



DR. DEEPKUMAR PRAVINBHAI PATEL

Address: Manjrol (Amalpur), Tal: Sankheda, Dist: Chhota Udepur, Gujarat (391145)

Mobile: +91 99137 97392/ 81406 00673

Email: dp2manjrol@gmail.com

Date of Birth: 13/05/1996

Place of Birth: Bodeli (Gujarat)

Nationality: Indian

EXPERIENCE:

Position	Department	Place	Duration
Assistant Professor	Food Processing Technology	ADIT, CVMU, Anand	07/08/2023 - Present

ACADEMIC VITAE

Qualification	University/Board	Year of passing	Percentage/ OGPA	Class/Grade
Ph.D. (Processing and Food Engineering)	Maharana Pratap University of Agriculture and Technology, Udaipur	July, 2023	8.76	1 st class with Distinction
M.Tech. (Processing and Food Engineering)	Maharana Pratap University of Agriculture and Technology, Udaipur	June, 2019	8.42	1 st class with Distinction
B.Tech (Agricultural Engineering)	Navsari Agricultural University, Navsari	June, 2017	8.22	1 st class with Distinction (Gold Medalist)
Higher Secondary School Examination	Gujarat Secondary and Higher Secondary Education Board, Gandhinagar	May, 2013	59.2 %	C1
Secondary School Examination	Gujarat Secondary Education Board, Gandhinagar	June, 2011	69.2 %	B2

THESIS DETAIL

Discipline of Specialization: Processing and Food Engineering

- **Ph.D. (PFE) Research Title:** Development of Portable Solar Assisted Evaporative Cooling Chamber (Selected under CSIR-HRDG, New Delhi)
- **M.Tech. (PFE) Research Title:** Process Development of Osmo Dried Ginger Treated Banana Slices.

Graduation Discipline: Agricultural Engineering.

- **B.Tech. (Agril. Engg) Research Title:** Study of Drying Behavior of Dried Banana Chips.

ACHIEVEMENTS

1. Received **Vice Chancellor's Gold Medal** for securing **first position** in B. Tech (Agril. Engg.) during the academic year August 2013 to July 2017 at CAET, Dediapada, Navsari Agricultural University, Navsari, India.
2. Awarded with **TEQIP Fellowship** (January, 2020 to October, 2020)
3. Awarded with **CSIR SRF-Direct Fellowship** (November, 2020 to July, 2023)
4. **Poster Presentation** adjudged to **second position** in the 3rd International Conference on "Global Initiative in Agriculture, Forestry and Applied Sciences for Food Security, Environment Safety and Sustainable Development (GIAFAS-2021)" at Shri Guru Ram Rai University, Dehradun, UK on October 17-18, 2021.
5. **Oral Presentation** awarded **second position** in the International Conference on "New Generation Horticulture for Prosperity" at College of Agriculture, OUAT, Bhubaneswar, Odisha on 20-21st January, 2023.
6. **Poster Presentation** adjudged to **first position** in Poster Competition and Workshop on Awareness Development for Processing of Millets at CTAE, MPUAT, Udaipur on January 24, 2023.
7. Received **best article award** for article entitled "Zero Energy Cool Chamber: On-farm Innovation by Agriculture and Food e-Newsletter.
8. Life member of Indian Society of Agricultural Engineers (ISAE), New Delhi.
9. 15 Years member of All India Agricultural Students Association (AIASA).
10. Was **annual member** of magazine Agriculture and Food e-Newsletter 01/03/2019 to 12/04/2020.
11. Secured **Third position** at university level in 400 m relay (athletic) sport.

12. Received appreciation prizes and certificates under sports category in **Athletics and Group Games** at college and university level.
13. Got a certificate for **NSS** conducted at Mota Sukha Aamba Village, Organized by college of Agricultural Engineering, Dediapada in 2016.
14. Received certificate for completing **M.S Office Basic** Course at Dutta Computer Academy in 2011.
15. Got a certificate for **NCC** conducted by AAN, at Shree Valmiki Vidhyalaya, Surat in 2010.
16. Passed **Elementary Drawing Grade Examination** and certified by State Examination Board Gujarat State in 2010.

