

CURRICULUM VITAE

Name : Dr. Nilesh P. Patil



Educational : **Gold Medalist**

Ph.D (Chemical Engineering)

M.B.A (Marketing) (Pursuing)

M.Tech (Chemical Engineering)

B.Tech (Chemical Engineering)

FICS, MIE, MIChE, MISTE, MNAFEN, MIMS

Certified Chartered Engineer (IEI, Kolkata)

Certified Professional Engineer (IEI, Kolkata & ECI, New Delhi)

Date of Birth : 21.02.1985

Mobile No. : +91-9689697979

E-mail : drnileshppatil@gmail.com

Permanent Address : Dr. Nilesh Prabhakar Patil

S/o – Shri. Prabhakar Purushottam Patil

House No. 1145, Near Mhalsadevi Temple,

A/P – Talvel, Taluka – Bhusawal, District – Jalgaon,

PIN – 425305 (MS), INDIA

Office Address

: University Institute of Chemical Technology,

Kavayitri Bahinabai Chaudhari North Maharashtra University,

Post Box No. 80, Umavinagar, Jalgaon – 425 001 (MS), INDIA

Phone No. : +91-257-2258420 / 2257441 / 42 / 43

Fax No. : +91-257-2258403

Email ID : directoruict@nmu.ac.in

Areas of Expertise : Advanced Separation Techniques, Process Intensification, Biofuels, Multi-Pressure Distillation, Modeling & Simulation, Water & Waste-Water Treatment Technologies.

Educational Qualifications				
----------------------------	--	--	--	--

Examinations	Year of Passing	Board / University	Marks Obtained	Class Obtained
M.B.A (Marketing)	May 2020	I.M.R., K.B.C.N.M.U., Jalgaon	Appearing	Appearing
Post Graduate Diploma (Intellectual Property Rights) (12 Month)	May 2017	School of Law, K.B.C.N.M.U., Jalgaon	62.60	First Class
Ph.D (Chemical Engineering)	March 2017	U.I.C.T., K.B.C.N.M.U., Jalgaon	AWARDED	
Certificate Course on Industrial Safety & Management (06 Month)	May 2015	S.E. & E.S., K.B.C.N.M.U., Jalgaon	---	(A) Grade
M.Tech (Chemical Engineering)-II	May 2011	U.I.C.T., K.B.C.N.M.U., Jalgaon	CGPA – 7.87	(A) Grade
M.Tech (Chemical Engineering)-I	May 2010	U.I.C.T., K.B.C.N.M.U., Jalgaon	CGPA – 7.50	(A) Grade
GATE – 2008	February 2008	I.I.Sc., Bangalore	72.01%	Qualified AIR-1072
B.Tech (Chemical Engineering)	May 2008	U.I.C.T., K.B.C.N.M.U., Jalgaon	85.93%	(Gold) (Medalist) 1 st Rank
B.Tech (Chemical Engineering)-III	May 2007	U.I.C.T., K.B.C.N.M.U., Jalgaon	74.80 %	1 st Rank
B.Tech (Chemical Engineering)-II	May 2006	U.I.C.T., K.B.C.N.M.U., Jalgaon	74.93 %	1 st Rank
B.Tech (Chemical Engineering)-I	May 2005	U.I.C.T., K.B.C.N.M.U., Jalgaon	74.13 %	1 st Rank

H.S.C.	February 2004	Nasik	66.00 %	First Class
S.S.C.	March 2000	Nasik	65.60 %	First Class

Awards & Honors

- ❖ Honored With Prestigious “**Promising Engineer Award – 2017**” By The Institution of Engineers (India), Kolkata Nashik Local Center, Nashik in Recognition of Remarkable Achievements in the Field of Chemical Engineering On October 11, 2017. **(One of 05 Awardees from Entire Maharashtra State)**
- ❖ Honored With “**Sardar Vallabhbhai Patel Aadarsh Shikshak Puraskar – 2017**” By Joint Convention of Rotary Club of Jalgaon Central, Sardar Vallabhbhai Patel Bahuddeshiya Sanstha & Yuva Vikas Foundation, Jalgaon in Recognition of Outstanding Contribution in Educational & Social Sector of Society On September 03, 2017.
- ❖ Honored With “**Gold Medal**” by Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon in Recognition of Outstanding Contribution as a University Topper for B.Tech [Chemical Engineering] Securing (85.93 %) On January 19, 2008.
(University Topper for B.Tech (Chemical Engineering) from Entire Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon)

Special Achievements

- ❖ Ex. Class-I Officer, Heavy Water Board, Department of Atomic Energy, Government of India, New Delhi.
- ❖ Qualified in GATE-2008 with 72.01 %, securing 1072 AIR rank.
- ❖ Selected in Praj Industries Limited, Pune through campus recruitment as a Process Design Engineer.

Projects

Ph.D (Chemical Engineering) – Design and Development of Multi-Pressure Distillation Technology to Optimize the CAPEX and OPEX for the Production of Ethanol from Fermented Wash in Distillery.

(Research Guide: Prof. Dr. V. S. Patil)

M.Tech (Chemical Engineering) - Detail Engineering Design & Utility Optimization of 30 KLPD TS MPR Distillation Plant For MSSK, Faizpur.

(Guide: Prof. Dr. R. S. Sirsam)

B.Tech (Chemical Engineering) - To Study the Kinetics and Characteristics of Catalytic Esterification Reaction between Acid & Alcohol.

