

BIO-DATA

1. **Name:** Dr. Sanjaykumar Rameshbhai Patel

2. **Date of Birth:** 17th March, 1979

3. **Designation:** Assistant Professor

4. **Highest Qualifications:** Ph.D.

5. **Degree Obtained**

University	Degree	Year	Field of Specialization
SVNIT, Surat	Ph.D.	2011	Chemical Engineering
M.S.University, Baroda	M.E.	2005	Chemical Engineering (Polymer Technology)
S.G.University, Surat (SVRCET-Surat)	B.E.	2001	Chemical Engineering



6. **Employment Record**

University	Designation	Period
SVNIT, Surat	Assistant Professor	Since November 2006
SVNIT, Surat	Teaching Assistant	9 months

7. **Other Related Experience (Research)**

University	Designation	Period
SVNIT, Surat	Research Fellow	6 months

8. **Consultancy and Sponsored research activities:** (4 Research Projects)

Sr. No	Project Title	Name of the funding agency	Fund Sanctioned Rs.	Duration	Status
Principal Investigator					
1.	A Study on Ultrasound Assisted Crystallization of Clopidogrel Hydrogen Sulfate	Young Scientists (SERB, DST), New Delhi	Rs.15,76,000/-	Two year (Sanctioned in 2015)	Ongoing
Principal Investigator					
2.	A study on particle size and morphology of clopidogrel hydrogen sulfate by anti-solvent crystallization	Institute Research Grant, MHRD	10,00,000/-	Two year (Sanctioned in 2014)	completed
3.	Sonocrystallization for the recovery of valuable products from dairy waste stream	Annual Plan	2,25,000/-	One Year (Sanctioned in 2007)	completed
Co- Investigator					
4.	To evaluate the performance of tertiary treatment in a full scale up-flow anaerobic sludge blanket (UASB) based sewage treatment plant (STP).	Annual Plan	4,13,750/-	One year (Sanctioned in 2007)	completed

9. Course Development Project:

Sr. No.	Name of the funding agency	Project Title	Year of Sanction of Gran	Amount Sanctioned	Status:	Investigators
01	National Mission Project on Pedagogic Research, MHRD, Govt. of India	Project to develop a course on "Crystallization and Drying"	2015	5.0 Lacs	completed	Principal Investigator: Dr.Sanjaykumar R. Patel Co- Investigator: Dr. A. K. Jana Dr.Shirish Sonwane