LIST OF PUBLICATIONS

RESEARCH PAPERS

1. **Deep P. Patel**, Jain, S. K., Lakhawat, S. S. and Wadhawan, N. 2022. A low-cost storage for horticulture commodities for enhancing farmer's income: An overview on evaporative cooling. *Journal of Food Process Engineering*, e14134. **NAAS (2024) : 9.00** ISSN: 0145-8876.
2. **Deep P. Patel** and Jain, S. K. 2024. Development and performance evaluation of a portable solar-assisted evaporative cool chamber for preservation of perishables. *Journal of Food Process Engineering*, 47(8), e14716. **NAAS (2024) : 9.00** ISSN: 0145-8876. <http://dx.doi.org/10.1111/jfpe.14716>
3. **Deep P. Patel**, Jain, S. K. 2024. A Portable Solar-Assisted Evaporative Cooling Chamber (ECC) Designed to Prolong the Freshness of Fruits and Vegetables. *Journal of Eco-friendly Agriculture*. 19 (2): 151-166. **NAAS (2024) 5.36**. ISSN: 2229-628X.
4. **Deep P. Patel**, Jain, S. K., Lakhawat, S. S. and Wadhawan, N. 2023. Conceptual study of solar-powered evaporative cooling systems for the storage of different perishables - a significant appraisal. *Environment and Ecology*. **NAAS (2023) 5.25**. ISSN: 0970-0420.
5. **Deep P. Patel**, Maulik L. Ramani and R. G. Burbade. 2019. Effect of various pre-treatments on drying behaviour of banana. *Multi logic in science*. 8(1): 50-53. **NAAS (2023) 4.51**. ISSN: 2277-7601.
6. **Deep P. Patel**, Kusum Meghwal, Maya Sharma and S. K. Jain. 2022. Optimization of process parameters for osmotic dehydration of banana slices using response surface

methodology. *The Pharma Innovation Journal*, 11(2): 725-731. **NAAS (2023) 5.23.** ISSN:2349-8242.

7. **Deep P. Patel**, Kusum Meghwal, Maya Sharma and R. G. Burbade. 2022. Mathematical modelling and convective drying kinetics of osmotically dehydrated banana slices. *The Pharma Innovation Journal*, 11(2): 1083-1087. **NAAS (2023) 5.23.** ISSN:2349-8242.
8. Sharma, M., **Patel, D.**, Meghwal, K., and Mitra, J. 2022. Focused microwave assisted extraction setup and extraction of sesamol from sesame seed. *Journal of Postharvest Technology*, 10(1): 134-141. **NAAS (2023) 4.25.** ISSN: 2348-4330.
9. Neha Prajapat, Kusum Meghwal, **Deep P. Patel** and S. K. Jain. 2022. Optimization of osmotic drying parameters for beetroot tutti-frutti. *The Pharma Innovation Journal*, 11(5): 1915-1924. **NAAS (2023) 5.23.** ISSN: 2349-8242.
10. Kusum Meghwal, Neha Prajapat, **Deep P. Patel**, Maya Sharma and R. C. Verma. 2022. Optimization of egg powder by foam-mat tray drying using response surface methodology. *The Pharma Innovation Journal*, 11(5): 900-909. **NAAS (2023) 5.23.** ISSN: 2349-8242.
11. Prajapat, N., Meghwal, K., **Deep P. Patel**, Suman, S. and Sharma, A. 2022. Mass transfer kinetics during osmotic dehydration of beetroot tutti-frutti: Beetroot osmotic dehydration. *Journal of AgriSearch*, 9(3): 244-248. **NAAS (2023) 4.71.** ISSN: 2348-8808.
12. **Deep P. Patel**, S. K. Jain, N. K. Jain and S. S. Lakhawat. 2019. Mass exchange during osmotic drying of ginger treated banana slices. *International Journal of Chemical Studies*. 7(3): 4823-4829. **NAAS (2019) 5.31.** ISSN: 2349-8528.
13. Prajapat, N., **Deep P. Patel**, Meghwal, K., S. K. Jain. (2023). Foam mat drying of high value foods. *International Journal of Agriculture Sciences*, 15(7):12455-12457. **NAAS (2023) 4.58.** ISSN: 0975-3710.
14. **Deep P. Patel**, Prajapat, N., Divyesh Vaghela and S. K. Jain. (2023). Evaluation of techno-economic feasibility of the developed portable solar-assisted evaporative cool chamber. *International Journal of Statistics and Applied Mathematics*, 8(4): 519-523. **NAAS (2023) 5.12.** ISSN: 2456-1452.
15. Prajapat, N., **Deep P. Patel**, Meghwal, K., S. K. Jain. (2023). Quality evaluation of beetroot tutti-frutti. *International Journal of Statistics and Applied Mathematics*. 8(4): 759-762. **NAAS (2023) 5.12.** ISSN: 2456-1452.

