

## Curriculum vitae Dr. Satya Narayan Singh

<p><b>Dr. S. N. Singh</b> I/c Principal &amp; Dean, College of Agricultural Engineering &amp; Technology, Associate Professor &amp; Head, Department of Processing and Food Engineering, Navsari Agricultural University Navsari Parsi Tekra, Dediapada, Gujarat, INDIA. PIN - 393 040 (M) +91 9427265807, +91 9913599332 E-mail <a href="mailto:principalcaed@nau.in">principalcaed@nau.in</a>, <a href="mailto:caed@nau.in">caed@nau.in</a>, <a href="mailto:snsingh@nau.in">snsingh@nau.in</a></p>	 <p><b>Dr. S. N. Singh</b></p>
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### **Employment Record (Experience: > 21 Years)**

<b>Sr. No.</b>	<b>Designation</b>	<b>Institution</b>	<b>Month/Year</b>
1.	I/c Principal & Dean	College of Agricultural Engineering & Technology, NAU, Dediapada	May 01, 2026 to Cont.
2.	Associate Professor (selection) & Head	College of Agricultural Engineering & Technology, NAU, Dediapada	August 14, 2025 to Cont.
3.	Associate Professor (Promotion) & Head	College of Agricultural Engineering & Technology/ Polytechnic in Agricultural Engineering, NAU, Dediapada	June 08, 2025
4.	Assistant Professor & Head	College of Agricultural Engineering & Technology/ Polytechnic in Agricultural Engineering, NAU, Dediapada	June 28, 2013
5.	Assistant Professor (selection)	Polytechnic in Agricultural Engineering	June 08, 2012

6.	Senior Scientist	Sardar Patel Renewable Energy Research Institute, Vallabh Vidyanagar, Anand, Gujarat	October 01, 2011 to June 07, 2012
7.	Associate Scientist	Sardar Patel Renewable Energy Research Institute, Vallabh Vidyanagar, Anand, Gujarat	August 20, 2009 to September 30, 2011
8.	Scientific Assistant	Sardar Patel Renewable Energy Research Institute, Vallabh Vidyanagar, Anand, Gujarat	May 25, 2009 to August 19, 2009
9.	Chemist for Bio-Diesel Processing	Gujarat State Fertilizers & Chemicals Ltd., Fertilizernagar -391750, Dist: - Vadodara, Gujarat, India	December 20, 2006 to March 27, 2009
10.	Senior Research Fellow (SRF)	Faculty of Food Processing Technology & Bio-Energy, Anand Agricultural University, Anand.	June 13, 2005 to December 19, 2006
11.	Agricultural Expert Consultant	European Union Watershed Management, Self-Employment Women Association, (SEWA), Ahmedabad	February 01, 2005 to June 12, 2005

### Academic Qualifications

Sr. No.	Degree	College/ University	Year	Class
1.	Ph.D. (Agricultural Engineering) with Specialization in Processing & Food Engineering	College of Agricultural Engineering & Technology, Navsari Agricultural University, Parsi Tekra, Dediapada, Gujarat	2022	First Class
2.	M. Tech. (Agricultural Engineering) with Specialization in Agricultural Process & Food Engineering	College of Agricultural Engineering & Technology, Junagadh Agricultural University Junagadh, Gujarat	2005	First Class
3.	B. Tech. (Agricultural Engineering)	College of Agricultural Engineering & Technology, Chandra Shekhar Azad University of Agriculture & Technology, Kanpur, Uttar Pradesh	2001	First Class

### Membership:

Life Member of Indian Society of Agricultural Engineers. (LM-10675)

## Academic Achievements

Research Outcome	Nos.	Research Outcome	Nos.
Papers published in International Journals / Proceedings	6	Recommendations to the Farmers Recommendations to the Scientific Community	As a PI: 04 As a Co-PI: 05  As a PI: 01
Papers Published in National Journals (NAAS rated)	8	Popular Articles Published	10
Papers Presented in Conventions /Seminar, Lectures Delivered in Winter / Summer School	6	Workshop / Seminar / Conventions / Symposium attended	>100
Six Week Online Course	08	Pamphletes	10
M.Tech. Students Guided	03	PG Committee Members	07
B. Tech. Students Guided	39	Ongoing Research Project	As a PI: 02 As a Co-PI: 01
ICAR Summer/Winter School Participated	04	Book as an Author	01
Book Chapters	12	Abstract Published	25
List of Practical Manual Prepared	09		