(Guide: Prof. Dr. V. S. Patil)

Total Experience – 11 Years (Industrial- 4 Years, Academic- 7 Years)

Experience – Industrial (04 Years)

Sr. No.	Name of the Institute	Designation	From	To	Total Tenure (Month)
1	PRAJ Industries Limited, Praj Tower, 274 & 275/2, Hinjewadi, Pune: 411057, MS Phone : +91-20-71802000 Fax : +91-20-71802000 E-mail: info@praj.net	Sr. Engineer (Process Engineering)	04.08.2008	24.08.2012	48

Roles & Responsibilities

- Review of Clients RFQ / RFP Documents, Specifications, Datasheets, Verification of FEED, Cost Estimation & Proposal Preparation to Support Sales & Marketing Team.

- Process Design & Detail Engineering Including Performing Process Design, Heat & Material Balance Calculations, Sizing & Selection of Process Equipments, Utility Calculations, Process Simulations, Process Optimization etc. for Pre-Bid & Awarded Projects.
- Designing of Distillation Column, Heat Exchanger, Thermosyphon Reboiler, Condensers & Storage Vessels, Line Sizing of Entire Plant, Sizing Calculations of Relief & Control Valves, Pump & Pipelines Hydraulics Calculations etc.
- Preparation & Review of Various Engineering Deliverables (Drawings & Documents) Such as Plant Layout, Equipment Layout, Elevation Drawing (ELD), Process Flow Diagram (PFD), Piping & Instrumentation Diagram (P&ID), Process Datasheets, Equipment Datasheets, Cause & Effect Diagrams, Process Control Philosophies, Shutdown Philosophies, HAZOP Studies & Reports, Operation & Maintenance Manuals, Standard Pre-Commissioning / Commissioning Procedures etc.
- Experience in Process Simulation Softwares like Aspen HYSYS, Aspen Plus, Chem-CAD, Heat Exchanger Design & Rating Softwares like HTFS, HTRI etc.
- Preparation & Guiding Team of Junior & Trainee Process Engineers to Prepare Various Process Engineering Deliverables (Drawings & Documents) Such as Process Simulation, HMBT, PFD, P&ID, Process Datasheets, Equipment Specifications, Process Control Philosophy, Hazop etc.
- Preparation of Process Data Sheet (PDS) for Process Equipments like Distillation Columns, Shell & Tube Heat Exchangers, Reactors, Centrifuges, Scrubber, Decanter, Dryers, Filters & Digesters etc.
- Preparation of Process Data Sheet (PDS) for Bought-Outs like Centrifugal Pump, Vacuum Pump, PHE'S & Various Control Valves etc.
- Preparation of Process Data Sheet (PDS) for Instruments like Control Valves, Pressure Safety Valves, Flow, Level, Pressure & Temperature Elements etc.
- Providing Necessary Engineering Inputs to the Other Engineering Departments like Proposal, Sales & Marketing, Detail Engineering, Projects, Electrical, Instrumentation, Commissioning etc.
- Preparation & Review of Fire Water Network Hydraulics.

- Basic Engineering Activity Planning, Work Scheduling & Assigning Responsibilities to All Process Engineers & Draftsmen & Monitoring to Meet Project Schedule with Resource Optimization.
- To Impart Trainings on Basic Process Design Engineering & Related Activities, Simulation Tools like Aspen HYSYS / Aspen Plus, Chem-CAD etc. to Newly Joined Graduate Trainee Engineers (GET'S).
- Technical Evaluation & Review of Vendor Documents, Drawings, Datasheets, Specifications & Calculations for Process Equipments, Plant Utility Systems & Other Bought-Outs etc. & Coordination with Vendors & Contractors for Smooth Execution of the Assigned Project.
- Preparing Equipment List, Utility Consumption List, Instrument List, Electrical Load List etc.
- Prepare, Participate & Drive HSEE&S (Health, Safety, Environment, Energy & Security) activities such as Hazard Operability (HAZOP), Hazard Identification (HAZID), Project, Health, Safety & Environment Review (PHSER) Studies, Process Hazard Analysis (PHA), Level of Protection Analysis (LOPA), Root Cause Analysis & Management of Change (MOC).
- Independently Handled Turnkey Distillery Projects from Concept to Commissioning (CToC).
- Commissioning / Supervision of Project Installations.
- Knowledge of Various National & International Codes, Standards & Guidelines Viz. API, ANSI / ASME, IS, IBR, GMP etc.
- Pro-Active Participation in Regular Meetings as Defined in QMS.
- Reporting Work-Order & Task Progress Regularly to Both Internal & External Stakeholders (e.g. Project Managers).