BOOK CHAPTERS

1. **Deep P. Patel**, Kusum Meghwal and S. K. Jain. 2022. Novel and Promising Technologies in Food Processing and Post-Harvest Sector. Current Research in Food Science. *Integrated Publication*, 2: 83-110. ISBN: 978-93-90471-65-2.
2. **Deep P. Patel**, Nikita Mishra and S. K. Jain. 2023. Clay Pot Fridge: Make in India Initiative for an Affordable On-farm Storage of Perishables. Innovative Research and Technology in Agriculture Sciences. *Scripown Publication*, 6: 12-24.
3. Kusum Meghwal, **Deep P. Patel**, and S. K. Jain. 2022. Estimation of Biochemical Constituents for Quality Evaluation of the Farm Produce. Research Trends in Food Technology and Nutrition. *Akinik Publication*, 20: 21-44. ISBN: 978-93-5570-269-2.
4. Nikita Mishra, **Deep P. Patel** and S. K. Jain. 2023. Hyper spectral imaging technique: a brief introduction for evaluating food quality of agro produce. Exploration and Development of Agriculture in India. Published by *JSA College of Agriculture and Technology*, 1: 88-92. ISBN-978-81-959725-4-8.
5. Nikita Mishra, **Deep P. Patel** and S. K. Jain. 2023. Recent Applications of Artificial Intelligence in Drying of Agriculture Produces: An Overview. Advances in Food Science and Nutrition. *Scripown Publication* 3: 69-80.

ARTICLES

1. **Deep P. Patel** and Chetan Kumar Nagar. 2019. Zero energy cool chamber: On-farm innovation. *Agriculture and Food: e-newsletter*. 1(4) : 44-48. ISBN: 2581-8317
2. **Deep P. Patel**, Chetan Kumar Nagar and Shashi kumar J N. 2019. Banana: Processing and valuation. *Agriculture and Food: e-newsletter*. 1(5) : 1-7. ISBN: 2581-8317
3. **Deep P. Patel**. 2019. Button mushroom: cultivation, utilization and processing. *Agriculture and Food: e-newsletter*. 1 (9) : 427-432. ISBN: 2581-8317
4. **Deep P. Patel**. 2019. Beetroot: Health Benefits & Processing. *Agriculture and Food: e-newsletter*. 1 (10): 60-63. ISBN: 2581-8317
5. **Deep P. Patel**. 2019. Kodo (Varagu) Millet. *Agriculture and Food: e-newsletter*. 1 (11): 164-167. ISBN: 2581-8317
6. **Deep P. Patel**. 2019. Green Chilli: Cultivation Process Guide. *Agriculture and Food: e-newsletter*. 1(11) : 178-179. ISBN: 2581-8317