## List of Externally Funded Research Projects

Sr. No.	Title	Duration	As PI/ Co-PI	Funding agency Name	Amount (Lakhs)
1.	Improving the Emission Characteristics of Stationary Engine Fuelled by Bio-Diesel	25-05-2009 to 29-06-2010	PI: Er. S. N. Singh	Gujarat Council of Science and Technology (GUJCOST) Gandhinagar, Gujarat	4.37
2.	MLD/FLD of Improved Inverted Downdraft Biomass Gasifier (IDBG) type cook stove for domestic cooking and road side <i>Dhahba</i> .	20-08-2009 to 28-02-2010	PI: Er. S. N. Singh	All India Coordinating Research Project (AICRP) on Renewable Energy Sources (RES) of ICAR	
3.	Studies on use of blend of Dewaxed and Degummed Jatropha oil and	01-10-2009 to 30-09-2011	PI: Er. S. N. Singh		

	Diesel on performance of IC Engine at farmer's site.				
4.	Development of drying system of 250 kg/batch capacity for high value fruit, vegetables and medicinal plants using SPRERI design Combustor.	01-07-2010 to 30-06-2011	PI: Er. S. N. Singh		
5.	Operational Research Demonstration of high TSC fixed dome family size bio gas plants in Dahod, Anand and Kheda District of Gujarat.	01-08-2010 to 31-12-2011	Co-PI: Er. S. N. Singh		
6.	Comparative evaluations of biomass cook stoves of selected improved designs for their suitability in tribal region of Gujarat.	01-08-2010 to 31-12-2011	Co-PI: Er. S. N. Singh		
7.	Renewable Intervention for Rural Development	02-05-2011 to 07-06-2012	PI: Er. S. N. Singh	Department of Science & Technology (DST), New Delhi	41.06
8.	Setting-up demonstration biogas plants of solid- state Deenbandhu design in four districts of Gujarat State	01-04-2011 to 07-06-2012	PI: Er. S. N. Singh	Gujarat Agro Industries Corporation Limited (GACL), Ahmedabad	2.70

### Languages Known

Language	Read	Write	Speak
English	√	√	√
Hindi	√	√	√
Gujarati	√	√	√

### **Additional Responsibility**

Assistant Administrative Officer (AAO), Polytechnic Agricultural Engineering/ College of Agricultural Engineering & Technology, NAU, Dediapada. (May 22, 2024 to Cont.)

Drawing and Disbursing Officer (DDO) of Polytechnic Agricultural Engineering as well as College of Agricultural Engineering & Technology, Dediapada. (From December 2014 to October 31, 2016)

Head of Department (HOD), Processing & Food Engineering (PFE), College of Agricultural Engineering & Technology, Dediapada. (From June 28, 2013 to Cont.)

Programme Officer (NSS) of Polytechnic Agricultural Engineering, NAU, Dediapada (From July 01, 2012 to August 31, 2015).

Hostel Rector of Polytechnic Agricultural Engineering/ College of Agricultural Engineering Technology, Navsari Agricultural University, Dediapada. (From September 23, 2017 to September 22, 2020) & (December 01, 2025 to Cont.)

Assistant Hostel Rector of Polytechnic Agricultural Engineering/ College of Agricultural Engineering Technology, Navsari Agricultural University, Dediapada. (From October 01, 2020 to January 31, 2021)

Academic In-charge, Polytechnic Agricultural Engineering, Navsari Agricultural University, Dediapada (From February 01, 2021 to November 30, 2025)

### **Member**

- Member of National Food Security Mission (Oilseed & Oilpalm) at Director of Agriculture, Gujarat State, Krishibhavan, Sector-10 A, Gandhinagar.
- Member of Board of Studies (BOS), College of Agricultural Engineering & Technology, Dediapada.
- Member of Agresco, Agricultural Engineering Research Project, NAU, Navsari.
- Member of Anti-ragging committee.
- Member of new construction committee.
- Member of purchase committee.

### **Recommendations / for farmers / scientific community**

2025	PI	Development of dry powder from mahua ( <i>Madhuca Longifolia</i> ) flower.
	PI	Development of dry powder from mahua ( <i>Madhuca Longifolia</i> ) flower.
	PI	Studies of mahua ( <i>Madhuca Longifolia</i> ) flower powder based value added biscuit.
2024	Co-PI	Design and development of raised bed former-cum-seeder for heavy clay soil condition for South Gujarat.
2022	Co-PI	Development of Zero Energy Evaporative Cooling Storage Structure (ZEECSS) for Tribal Region of Dediapada.

