

Personal details

Name: Dr. Nikunj Kumar Ganeshbhai Patel

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Academic Qualifications

Degree	Specialization	Year
Bachelor of Engineering	Mechanical	2005
Master of Engineering	Industrial Process Equipment Design (IPED)	2008
Ph.D.	Energy Model Based Benchmarking and Parametric Analysis of Stenter for Surat (India) Textile Processing Cluster	13/02/2023

Additional information

	Score
GATE 2006	275
GATE 2007	384

Research project

Project 1

Title: Energy model based benchmarking of stenter used in Textile Industries

Status: Completed

PI/Co-PI: Co-PI

Duration (in months): 30

Total Grant/Funding received(Rs.): 19,47,000.00

Name of Sponsoring/ Funding Agency: Ministry of Textile, Government of India

Total no. of PI/Co-PI(s): 2/2

Consultancy work

	Company	PVA Systems, Thane (West), Maharashtra-400601	
	Products	Status	Consultancy charge
1	Commercial dishwasher for mega kitchen	Ongoing	4% of MRP
2	Advanced winnowing machine for post-harvesting process in the agriculture sector	Ongoing	4% of MRP
3	Solar dryer for high-quality drying of fruits and vegetables	Ongoing	4% of MRP

Research papers

Journal Papers

- 1 Title: CFD Analysis Toward Optimizing the DRI Furnace Bustle Shape
Journal Name: AIST Transactions,
Volume (Issue number): 10
All author names: Jegatheesan Ettiya, Nikunj Patel
- 2 Title: Energy model based benchmarking of the drying process in the stenter machine
Journal Name: Drying Technology, DOI: 10.1080/07373937.2021.1907401,
WebUrl:<https://www.tandfonline.com/doi/full/10.1080/07373937.2021.1907401>
Volume (Issue number): 39
All author names: Nikunj Kumar G. Patel, Dadasaheb J. Shendage, Munjal G. Parikh, Surajit K. Basu, Mukund H. Bade
Page No: 1114-1133
Publication Date/ Acceptance Date: 2021-03-19
- 3 Title: Investigation on energy assessment, conservation potential, and recovery opportunities for stenter machines based on field trial
Journal Name: Energy sources, Part A: Recovery, Utilization, and Environmental Effects, DOI: doi.org/10.1080/15567036.2022.2048925,

Web Url: <https://doi.org/10.1080/15567036.2022.2048925>

Volume (Issue number): 44

All author names: Nikunjkumar Patel, Munjal Parikh, Surajit Basu, Mukund Bade

Page No: 685-699

Publication Date/ Acceptance Date: 2022-03-15

Conference Papers

- 1 The effect of an atmospheric air temperature and humidity ratio on the performance of the stenter machine running in diverse climates of India

Name of all authors: Nikunjkumar G. Patel, Dadasaheb J. Shendage, Munjal G. Parikh, Surajit K. Basu, Rahul J. Patel, *Mukund H. Bade

11th Asia Pacific Drying conference 2023, 2023-02-18

- 2 Energy flow analysis and energy conservation potential of the fabric drying process in the convective fabric drying machine

Name of all authors: Nikunjkumar G. Patel, Dadasaheb J. Shendage, Munjal G. Parikh, Surajit K. Basu, Rahul J. Patel, *Mukund H. Bade

10th Asia Pacific Drying Conference 2019, 0, 2019-12-14,

- 3 Effect of flow-induced vibration on impingement rod of shell and tube heat exchanger

Name of all authors: Jatin V. Prajapati, Anilkumar S. Panchal, Nikunj G. Patel

7th international and 45th national conference on fluid machine and fluid power, , 0, , 2018-12-10,

- 4 Development of knowledge-based system for design and modeling of spur gear

Name of all authors: M. Natu , N.G. Patel , H.D. Desai

3rd International Conference on Production and Industrial Engineering, 2013, 2013-03-29,

- 5 Analytical and experimental investigation of a tuned undamped dynamic vibration absorber in torsion

Name of all authors: H.D.Desai, N.G. Patel

World Congress on Engineering 2010, 1555-1560, 2010-06-30,

WebUrl:efaidnbmnnnibpcajpcglclefindmkaj/https://www.iaeng.org/publication/WCE2010/WCE2010_pp1555-1560.pdf

6 Expansion pressure range and effect of pressure on tube to tubesheet joint.

Name of all authors: Nikunj Kumar G. Patel, Dr. K. P. Desai, R.D. Molia

International Conference on Advances in Mechanical Engineering, 262-266,
08-03-2009