7. **Deep P. Patel.** 2020. Osmotic dehydration: A gentle pre-treatment. *Agriculture and Food: e-newsletter.* 2(2) : 325-327. ISBN: 2581-8317
8. **Deep P. Patel.** 2020. Post harvest practices of banana: An evergreen fruit. *Agriculture and Food: e-newsletter.* 2 (2): 384-388. ISBN: 2581-8317
9. Chetan Kumar Nagar, **Deep P. Patel** and Shashi kumar. 2020. GARLIC: Processing and Value-added Products. *Agriculture and Food: e-newsletter.* 2 (3): 554-558. ISBN: 2581-8317

MANUAL

1. Deep P. Patel, S. K. Jain, Narotam Soni. 2023. Practical Manual on Development of Processed Products.

INTERNATIONAL CONFERENCES/SEMINARS

1. 1st International Conference on “Entrepreneurship in Agriculture and Renewable Energy Sector” 15-16th March, 2019, at PDKV, Akola, Maharashtra, India.
2. 3rd International Conference on “Global Initiatives in Agricultural, Forestry and Applied Sciences for Food Security, Environmental Safety and Sustainable Development” 17-18th October, 2021 at SGRRU, Dehradun, Uttarakhand, India.
3. IVth International Conference in Hybrid Mode on “Innovation and Current Advances in Agriculture and Allied Sciences” 12-14th June, 2022 by Society of Scientific Development in Agriculture and Technology, Meerut U.P., India.
4. International Conference on “New Generation Horticulture for Prosperity” at College of Agriculture, OUAT, Bhubaneswar, Odisha on 20-21st January, 2023.

NATIONAL CONFERENCES/SEMINARS

1. National Conference on “Recent Trends in food Processing and Food safety” 25-26th April, 2019, Dehradun, Uttarakhand, India.
2. National Conference on “Food and Nutritional Security and Sustainable Agriculture” 15-16th April, 2022 at Hyderabad, India.
3. National Conference on “Arid Fruits: A Way Forward for Sustainable Production and Nutritional Security” 28-30th November, 2019 at Raichur, Karnataka.

TRAINING PROGRAMME

1. Completed **one month “Tractor Training”** during 1st June, 2015 to 26th June, 2015 at Northern Region Farm Machinery and Testing institute, Hisar, Haryana.
2. Completed two days training programme on **“Leadership and Entrepreneurship Development”** held at CAET, Dediapada in 2015.
3. Completed **one month** training programme during 1st June, 2016 to 30th June, 2016 at **“ICAR-Central Institute of Post-Harvest Engineering & Technology”**, Ludhiana-141004, Punjab.
4. Completed **four months in-plant training** at **“Netafim Irrigation India Pvt. Ltd”** during the period of 28th January, 2017 to 28th May, 2017, Vadodara, Gujarat.
5. Completed five days training programme on **“Computational and Statistical Techniques in Engineering, Sciences and Agriculture”** during 25th February, 2019 to 1st March, 2019 at CTAE, MPUAT, Udaipur-313001, Rajasthan.
6. Completed two days training programme on **“Skill Development and Continuous Improvement”** during 16-17th July, 2019 at CTAE, MPUAT, Udaipur-313001, Rajasthan.
7. Participated five days AICTE training and learning academy FDP on **“Data Sciences”** from 23rd September, 2019 to 27th September, 2019 at CTAE, MPUAT, Udaipur-313001, Rajasthan.
8. Attended training programme on **“Hydroponics and Vertical Farming System”** on 5th September, 2020 at CTAE, MPUAT, Udaipur-313001, Rajasthan.
9. Completed five days skill development training programme on **“Entrepreneurship in Processing and Value Addition of Food Materials”** during 14th February, 2022 to 18th February, 2022 at Department of Processing and Food Engineering, CTAE, MPUAT, Udaipur-313001, Rajasthan.
10. Completed six days skill development training programme on **“Development of Processed Foods”** during 02nd March, 2022 to 07th March, 2022 at Department of Processing and Food Engineering, CTAE, MPUAT, Udaipur-313001, Rajasthan.
11. Completed eleven days training programme on **“Value Addition of Food Materials through Drying”** during 18th April, 2022 to 29th April, 2022 at Department of Processing and Food Engineering, CTAE, MPUAT, Udaipur-313001, Rajasthan.