Experience – Academic (07 Years, 00 Months)

Sr. No.	Name of the Institute	Designation	Level	From	To	Total Tenure (Month)
---------	-----------------------	-------------	-------	------	----	----------------------

1	University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, P. O. Box No. 80, Umavi Nagar, Jalgaon - 425001 Phone : +91-257-2257441 Fax : +91-257-2258403 E-mail: directoruict@nmu.ac.in	Assistant Professor (Chemical Engineering)	UG&PG	30.07.2012	Present	07 Years, 00 Months
---	--	--	-------	------------	---------	--

Roles & Responsibilities

- Preparation & Delivering Lectures of Two Subjects to Under Graduate (UG) B.Tech (Chemical Engineering) Students.
- Preparation & Delivering Lectures of One Subject to Post Graduate (PG) M.Tech (Chemical Engineering) Students.
- Preparation & Conducting Laboratory Sessions, Discussion Groups for Under Graduate (UG) & Post Graduate (PG) Students.
- Preparation, Administration & Grading University Examinations, Laboratory Assignments & Project Reports.
- Advise Students on Course & Academic Matters & Career Decisions.
- To Guide & Direct Under Graduate (UG) B.Tech (Chemical Engineering) & Post Graduate (PG) M.Tech (Chemical Engineering) Students in their Research Projects & Advise them on Research Matters.
- To Conduct Research in Field of Specialization & Publish Valuable Findings in Scholarly Journals.
- Serving on Various Academic Committees like Curriculum Development, Syllabus Structure Framing, Curriculum Planning, Examination etc.
- Serving on Various Administrative Committees like Training & Placement, NAAC Accreditation, NBA Accreditation, Anti-Ragging, Discipline, Parent-Teacher Meeting etc.

- Representing Department / University as a Speaker & Guest Lecturer in Various National & International Conferences, Workshops, Seminars etc.
- Provide Professional Consultative Services to Various Government Departments, Industry & Individuals.
- Organize Various National & International Conferences, Short Term Training Programs (STTP'S), Workshops, Professional Training Courses for Students, Research Students & Faculties.

Experience – Visiting Faculty (06 Years, 11 Months)

Sr. No.	Name of the Institute	Designation	Level	From	To	Total Tenure (Month)
1	School of Environmental & Earth Sciences, Kavayitri Bahinabai Chaudhari North Maharashtra University, P. O. Box No. 80, Umavi Nagar, Jalgaon - 425001 (MS) Phone : +91-257-2257429 Fax : +91-257-2258403 E-mail: directorsees@nmu.ac.in	Visiting Professor M.Tech (Environment Engineering)	PG M.Tech	August 2012	Present	80

Roles & Responsibilities

- Preparation & Delivering Lectures of One Subject to Post Graduate (PG) M.Tech (Environmental Engineering) Students.

Project Students Guided (UG & PG)

Sr. No.	Name of the Course	No. of Students Guided	
		Completed	Ongoing
1	B.Tech (Chemical Engineering)	19	06

		(List of Students) Annexure-I	
2	M.Tech (Chemical Engineering)	07 (List of Students) Annexure-II	01

Membership of Professional Bodies (16)

Sr. No.	Name of Institution / Society	Membership	
		Grade	Number
1	The Institution of Engineers (India), Kolkata	M.I.E	M-153144-6
2	Indian Institute of Chemical Engineers, Kolkata	M.I.I.Ch.E	LM-43468
3	National Foundation of Indian Engineers, New Delhi	A.M.N.F.E	AML/152/197/ 2012
4	Indian Society for Technical Education, New Delhi	L.M.	LM-87577
5	Asian Polymer Association, New Delhi	L.M	L-377
6	National Safety Council of India, Navi Mumbai	L.M	LM-MAH-618
7	Indian Science Congress Association, Kolkata	L.M	L-31564
8	Indian Chemical Society, Kolkata	L.F	F-7939
9	Oil Technologists' Association of India, Kanpur	L.M	OTA/LM/324/ 2017
10	Materials Research Society of India, Bangalore	L.M	LMB-2840
11	Association of Food Scientists & Technologists (India), Mysore	L.M	4/L019/17/ZON
12	Indian Membrane Society, Baroda	L.M	LM-227
13	Chemical Research Society of India, Bangalore	L.M	LM-1911
14	Chartered Engineer (India) The Institution of Engineers (India), Kolkata	C.Eng	M-1531446
15	Professional Engineer The Institution of Engineers (India), Kolkata	P.Eng	PE7001865
16	Professional Engineer Engineering Council of India, New Delhi	P.Eng	PE/00146/17

Reviewer of Journals (06)

- International Journal of Engineering, Malaysia
- International Journal of Chemical Engineering and Applications, Singapore
- American Journal of Chemical Engineering, New York, USA.
- Journal of Advances in Chemical Sciences, India
- International Journal of Engineering Trends & Technology, India
- International Journal of Chemical Engineering Research, India

Papers Published (14)

1. **Patil N.P.** and Sirsam R.S. (2011) Gamma-ray scanning: the best emerging technology for troubleshooting, optimization and predictive maintenance of distillation columns. *Chemical Industry Digest*, 09, 66-71.
2. **Patil N.P.** and Patil V.S. (2012) Membrane distillation: an alternative to reverse osmosis technology for desalination. *Chemical Industry Digest*, 04, 75-81.
3. **Patil N.P.** and Patil V.S. (2012) Molecular sieve dehydration technology for ethanol dehydration. *Chemical Industry Digest*, 09, 52-57.
4. **Patil N.P.**, Patil V.S. and Patil K.P. (2012) Adsorption of copper (Cu^{++}) & zinc (Zn^{++}) metal ion from waste water by using soybean hulls and sugarcane bagasse as adsorbent. *International Journal of Scientific Research & Reviews*, 1(2), 14-25.
5. **Patil N.P.** and Patil V.S. (2016) Operational and economic assessment of distillation column from the performance of tray. *Int. J. Eng. Trend. Technol.* 4, 500-505.
6. **Patil N.P.**, Patil V.S. and Bhole S.L. (2016) Production of bio-ethanol from cane molasses: energy optimization through internal and external heat integration in distillation column. *J. Adv. Chem. Sci.* 2(1), 215-218.
7. Bhole S.L., **Patil N.P.**, Patil V.S. and Gharpure M.G. (2016) Improvement in stage efficiency and reduction in energy consumption of distillation through artificial irrigation. *J. Adv. Chem. Sci.* 2(2), 219–222.