10. Publications/Presentations: (Total No.: 26)

Papers published in International Journal: 15

1. **Sanjay R. Patel** and Z.V.P. Murthy, Effect of process parameters on lactose crystal size and morphology in ultrasound assisted crystallization. **Crystal Research and Technology**, 46 (3), 243 – 248 (2011).
2. **Sanjay R. Patel** and Z.V.P. Murthy, Waste whey valorization: Speedy recovery of lactose from dairy waste stream. **Dairy Science and Technology**, 91(1), 53-63(2011).
3. **Sanjay R. Patel** and Z.V.P. Murthy, Optimization of process parameters by Taguchi method in the recovery of lactose from whey using sonocrystallization. **Crystal Research and Technology**, 45(7), 747 – 752 (2010).
4. **Sanjay R. Patel** and Z.V.P. Murthy, Ultrasound assisted crystallization for the recovery of lactose in an anti-solvent acetone. **Crystal Research and Technology**, 44(8), 889 – 896 (2009).
5. **Sanjay R. Patel** and Z.V.P. Murthy, Lactose recovery processes from whey: a comparative study based on sonocrystallization. **Separation & Purification Reviews**, Vol.41 (No.4) (2012) 251-266.
6. **Sanjaykumar R. Patel** and Z.V.P. Murthy, Anti-solvent Sonocrystallization of Lactose, **Chemical and Process Engineering**, Vol.32(4) 379-389(2011).
7. Nalin H. Maniya, **Sanjaykumar R. Patel** and Z.V.P. Murthy, Electrochemical preparation of microstructured porous silicon layers for drug delivery applications, **Superlattices and Microstructures**, 55(2013), 144-150.
8. Nalin H. Maniya, **Sanjaykumar R. Patel**, and Z.V.P. Murthy, Simulation and Fabrication Study of Porous Silicon Photonic Crystal, **Optik – International Journal for Light and Electron Optics**, Vol.125(No.2) (2014) 828-831. DOI: 10.1016/j.ijleo.2013.07.062 (Elsevier Scientific Publication, Germany) (Impact Factor: 0.524/2012)
9. Abhijit A. Lonare, **Sanjaykumar R. Patel**, Antisolvent crystallization of poorly water soluble drugs, **International Journal of Chemical Engineering and Applications**, Vol. 4, No.5, October 2013,337-341.
10. Abdul Rahim Sheikh, **Sanjaykumar R. Patel**, Ultrasound Assisted Reactive Crystallization of Strontium Sulfate, **Journal of Crystal Growth**, 390, 2014, 114-119
11. Nalin H. Maniya, **Sanjaykumar R. Patel**, Z.V.P. Murthy, Study on Surface Chemistry and Particle Size of Porous Silicon Prepared by Electrochemical Etching, **Materials Research Bulletin** 57 (2014) 6–12, DOI: 10.1016/j.materresbull.2014.05.014 (Pergamon-Elsevier Scientific Publication, UK) (Impact Factor: 1.913/2012)
12. Nalin H. Maniya, **Sanjaykumar R. Patel**, Z.V.P. Murthy, Controlled delivery of acyclovir from porous silicon micro-and nanoparticles, **Applied Surface Science**, Volume 330, 1 March 2015, Pages 358–365. (Elsevier Scientific Publication, NORTH-HOLLAND) (Impact Factor: 2.538)

13. Nalin H. Maniya, **Sanjaykumar R. Patel**, Z.V.P. Murthy, Fabrication and application of porous silicon multilayered microparticles in sustained drug delivery, **Superlattices and Microstructures**, (2015), 34-42.
14. Nalin H. Maniya, **Sanjaykumar R. Patel**, Z.V.P. Murthy, Development and in vitro evaluation of acyclovir delivery system using nanostructured porous silicon carriers, **Chemical Engineering Research and Design**, 104 (2015) 551–557
15. Nalin H. Maniya, **Sanjaykumar R. Patel**, Z.V.P. Murthy, Drug delivery with porous silicon films, microparticles, and nanoparticles, *Rev. Adv. Mater. Sci.* 44 (2016), 257-272

Papers published/presented in International Conference/Seminar: 7

1. Konakala, P., **Patel, S.R.**, Mungray, A.K. and Murthy, Z.V.P. Treatment of anaerobic reactor effluents: A comparative approach. International Conference on “Environmental Management: Scenario and Strategies to 2020” held in the Department of Chemical Engineering, Ujjain Engineering College, Ujjain (M.P.), Dec. 26-27, 2007.
2. **Patel, S.R.**, Jayant, M.B. John, J.V., Mungray, A.K. and Murthy, Z.V.P. Sonocrystallization as a method for the treatment of dairy effluents. International Conference on “Environmental Management: Scenario and Strategies to 2020” held in the Department of Chemical Engineering, Ujjain Engineering College, Ujjain (M.P.), Dec. 26-27, 2007.
3. **Patel, S.R.** Murthy, Z.V.P., Lactose Recovery using Sonocrystallization in an Anti-solvent ‘Acetone’, “International Congress of Environmental Research (ICER-08)”, Goa, India, December 18-20, 2008.
4. Abhijit A. Lonare, **Sanjaykumar R. Patel**, Antisolvent crystallization of poorly water soluble drugs, *International Journal of Chemical Engineering and Applications*, 4th International Conference on Chemical Engineering and Applications (CCEA 2013) held in Paris, France during October 12-13, 2013.
5. Nalin H. Maniya, Sanjaykumar R. Patel, Z.V.P. Murthy, Electrochemical Etching of Porous Silicon Layers for Drug Delivery System, Paper Presented at the “ICON-NANO 2013 – An International Conference on Surface Science and Nanotechnology in Biomedical, Pharmaceutical & Engineering Systems, Organized by Shah-Schulman Center for Surface Science and Nanotechnology and Faculty of Pharmacy, Dharmasinh Desai University, Nadiad, India, during December 10-12, 2013.
6. Sagar V. Deotale, Sanjaykumar R. Patel, Meghal A. Desai, Solubility and Bioavailability of Poorly Soluble Drugs using Novel Approaches: A Review, International conference on material and characterisation techniques (ICMCT 2014), held on 10-12 March 2014 at VIT University, Tamilnadu, India.
7. Nitukumari, Sanjay R. Patel, Jignasa Solanki, Zink Oxide Thin Film Preparation, Characterization, and applications in Solar Cell, SIL 33, in International Conference on Macromolecules, synthesis, morphology, Processing, Structure, Properties and applications(ICM 2016) at MGU, Kerala India.