12. Participated in IQAC Faculty Development Programme organized on “Outcome-based Competency Focused Curriculum Design” on 03rd, August 2024 at A D Patel Institute of Technology, Anand, Gujarat.

WEBINARS/WORKSHOPS

1. Workshop on Digital Technologies for Smart Agriculture organised by CTAE, Udaipur on 16-17 October, 2019.
2. One week Programme on Skill Up-gradation Programme on Entrepreneurship organised by R. K. Sansthan and CTAE, Udaipur on 10-15 February, 2020.
3. One day Workshop on Industry-Institute Communion for Fostering Research and Innovation Culture organised by TOCIC, CTAE, Udaipur on 22nd February, 2020.
4. National Webinar on “Role of Higher Education Institutions in Post Covid-19” organised by MPUAT, Udaipur on 1-2 June, 2020.
5. National Web Conference on Building Resilience against Contagion and Covid-19 organised by Department of Resource Management and Consumer Science, CCAS, Udaipur on 19 June, 2020.
6. Short Term Course on Challenges and Opportunities in engineering after Covid-19 organised by Department of Electric Engineering, CTAE, Udaipur on 29th June to 03rd July, 2020.
7. Webinar on Entrepreneurial Opportunities in Food processing sector organised by Department of Food engineering, NIFTEM on 15 July, 2020.
8. Workshop cum Webinar on “Agriculture Knowledge Management in the Networked Digital Environment” organised by National Knowledge Management Centre for Agricultural Education and Research, ICAR-IVRI, Izatnagar and MPUAT, Udaipur on 15 July, 2020.
9. National Webinar on Emerging Trends and Prospects in Higher agriculture Education organised by MPUAT, Udaipur on 16 July, 2020.
10. National Webinar on On-farm Skill Development through organised by Soil and Water Conservation by RVSKVV, Gwalior on 25 July, 2020.
11. National Webinar on Recent Advances in Seed Spices Production organised by Seed Spice Research Station, SKDAU, Jagudan on 4 August, 2020.

12. Inter National Webinar on Modified and Controlled Atmosphere Packaging and Storage of Fresh Produce organised by Department of Food Engineering and Technology, Longowal on 05 August, 2020.
13. Webinar on Advanced Agricultural Engineering Technologies for Sustainable Agriculture organised by CAE, Raichur on 05 August, 2020.
14. National Webinar on “Agri-Planning for Disaster Times: Floods and Covid-19” organised by Dr. Rajendra Prasad Central Agricultural University, Pusa on 6 August, 2020.
15. Inter National Webinar on “Ensuring Food Safety, Security and Sustainability through Crop Protection” organised by BAU, Sabour on 5-6 August, 2020.
16. National Webinar on Recent Trends in Horticultural Entomology organised by Department of plant Protection, SKDAU, Jagudan on 27 August, 2020.
17. National Webinar on Entrepreneurship Opportunities in Processing of Fruits and Vegetables of the Arid Region organised by Department Post Harvest Technology, SKDAU, Jagudan on 2 September, 2020.
18. National Webinar on Recent Advances in Underutilized Fruits organised by Department Fruit Science, SKDAU, Jagudan on 5 September, 2020.
19. National Workshop on “Recent Advances in Dairy and Food Engineering” organised by Department of Dairy Technology, PU, Vadodara on 15 September, 2020.
20. National Webinar on Value Addition of Underutilized Food Crops organised by Department of Processing and Food Engineering, CTAE, Udaipur on 08 October, 2020.
21. National Webinar on Integrated Disease Management in Horticulture Crops organised by Department of plant Protection, SKDAU, Jagudan on 22 October, 2020.
22. National Webinar on Integrated Farming System and Farmer’s Income organised by Department of Agronomy, RCA, Udaipur on 05 November, 2020.
23. National Webinar on Digital Soil Science: Opportunities and Challenges organised by Department of Soil Science and Agriculture Chemistry, RCA, Udaipur on 12 April, 2021.
24. Inter National Webinar on Climate Resilient Agriculture and Food and Health Security organised by Department of Agronomy, RCA, Udaipur on 16 April, 2021.
25. Virtual Workshop on Science Communication organised by ICAR-IIHR on 29 December, 2021.