8. **Patil N.P.**, Patil V.S. and Bhole S.L. (2016) Molecular sieve dehydration: A major development in the field of ethanol dehydration to produce fuel ethanol. *Asian Journal of Science and Technology*. 7(5), 2897-2902.
9. **Patil, N. P.**, Bhole, S. L., & Patil, V. S. (2016). Design of distillation column for handling high density fermented wash in biorefinaries. *International journal of current research*. 8(12), 43554-43559.
10. **Patil, N. P.**, & Patil, V. S. (2017). Fuel ethanol from cane molasses: a review of feedstocks, technologies, opportunities and challenges. *Journal of Natural Products and Resources*. 3(1), 104-110.
11. Ahire, S. H., **Patil, N. P.**, & Patil, V. S. (2017). Electrocoagulation: Novel Technology for Treatment of Industrial waste water. *International Journal of Advanced Electronics and Communication Systems*, 6(5).
12. Chhajed, M. S., **Patil, N. P.**, & Patil, V. S. (2017). Development of Reactor for Carrying Out Biochemical Reaction. *International Journal of Advanced Electronics and Communication Systems*, 6(5).
13. Darekar, M., Thakur, P., Singh, K. K., Patil, N. P., Mukhopadhyay, S. Shenoy, K. T. (2018). Numerical Simulation of Liquid-Liquid Two-Phase Flow at Different Microfluidic Junctions. *Separation Science & Technology (Communicated)*
14. Nirvik Sen, Samir Ekhande, Parag Thakur, K.K. Singh, S. Mukhopadhyay, R. Sirsam, **N. Patil** & K.T. Shenoy (2019) Direct Precipitation of Uranium from Loaded Organic in a Microreactor, *Separation Science and Technology*.
(<https://doi.org/10.1080/01496395.2018.1563158>)

Total Conferences : 37 (National-22, International-15)

Conferences : National (22)

1. Research Paper Presented in a National Level Technical Paper Presentation "POLY-ERA'05" at College of Engineering & Technology, Akola (MS) on September 24, 2005.

2. Research Paper Presented in a National Level Technical Paper Presentation "POLY-IMPETUS" at Laxminarayan Institute of Technology, Nagpur (MS) on February 18-19, 2006.
3. Participated in a National Conference "CHEMCON 2007" held at Kolkata (WB) December 27-30, 2007.
4. Research Paper Entitled "CO₂ Sequestration : A Remedy for Global Warming" Presented in a National Level Technical Paper Presentation "TECHWAVE-2008" at J. T. Mahajan College of Engineering, Faizpur (MS) on February 26, 2008.
5. Research Paper Entitled "Design of Hybrid Power Generation System Using Biomass Fired Boilers" Presented in a National Level Technical Paper Presentation "MILESTONE-2K8" at SSBT'S College of Engineering & Technology, Jalgaon (MS) on March 7, 2008.
6. Research Paper Entitled "Multi-Pressure (MPR) Distillation Technology" Presented in a National Conference on "Recent Advances in Chemical Engineering" at Department of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on March 20, 2010.
7. Participated in a National Conference on "Recent Challenges in Pharmaceutical Sciences and Technology" at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on March 16, 2013.
8. Research Paper Entitled "Energy Integrated Multi-Pressure Distillation Technology – A New Era on the Horizon of Distillation Technology" Presented in a National Conference on "Recent Advances in Polymer Technology" at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on March 21-22, 2013.
9. Research Paper Entitled "Polymer Layered Silicate Nanocomposites" Presented in a National Conference on "Nano Science & Nano Technology" at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on March 23, 2013.
10. Research Paper Entitled "Green Fuel Bioethanol: Current and Future Perspectives" Presented in a National Conference on Modern and Innovative

Tools for Sustainability “MITS-2016” at Maharashtra Institute of Technology, Pune (MS) on February, 25-26, 2016.

11. Research Paper Entitled “Energy Optimization in the Production of Anhydrous Ethanol through Molecular Sieve Dehydration” Presented in a National Conference on Recent Trends in Chemical Engineering and Technology “REACT-2016” at Laxminarayan Institute of Technology, RTM Nagpur University, Nagpur (MS) on February 27-28, 2016.
12. Research Paper Entitled “A Review of Bioethanol Separation Technologies in Current and Future Distilleries” Presented in a National Conference on Recent Trends in Chemical Engineering and Technology “REACT-2016” at Laxminarayan Institute of Technology, RSTM University, Nagpur (MS) on February 27-28, 2016.
13. Research Paper Entitled “Novel Treatment Techniques for Treatment of Spent Wash” Presented in a National Conference on “Monitoring and Assessment of Natural Resources for Sustainable Management” at School of Environmental & Earth Sciences, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on January 23-24, 2017.
14. Research Paper Entitled “Application of Electro-coagulation Process for Treatment of Distillery Spent Wash” Presented in a National Conference on “Recent Advances in Chemical Engineering” at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on January 30-31, 2017.
15. Research Paper Entitled “Review of Biological, Chemical & Thermal Treatment Technologies for Molasses Base Distilleries Spent Wash in India” Presented in a National Conference on “Recent Advances in Chemical Sciences, Technology & Environment” at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on January 30-31, 2017.
16. Research Paper Entitled “Treatment of Distillery Spent Wash by Electro-Coagulation Using Stainless Steel Electrodes” Presented in a National Conference on “Advances in Chemical Sciences” at School of Chemical

Sciences, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on March 04, 2017.