Papers published/presented in National Conference/Seminar: 4

1. Pathak A, **Patel, S. R.**, Murthy, Z.V.P., A comparative study of parameters in the production of alcohol from cheese whey to reduce the BOD, *Proceedings of SUEIMS*, 2008, 62-67.
2. Paper presented on Mechanical Properties & Morphology of Polypropylene Blends in the National Seminar on Polymer, Surfactants & Gels, During March 11-13, 2005 at M.S.Uni., Baroda.
3. Paper presented on Mechanical Properties and Morphology of Polymer Blends at PG-CHEM-EET 2005, During October 29 -30, 2005 at SVNIT, Surat.
4. Abdul Rahim, Sanjaykumar R. Patel, and Z.V.P. Murthy, A Study on the Reactive Crystallization Process, Presented at the “CHEMCON-2012”, the 65th Annual Session of the Indian Institute of Chemical Engineers, held during December 27-30, 2012 at NIT Jalandhar. (P-18)

11. Edited books/Proceedings:

1. Edited Conference proceedings on “Emerging Trends in Chemical Engineering”, 7th -8th May, 2008, Department of Chemical Engineering, SVNIT, Surat.

12. Other Information:**i. Ph.D. Supervision:**

Sr. No.	Student Name Adm. No.	Title of Thesis	Co-Supervisor (if any)
1.	Nalin H. Maniya (DS11CH002) (Degree Awarded)	Porous silicon in drug delivery applications	Dr. Z.V.P. Murthy(Supervisor)
2.	Chetan Sharma (DS14CH004))	Registered for PhD	Dr. M. A. Desai
3.	Nitu Kumari (DS14CH007))	Registered for PhD	Dr. J.N. Solanki
4.	Arunkumar Maganbhai Patel (DS15CH004))	Registered for PhD	-

ii. M.E./M.Tech. Dissertations Guided: 5 completed

Sr. No.	Student Name Adm. No.	Month & Year of Completion	Title of Thesis	Co-Supervisor (if any)
1.	Gaurav S. Saxena (P11CH005)	June 2013	A study on the antisolvent crystallization of lactose	-
2.	Abdul Rahim (P11CH023)	June 2013	A Study on the Reactive Crystallization Process of Strontium Sulfate	-
3.	Mr. Abhijit Lonare (P12CH011)	July 2014	A Study on Antisolvent Crystallization of Telmisartan	-
4.	Mr. Sagar Deotale (P12CH016)	July 2014	Solubility Estimation of Telmisartan in Pure and Binary Solvents	Dr. M.A. Desai
5.	Manoj Rangnathrao Korke (P13CH014)	July 2015	A study on Reactive Crystallization of Lithium Carbonate	-
6.	Parth R. Kayastha(P14CH013)	July 2016	Ultrasound Assisted Cooling Crystallization of Lactose	

iii. Event Organized:

Sr. No.	Name of Faculty Member	Name of Programme	Dates of Programme
	Sanjay R. Patel (coordinator)	STC on Green Concepts in Engineering & Chemistry	12 th – 16 th December, 2016
1.	Sanjay R. Patel (coordinator)	STTP on Recent Trends in Chemical Engineering	7-15 July,2016
2.	Sanjay R. Patel (coordinator)	STTP on Design of Experiment for Process Optimization	6-10 June,2016
3.	Sanjay R. Patel (coordinator)	STTP on Design of Experiment and Artificial Neural Network	22-26 June,2015
4.	Sanjay R. Patel (coordinator)	One Day finishing School on Design of experiment using the Taguchi method: an Overview	25 th April,2015
5.	Sanjay R. Patel (coordinator)	One Day workshop on FEM Simulations using COMSOL Multiphysics and Neural Network based Modelling using STATISTICA	7 th August, 2014
6.	Sanjay R. Patel	One Day workshop on COMSOL	6 th December, 2013

	(coordinator)	multiphysics modeling	
7.	Sanjay R. Patel (coordinator)	National Conference of on Emerging Trends in Chemical Engineering – Global Scenario (ETCE-08)	7 – 8 th May, 2008.
8.	Sanjay R. Patel (Member of Local organizing committee)	ISTE Recognized workshop on Opportunities in Catalysis & Adsorptive separations	7-11 th May, 2007

iv. Expert lecture Delivered

1. Case study on multi-response analysis in STTP at DBACER, Nagpur.
2. Taguchi Method and Analysis of Variance-Basic Procedure and case study in STTP at DBACER, Nagpur.
3. Taguchi Design of Experiments, Modeling and Optimization Techniques for engineering Applications, December, 2016 at SVNIT, Surat.
4. Sonocrystallization Process in QIP sponsored Short Term Course on Green Concepts in engineering and chemistry on 12th – 16th December, 2016.
5. The Use of Ultrasound in crystallization Process in STTP on Recent Trends in Chemical Engineering under TEQIP-II on 11/07/2016 to 15/07/2016 at SVNIT, Surat.
6. Taguchi Method and Analysis of Variance in STTP on Design of Experiment for Process Optimization Overview under TEQIP-II on 7/06/16 at SVNIT, Surat.
7. Solving of Multiresponse Optimization Problems in STTP on Design of Experiment for Process Optimization Overview under TEQIP-II on 10/06/16 at SVNIT, Surat.
8. Optimization using Taguchi Method delivered at STTP on “Optimization: Theory and Engineering Practice”, Vishwakarma Government Engineering College, Chandkheda, Gandhinagar. (18/12/2015)
9. Optimization of Process Parameters using Taguchi Method: Case study delivered at One Day Workshop on “Design of Experiments using the Taguchi Method and Artificial Neural Network”, Pacific School of Engineering, Palsana, Surat. (13/07/2015)
10. Expert lectures on Solving of Taguchi method and ANOVA in STTP on Design of Experiment and Artificial Neural Network under TEQIP-II held during 22-26 June, 2015 at SVNIT, Surat.
11. Taguchi method and ANOVA using Excel in finishing school on Design of experiment using the Taguchi method: an Overview under TEQIP-II on 25/04/15 at SVNIT, Surat.
12. “Ultrasonic assisted processes-I & II” in STTP on Green chemistry and engineering: Towards a sustainable future under TEQIP-II on 20/11/13 at SVNIT, Surat.
13. “Ultrasound assisted separation processes for Industrial applications” in workshop entitled “Performance Enhancement of ETP” on 12th April, 2012 organized at FETR, Bardoli.
14. Introduction to chemical engineering thermodynamics” on March, 2012 at FETR, Bardoli.
15. Introduction to ASPEN Plus Simulation” in STTP on Chemical Process Simulation-application of software in chemical engineering on 4/02/12 at SCET, Surat.
16. Introduction to Reactor Simulation” in STTP on Chemical Process Simulation-application of software in chemical engineering on 12/02/12 at SCET, Surat

v. Member (M) / Life Member (LM) / Life Fellow (LF) of the Following Bodies:

1. Indian Institute of Chemical Engineers (IChE), LM-46892

vi. RECOGNITION AND CITATIONS (Reviewed/reviewing technical papers of Journals)

1. International Journal of Sustainable Energy (Taylor & Francis Group Publication, USA)
2. Journal of The Institution of Engineers (India): Series E
3. Ultrasonics Sonochemistry (Elsevier Scientific Publication)

vii. Workshops/Summer Schools/ Winter schools/Short term Courses attended:

Sr. No.	Institute	Title	Period		
			From	To	Weeks/ days
1.	STC	Product and Process Optimization Using Designed Experiment	18/03/2016	20/03/2016	3 days
2	NIT, Warangal	Sonoprocess Engineering	22/02/2016	26/02/2016	5 days
3.	SVNIT, Surat	Interfacial Engineering and Nanotechnology for Sustainable environment	10/08/2015	14/08/2015	5 days
4.	DBIM, Surat	Data Analysis and Design of experiment using MINITAB	13/02/2015	14/02/2015	2 Days
5.	SVNIT, Surat	STTP on Green chemistry and engineering: Towards a sustainable future	18-11-13	22-11-13	5 days
6.	SVNIT, Surat	Hindi software Prashikshan karyashala	21/10/2013	25/10/2013	5 days
7	SVNIT, Surat	Advances on waste water treatment and energy generation	30/09/2013	4/10/2013	5 days
8	SVNIT, Surat	Workshop on nanotechnology applications for sustainable development	19-04-2013	21-04-2013	3 days
9	SVNIT, Surat	Workshop on intensive Hindi training	23-07-2012	27-07-2012	5 days
10	IIT, Bombay	CEP course on challenges for faculty to meet the need of industry	8-06-2010	12-06-2010	5 days
11	SVNIT, Surat	STTP on Treatment and Disposal of wastewater	5-10-2009	9-10-2009	5 days
12	SVNIT, Surat	STTP on Advanced Instrumental methods of analysis	24-08-2009	28-08-2009	5 days
13	SVNIT, Surat	STTP on Sustainable water and wastewater management techniques	27-07-2009	31-07-2009	5 days
14	SVNIT, Surat	STTP on Nanotechnology: A sustainable development to environment	19-01-2009	23-01-2009	5 days
15	IIT, Bombay	CEP course on CFD analysis in chemical engineering	7-07-2008	11-07-2008	5 days
16	SVNIT, Surat	Pedagogy Training	12-05-2008	15-05-2008	4 days
17	SVNIT, Surat	Training on research methodology in engineering	16-05-2008	17-05-2008	2 days
18	SVNIT, Surat	Induction training	21-01-2008	23-01-2008	3 days
19	SVNIT, Surat	workshop on Opportunities in Catalysis & Adsorptive separations	7-05-2007	11-05-2007	5 days
20	UICT, Mumbai	DST-SERC School on Advanced Separation Processes in Chemical & Biochemical Process Industries	21-03-2007	24-03-2007	4 days
21	SVNIT, Surat	Short Term Programme on Application Orientation in Engineering Mathematics & Mathematical Modeling	26-12-2006	30-12-2006	5 days
22	SVNIT, Surat	Workshop on advanced Analytical Techniques for Material Characterization	8-06-2006	10-06-2006	3 days

viii. Administrative Responsibilities

1. Chief Warden, Hostel no. 13, Swami Vivekanand Bhavan
2. Member, Unnat Bharat Abhiyan, SVNIT, Surat
3. Ex-Warden, Hostel no. 13, Swami Vivekanand Bhavan
4. Department Coordinator of Time Table Committee
5. Member of Registration Committee of Convocation
6. CAD lab In-charge in the Department
7. Faculty Advisor, B.Tech-III (Chemical)
8. Ex-Associate warden, Hostel no-2, Narmad Bhavan
9. Member of environment audit committee
10. Member of Hindi Cell committee
11. Ex-Warden, Hostel no. 8, Tagore bhavan