26. National Workshop on Emerging Technologies for Redesigning Future organised by Department of Mechanical Engineering, CTAE, Udaipur on 4-5 February, 2022.
27. Webinar on “Food Processing and Value Addition: Innovations, Opportunities and Government Scheme” organised by Department of Processing and Food Engineering, CTAE, MPUAT, Udaipur on 14 April, 2022.
28. Poster Competition and Workshop on Awareness Development for Processing of Millets at CTAE, MPUAT, Udaipur on January 24, 2023.
29. Participated in International Seminar Organised on 18th March 2024 “Inclusive Equitable Quality Education to Stipulate Lifelong Sustainable Learning Opportunity for HEIs in India” by Sarvajanik University.
30. Attended an online webinar on Employability Skills on 11th October 2024, conducted under the TEERTH initiative by the Knowledge Consortium of Gujarat, Education Department, Government of Gujarat.
31. Participated in one day seminar on “Effective Journal Paper Writing” organized at ADIT on December 21, 2024.
32. Attended an online webinar on Life Skills on 4th February 2025, conducted under the TEERTH initiative by the Knowledge Consortium of Gujarat, Education Department, Government of Gujarat.

PROFESSIONAL ACTIVITIES

1. Serving as a Paper Setter and external examiner for Parul University in Vadodara, Gujarat.
2. Serving as a Paper Setter and external examiner for Maharana Pratap University of Agriculture and Technology in Udaipur, Rajasthan.
3. Serving as a Paper Setter for Swarnim University, Gandhinagar, Gujarat.
4. Contributing as a member of the Admission Counselling Team for A. D. Patel Institute of Technology, Anand, Gujarat.
5. Steering the Institute's Innovation Council (IIC) as the Departmental Coordinator at A. D. Patel Institute of Technology, Anand, Gujarat.
6. Member of Clean Campus Green Campus Committee at ADIT, Anand.
7. Organized Expert Talk on “Food Safety and Hygiene in Bakery Production” Sponsored by SSIP and AFSTI on 24th September 2024 at ADIT, Anand.

8. Attended IIC Activity on “Intellectual Property & Technology Transfer Meet” in Collaboration with CHARUSAT, Changa on 02/08/2024.
9. Undertaking the role of Departmental Coordinator for SPECTRUM-24 at A. D. Patel Institute of Technology, Anand, Gujarat, during the academic year 2023-24.
10. Appointed as a Reviewer for the Journal "International Journal of Agriculture Sciences" by Bioinfo Publication.
11. Appointed as a Reviewer for the Journal "International Journal of Innovative Research in Technology".
12. Served as a Reviewer (Book Chapter) for the "B P International Publications".
13. Served as a Reviewer for the Journal “International Journal of Environment and Climate Change”.
14. Student Co-ordinator for Skill Development Training on “Development of Processed Foods” Sponsored by IDP-NAHEP, New Delhi during 02nd March, 2022 to 07th March, 2022 at Department of Processing and Food Engineering, CTAE, MPUAT, Udaipur-313001, Rajasthan.
15. Student Co-ordinator for Webinar on “Food Processing and Value Addition: Innovations, Opportunities and Government Schemes” Sponsored by IDP-NAHEP, New Delhi on 14th March, 2022 at Department of Processing and Food Engineering, CTAE, MPUAT, Udaipur-313001, Rajasthan.

INTERPERSONAL SKILL

- Ability to rapidly build relationship and set up trust
- Confident and determined
- Ability to cope up with different situations
- Positivity
- Hardworking

DECLARATION

I hereby affirm that the information in this document is accurate and true and are not false or misleading to best of my knowledge. Thank You.



Dr. Deepkumar Pravinbhai Patel