17. Research Paper Entitled “Electro-Coagulation: Novel Technology for Treatment of Industrial Waste Water” Presented in a National Conference on “Current Trends Engineering, Science, Technology & Management” at Godavari College of Engineering, Jalgaon (MS) on March 21, 2017.
18. Research Paper Entitled “Development of Reactor for Carrying Out Biochemical Reaction” Presented in a National Conference on “Current Trends Engineering, Science, Technology & Management” at Godavari College of Engineering, Jalgaon (MS) on March 21, 2017.
19. Research Paper Entitled “Zero Liquid Discharge: A Sustainable Solution for Water Management in Indian Distilleries” Presented in a National Conference on “Advances in Environmental Sciences and Geospatial Technology” at School of Environmental & Earth Sciences, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on February 15-16, 2018.
20. Research Paper Entitled “Development of Potato Starch Based Bioadsorbent for Dehydration of Bioethanol” Presented in a National Conference on “Innovations in Chemistry : Laboratory to Society” at School of Chemical Sciences, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on March 05-06, 2018.
21. Research Paper Entitled “Hybrid Multi-Pressure Distillation – Molecular Sieve Dehydration Technology: A Reliable Approach for Energy Optimization in Bioethanol Production Process” Presented in a National Conference on “Current Trends Engineering, Science, Technology” at Godavari College of Engineering, Jalgaon (MS) on March 20, 2018.
22. Research Paper Entitled “Applications of Algae in Wastewater Treatment : A Novel Approach” Presented in a National Conference on “Innovations in Environmental & Earth Sciences for Sustainable Future” at School of Environmental & Earth Sciences, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on February 27-28, 2019.

Conferences : International (15)

1. Research Paper Entitled "CBDT : The Ultimate Energy Integrated Technology for the Production of Absolute alcohol" in a International Conference on "Advances in Energy Technology" at SSBT'S College of Engineering & Technology, Jalgaon (MS) on March 29, 2013.
2. Research Paper Entitled "Hybrid Hydroelectric Power Plant : The Ultimate Technology For Electricity Generation" in a International Conference on "Mathematical Modeling & Optimization Techniques in Science & Engineering" at SSBT'S College of Engineering & Technology, Jalgaon (MS) on July 26-27, 2013.
3. Research Paper Entitled "Fuel Generation From Waste Lubrication Oil" in a International Conference on "Global Opportunities For Latest Developments In Chemistry & Technology" at Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on February 06-08, 2014.
4. Research Paper Entitled "Role of Modeling & Simulation in Energy Conservation in Designing of Distillation Column" in a International Conference on "Modeling & Simulation In Engineering & Technology" at Godavari College of Engineering, Jalgaon (MS) on February 15-16, 2014.
5. Research Paper Entitled "Performance Enhancement of Distillation Column by Optimizing the Geometry of Bubble Cap Trays" in a International Conference on "Sustainable Developments" at SSBT'S College of Engineering & Technology, Jalgaon (MS) on February 25-26, 2014.
6. Research Paper Entitled "Molecular Sieves Dehydration - An Energy Intensive Technology for Production of Fuel Grade Ethanol from Rectified Spirit" in a Third Global Sustainable Biotech Congress's International Conference on "Innovations in Biotechnology & Their Applications" Organized by Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon in Collaboration with Cety's University, Mexico at Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on December 01-05, 2014.
7. Research Paper Entitled "Process Integration and Intensification for the Separation of Ethanol from Fermented Wash in Distillery" in a International

- Conference on “Advances in Chemical Engineering” at National Institute of Technology Karnataka, Surathkal, (Karnataka) on December 20-22, 2015.
8. Research Paper Entitled “Operational and Economic Assessment of Distillation Column from the Performance of Tray” in a International Conference on “Global Trends in Engineering, Technology & Management” at SSBT’S College of Engineering & Technology, Jalgaon (MS) on January 04-06, 2016.
 9. Research Paper Entitled “Production of Bioethanol: Energy Optimization through Revamping of Multi-Pressure Distillation Technology” in a International Conference on “Sustainable Development for Energy and Environment” at CSIR, National Chemical Laboratory, Pune (MS) on January 16-17, 2017.
 10. Research Paper Entitled “Biofuel Production by Dehydration of Ethanol-Water Mixture Using Biobased Adsorbents” in a International Conference on “Recent Trends in Engineering and Science” at Government College of Engineering, Jalgaon (MS) on January 20-21, 2017.
 11. Research Paper Entitled “Pressure Swing Adsorption Technology: A Novel Approach for Production of Fuel Grade Ethanol” in a International Conference on “Advance Materials, Textiles & Processes” at Uttar Pradesh Textile Technology Institute, Kanpur (UP) on October 14-15, 2017.
 12. Research Paper Entitled “Application of Electro-Coagulation Technology in Waste Water Treatment” in a International Conference on “Advance Materials, Textiles & Processes” at Uttar Pradesh Textile Technology Institute, Kanpur (UP) on October 14-15, 2017.
 13. Research Paper Entitled “Column Design By Visual Basic & Comparative Study With MATLAB” in a International Conference on “Global Trends in Engineering, Technology & Management” at SSBT’S College of Engineering & Technology, Jalgaon (MS) on December 22-24, 2017.
 14. Research Paper Entitled “Development & Characterization of Biobased Adsorbents from Banana Stem for Bioethanol Dehydration” in a International Conference on “Global Trends in Engineering, Technology & Management” at SSBT’S College of Engineering & Technology, Jalgaon (MS) on December 22-24, 2017.

