.2
Gupta, A.K., Kashyap,	Machine learning model of regenerative	International Journal of Refrigeration	137	178–187	2022	3.8

S., Sarkar, J.	evaporative cooler for performance prediction based on experimental investigation					

(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
Kashyap, S., Sarkar, J., Kumar, A.	Numerical analysis of a novel dual mode evaporative cooler	Proceedings of 7th International & 45th National Conference on Fluid Mechanics & Fluid Power	—	Fluid Mechanics & Fluid Power	Mumbai, India	2018
Kashyap, S., Sarkar, J., Kumar, A.	Numerical analysis of the combined parallel-counter flow regenerative evaporative cooler	Proceedings of 25th National & 3rd International ISHMT-ASTFE Heat and Mass Transfer Conference	—	Heat and Mass Transfer	Roorkee, India	2019
Kashyap, S., Desai, A., Mukherjee, S.	Design and Preliminary Testing of Stirling Pulse Tube	Proceedings of National Conference on Cryogenics and Superconductivity (NCCS-29)	—	Cryogenics and Superconductivity	India	2024

(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number
Kashyap, S., Yadav, C.	Techno-Economic Analysis of the Regenerative Evaporative Cooler for the Different	Springer Nature Singapore	2025	978-981-96-6616-4

	Climatic Zones (Book Chapter in *LCA and TEA for Sustainable Development*)			

(D) **PATENT:** Sarkar J, **Kashyap S,** A DUAL-MODE EVAPORATIVE COOLER FOR COMPOSITE CLIMATE, Ref. P.2366.IN, Application no. 202111057640, Filling date: 10.12.2021, Publication no. 53/2021 (31.12.2021), Patent No. 456357, Grant date: 03/10/2023