2021	Co-PI	Comparative Studies on the different drying methods on ber ( <i>Ziziphus mauritiana</i> ).
	Co-PI	Effect of laser levelling on crop water requirement and growth of gram crop.
	PI	Study on drying characteristics of bitter gourd ( <i>Momordica charantia</i> L.).
2018	PI	Development and studies of sapota (chikoo) powder based value added product (pasta) using semolina (Suji) and maida.
2016	Co-PI	Study relating to “Formulating long-term mechanization strategy for Dediapada taluka”.

### Ongoing Research Project

2025 to Cont.	PI	Development of ragi-soya-maida based pasta using bathua ( <i>Chenopodium album</i> L.)
2025 to Cont.	PI	Drying of Green Pea ( <i>Pisum sativum</i> L.) Puree using Refractance Window (RW) Dryer for Powder Production.
2023 to Cont.	Co-PI	Study on drying of <i>Moringa Oleifera</i> leaves for development of its powder based biscuits.

### Courses Taught in Recent Past and Continue:

<b>M. Tech. (Agril. Engg.) Courses:</b>		
<b>Sr. No.</b>	<b>Course</b>	<b>Credit</b>
1.	PFE-501 Transport Phenomena in Food Processing	3 (2+1)
2.	PFE-503 Field Crops Process Engineering	3 (2+1)
3.	PFE-507 Instrumentation and Sensors in Food Processing	3 (2+1)
4.	PFE-502 Unit Operations in Food Process Engineering	3 (2+1)
5.	PFE-504 Horticultural Crops Process Engineering	3 (2+1)
6.	PFE-508 Application of Engineering Properties in Food Processing	3 (2+1)
7.	PFE-509 Food Quality and Safety	3 (2+1)
8.	PGS-504 Basic Concepts in Laboratory Techniques	1 (0+1)
9.	PFE-503 Advanced Food Process Engineering	3 (2+1)
10.	PFE-502 Engineering Properties of Food Materials	3 (2+1)
11.	PFE-506 Processing of Cereals, Pulses and Oilseeds	3 (2+1)
12.	DTE-503 Advanced Dairy Processing	3 (2+1)
<b>B. Tech. (Agril. Engg.) Courses:</b>		
<b>Sr. No.</b>	<b>Course</b>	<b>Credit</b>

1.	PFE-3.7 Engineering Properties of Agricultural Produce & Food Science	3 (2+1)
2.	PFE-4.8 Post Harvest Engineering of Cereals, Pulses and Oil Seeds	3 (2+1)
3.	CAE-1.3 Introduction to Agricultural Engineering	4 (3+1)
4.	PFE-3.5.4 Post Harvest Engineering of Cereals, Pulses and Oil Seeds	3 (2+1)
5.	PFE-2.4.4 Engineering Properties of Agricultural Produce	2 (1+1)
6.	PFE-2.4.9 Post Harvest Engineering of Horticultural Crops	2 (1+1)
7.	PFE-3.6.3 Post Harvest Engineering of Horticultural Crops	2 (1+1)
8.	PFE-2.4.5 Engineering Properties of Agricultural Produce	2 (1+1)
9.	PFE-405 Development of Processed Products and Equipments	3 (2+1)
10.	ME-1.1.8 Heat and Mass Transfer	2 (2+0)
11.	PFE-302 Agricultural Structures and Environmental Control	3 (2+1)
12.	PFE-202 Crop Process Engineering	3 (2+1)
13.	PFE-302 Agricultural Structures and Environmental Control	3 (2+1)
14.	PFE-201 Engineering Properties of Biological Materials and Food Quality	3 (2+1)
15.	PFE-4.8.20 Development of Processed Products	3 (2+1)
16.	APE-302 Agricultural Structures and Environmental Control	3 (2+1)
17.	APE-202 Crop Process Engineering	3 (2+1)
18.	APE – 201 Engineering Properties of Biological Materials and Food Quality	3 (2+1)
19.	Maths (E)-101 Engineering Mathematics-I	3 (2+1)
<b>Polytechnic in Agril. Engg. Courses:</b>		
<b>Sr. No.</b>	<b>Course</b>	<b>Credit</b>
1.	PFE-3.1.4 Agricultural Process Engineering	3 (2+1)
2.	APE-3.1.2 Agricultural Process Engineering	4 (2+2)
3.	APE-3.1.5 Agricultural Structures	3 (2+1)
4.	APE-2.2.3 Post Harvest Technology	4 (3+1)
5.	FMP-1.2.4 Applied Mechanics	3 (2+1)
6.	HBS-1.1.4 Applied Chemistry	3 (2+1)
7.	FMP-2.2.5 Manufacturing Technology - II	3 (2+1)