15. Research Paper Entitled “Numerical Simulation of Liquid-liquid Two-Phase Flow at Different Microfluidic Junctions” in a International Conference (DAE-BRNS Symposium - SESTEC-2018) on “Emerging Trends in Separation Science & Technology” at BITS Pilani, K. K. Birla Goa Campus, Goa on May 23-26, 2018.

Trainings, Workshops & STTP’S – 35 (Attended-20, Organized-15)

Trainings, Workshops & STTP’S – Attended (20)

1. Participated in a National Level Caliber Workshop on “Pumps, Seals & Pickings” held at Mumbai (MS) on January 27-28, 2011.
2. Participated in a One Week Short Term Training Program (STTP) On “MATLAB Fundamentals & Applications” at Shri Sant Gadge Baba College of Engineering & Technology, Bhusawal (MS) on April 22-27, 2013.
3. Participated in a One Week Short Term Training Program (STTP) On “Nano Science & Nano Technology” at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on June 20-25, 2013.
4. Participated in a Workshop on “Team Building” at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on July 27-28, 2013.
5. Participated in a One Week Quality Improvement Program (QIP) On “Innovations In Drug Design & Delivery” at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on September 20-27, 2013.
6. Participated in a One Week Short Term Training Program (STTP) On “Advances In Waste Water Treatment & Energy Generation” at Sardar Vallabhai Patel National Institute of Technology, Surat (GJ) on September 30–October 04, 2013.
7. Participated in a Two Week ISTE Workshop On “Fluid Mechanics” Conducted by Indian Institute of Technology, Kharagpur Under the National Mission on Education through ICT at SSBT’S College of Engineering & Technology, Jalgaon (MS) on May 20-30, 2014.

8. Participated in a One Day Workshop on “Comsol Multiphysics Modeling” Organized by Comsol Multiphysics Pvt. Limited, Bangalore at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on October 30, 2014.
9. Participated in a Savatribai Phule Pune University Sponsored Three Days Intensive Course On “Process Equipment Design” at MIT Academy of Engineering, Alandi (D) Pune (MS) on November 27-29, 2014.
10. Participated in a Savatribai Phule Pune University Sponsored Three Days International Workshop On “Advances in Engineering Optimization” at Dynanganga College of Engineering & Research, Narhe, Pune (MS) on January 29-31, 2015.
11. Participated in Three Days Continuing Professional Development Program On “TQM Practices and Tools for Organizational Excellence” at Engineering Staff College of India, Hyderabad (Telangana) on February 09-11, 2016.
12. Participated in Two Days Workshop on “Capacity Enhancement Program” Organized by SaiTej Life Training Institute, Nashik at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on July 23-24, 2016.
13. Participated in One Day Workshop On “Indian Patenting & Filing Procedures” Organized by Rashtriya Uchchatar Shiksha Abhiyan (RUSA), Govt. of Maharashtra, Mumbai in collaboration with Rajiv Gandhi National Institute of Intellectual Property Management, Nagpur & Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon at Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on August 23, 2016.
14. Participated in MHRD, GOI, TEQIP-II Sponsored Two Week Short Term Training Program (STTP) on “Process Design & Intensification: Fundamentals to Applications” Organized by University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) from December 26, 2016 to January 04, 2017.
15. Participated in MHRD, GOI, TEQIP-II Sponsored One-Week Workshop on “Best Practices in Teaching – Learning Methods & NBA Accreditation Process”

Organized by Engineering Staff College of India, Hyderabad at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on March 22-26, 2017.

16. Participated in One-Day Workshop on “Retail Management” Organized by Institute of Management & Research, Jalgaon (MS) on February 8, 2018.
17. Participated in MHRD, GOI, TEQIP-III Sponsored One Week Short Term Training Program (STTP) on “Advanced Industrial Waste Management Techniques” Organized by University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) from May 14-19, 2018.
18. Participated in One Day National Seminar On “Intellectual Property Rights & Patent System in India” Organized Jointly by School of Law & IPR Cell, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on March 12, 2019.
19. Participated in One Day State Level Workshop On “Laboratory & Industrial Safety & Hazards” Organized by School of Chemical Sciences, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on March 13, 2019.

Trainings, Workshops & STTP’S – Organized (15)

1. **Member** – Organizing Committee for National Conference on “Recent Challenges in Pharmaceutical Sciences and Technology” held at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on 16 March, 2013.
2. **Member** – Organizing Committee for National Conference on “Recent Advances in Polymer Technology” held at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on 21-22 March, 2013.
3. **Member** – Organizing Committee for National Conference on “Nano Science & Nano Technology” held at University Institute of Chemical Technology, Kavayitri

Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on 23 March, 2013.

4. **Member** – Organizing Committee for Short Term Training Program (STTP) On “Nanoscience & Nanotechnology” held at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on 20-25 June, 2013.
5. **Member** – Organizing Committee for National Conference on “Recent Advances in Chemical Sciences & Technology” held at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on 21 September, 2013.
6. **Member** – Organizing Committee for National Conference on “Recent Advances in Food & Fermentation Technology” held at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on 25 September, 2013.
7. **Member** – Organizing Committee for One Week Quality Improvement Program (QIP) On “Innovations in Drug Design & Delivery” held at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on 20-27 September, 2013.
8. **Member** – Organizing Committee for National Conference on “Emerging Trends in Oleochemicals & Ecofriendly Coating Technologies” held at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) on 28 September, 2013.
9. **Coordinator** – Organized Two Week Short Term Training Program (STTP) on Process Design & Intensification: Fundamentals to Applications Sponsored by TEQIP at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) from December 26, 2016 to January 04, 2017.
10. **Convener** – Organized Two Days National Conference on Recent Advances in Chemical Engineering Sponsored by TEQIP at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) during January 30-31, 2017.

11. **Member** – Organizing Committee for National Conference on Recent Advances in Chemical Sciences, Technology & Environmental Sponsored by TEQIP at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) during January 30-31, 2017.
12. **Member** – Organizing Committee for National Conference on Recent Advances in Polymer Technology Sponsored by TEQIP at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) during January 27-28, 2017.
13. **Coordinator** – Organized One Week Workshop on “Best Practices in Teaching – Learning Methods & NBA Accreditation Process” conducted by Engineering Staff College of India, Hyderabad at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) from March 22-26, 2017.
14. **Member** – Organizing Committee for National Conference on Recent Advances in Polymer Technology Sponsored by TEQIP at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) during February 16-17, 2018.
15. **Coordinator** – Organized One Week Short Term Training Program (STTP) on “Advanced Industrial Waste Management Techniques” Sponsored by TEQIP at University Institute of Chemical Technology, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon (MS) from May 14-19, 2018.

Responsibilities Handled

1. **Chairman** – Blood Donation Camp organized Jointly by UICT, KBCNMU, Jalgaon & CIVIL Hospital, Jalgaon on February 28, 2019.
2. **Jury** – University Level Research Project Presentation Competition organized by School of Environmental & Earth Sciences, KBCNMU, Jalgaon on January 31, 2019.
3. **Chairman** – Blood Donation Camp organized Jointly by UICT, NMU, Jalgaon & CIVIL Hospital, Jalgaon on March 06, 2018.

4. **Chairman** – Blood Donation Camp organized Jointly by UICT, NMU, Jalgaon & CIVIL Hospital, Jalgaon on February 28, 2017.
5. **Coordinator** – TEQIP Sponsored One Week Industrial Tour for Third Year B.Tech (Chemical Engineering) Student from January 07-15, 2017.
6. **Chairman** – Blood Donation Camp organized Jointly by UICT, NMU, Jalgaon & CIVIL Hospital, Jalgaon on February 27, 2016.
7. **Expert Member/Judge** – for Student Paper Presentation at National Conference REACT-2016 at LIT Nagpur.
8. **Expert Member** – for Technical Interview of Final Year B.Tech (Chemical Engineering) Students in Interview Techniques Workshop Organized by Central Training & Placement Cell at UICT, KBCNMU, Jalgaon on January 24, 2016.
9. **Coordinator** – UG & PG Admissions for Academic Year 2016-2018.
10. **Member** – Internal Evaluation Committee of TEQIP for Seed Money Bill Verification.
11. **Member** – Organizing Committee Open-House-2013-2016.
12. **Member** – Examination Committee at UICT for Academic Year 2013-2016.
13. **Member** – Organizing Committee for Teacher Parent Meet.
14. **Member** – Committee for Preparation of NBA Accreditation.
15. **Member** – Finance Committee – TEQIP-II.

In-Plant Trainings

- ❖ “Sudarshan Chemical Industries” Roha: - 30 days (5/05/2006 to 15/06/2006).
- ❖ “Filtra Catalysts & Chemicals Ltd” Chiplun: - 45 days (5/05/2007 to 10/07/2007).

Extra Curricular Activities

- ❖ State Level Science Exhibition 2006 – 2nd Prize for technical poster on “Plastic Wastes & Plastic Fuels”.
- ❖ State Level Science Exhibition 2007 - Participated for working model “Instant Pressure Air Compressor”.

- ❖ State Level Science Exhibition 2008 - Participated for technical poster on “ CO₂ Sequestration”.

Social Contribution

1. **Chairman** – Chairman of One Day Working Model Competition (WMC-2017) Organized By Sardar Vallabhbhai Patel Multi-Purpose Foundation, Yuva Vikas Foundation & Rotary Club of Jalgaon Central, Jalgaon in the 142nd Birth Commemoration of Great Visionary Bharat Ratna Lohapurush Sardar Vallabhbhai Patel On October 31, 2017.
2. **Chairman** – Chairman of One Day Workshop On “Safety Awareness In Handling Chemical Fertilizers, Toxic Pesticides & Insecticides” for Farmers Organized By Akhil Bhartiya Leva Vikas Mahasangh, Jalgaon On the Occasion of Kisan Diwas (Farmer's Day) On December 23, 2016.
3. **Chairman** – Chairman of One Day Training Program On “Importance of Rain Water Harvesting” for Villagers in Talvel, Taluka – Bhusawal, District – Jalgaon Organized By Akhil Bhartiya Leva Vikas Mahasangh, Jalgaon On the Occasion of Water Day On April 14, 2016.

Computer Professionalism

- MS-CIT with 96.00 %
- Chem-CAD 5.2, 6.0
- Auto-CAD 2006
- Aspen
- Hysis

Personal Profile

Name : Dr. Nilesh Prabhakarrao Patil
Fathers Name : Shri. Prabhakarrao Purushottam Patil
Nationality : Indian
Date of Birth : 21st February, 1985
Marital Status : Married
Languages Known : English, Hindi & Marathi
Hobbies : Reading News Paper

References

- **Prof. Dr. Jitendra B. Naik.**
Director,
University Institute of Chemical Technology,
Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon – 425 001 (MS)
Phone (O) : +91-2257441 / 2257442
Fax : +91-257-2258403
Mobile : +91-9422205671
E-mail : jitunaik@gmail.com

- **Prof. Dr. V. S. Sapkal.**
(Hon'ble Former Vice Chancellor, R. S. T. M. Nagpur University, Nagpur)
Director,
University Department of Chemical Technology,
Sant Gadge Baba Amravati University, Amravati – 444 602 (MS)
Phone (O) : +91-721-2662358
Phone (R) : +91-721-2660836
Fax : +91-721-2662135
Mobile : +91-9422856980
E-mail : vssapkal@gmail.com

- **Mr. Anant D. Patil.**
Executive Vice President (Engineering & Technology)
Praj Industries Limited, Pune.
Praj Tower, 274 & 275/2,
Bhumkar Chowk-Hinjewadi Road, Hinjewadi, Pune – 411057 (MS)
Phone (O) : +91-20-71802000 / 22941000
Phone (R) : +91-20-
Fax : +91-20-22941299
Mobile : +91-9960411160
E-mail : anantpatil9@gmail.com

Place : Jalgaon

Yours Sincerely,

Date : 30.06.2019

Dr. Nilesh Prabhakar Patil

Annexure-I

List of Students Guided for B.Tech(Chemical Engineering) - 25

Sr. No.	Name of the Student	Name of the Project	Academic Year	Completed On
1	Patil Bhushan R.	Entrainment Length of Cohesive Particles in Fluidized Bed	2014-2015	July-2015
2	Thote Adhiraj P.	Design of Reactive Distillation Column	2014-2015	July-2015
3	Arsode Atul S.	Replacement of Metal Oxide Flame Retardant by Environment Friendly Flame Retardant	2014-2015	July-2015
4	Tripathi Deepak R.	Pulsar Side Cover Rejection	2014-2015	July-2015
5	Thombare Bapuso C.	Studies on Utility at Glenmark Pharmaceutical Ltd., Ankleshwar	2014-2015	July-2015
6	Patil Ritesh L.	H-Acid Manufacturing	2016-2017	July-2017
7	Patil Amol D.	H-Acid Manufacturing	2016-2017	July-2017
8	Rane Bhushan R.	Tartaric Acid Recovery Plant	2016-2017	July-2017
9	Jagtap Gaurav S.	Process Study of Nitrile Plant, Vacuum Distillation & Hydrogenation Plant	2016-2017	July-2017
10	Thorat Rahul P.	Effluent Treatment Plant	2016-2017	July-2017
11	Bisht Shubham	Studies of Ammonia Plant at RCF, Chembur, Mumbai	2016-2017	July-2017
12	Bharambe Gaurav G.	Calculative Analysis of Reactor, Charge Heater, Recycle Gas Comp & Charge Pump in DHDT	2016-2017	July-2017
13	Choudhari Ankita G.	Production & Scale Up of Mono Disperse Graphene Quantum Dots by Using Used Battery & Graphene Rod	2017-2018	July-2018

14	Mahajan Dipak R.	Material & Energy Balance of Oxalic Acid Manufacturing Process	2017-2018	July-2018
15	Dhangar Bhushan V.	Hydrodynamics & Drop Size Distribution Studies in Solvent Extraction Contactors	2017-2018	July-2018
16	Beg Irphan Beg A.	Production of 4-Nitrophenyl Chloroformate & N-Pentyl Chloroformate	2017-2018	July-2018
17	Farkade Kanchan W.	Particle Size Engineering Using Automated Batch Crystallizer	2017-2018	July-2018
18	Fulari Akshay S.	Material & Energy Balance of Oxalic Acid Manufacturing Process	2017-2018	July-2018
19	Neve Danvesh V.	To Study Effect of Reaction Time with Different Precursors on the Synthesis of Magnetite Nanoparticles	2017-2018	July-2018
20	Alok Ranjan		2018-2019	
21	Jangale Akash S.		2018-2019	
22	Shende Pratiksha K.		2018-2019	
23	Pajgade Nilesh V.		2018-2019	
24	Sonawane Lalit B.		2018-2019	
25	Pazare Manasi S.		2018-2019	

Annexure-II

List of Students Guided for M.Tech(Chemical Engineering) - 08

Sr. No.	Name of the Student	Name of the Project	Academic Year	Completed On
1	Kharche Atul M.	Design & Development of Bubble Cap Tray to Optimize & Enhance Performance of Distillation Column	2013-2014	June-2014
2	Patil Mayur A.	Removal of Metal Ion from Waste Water Using Natural Adsorbents	2013-2014	June-2014
3	Ahire Satish H.	Treatment of Spent Wash by Electro-Coagulation Technique	2016-2017	July-2017
4	Patil Snehal R.	Energy Optimization in Ethanol Dehydration through Application of Biobased Adsorbents	2016-2017	July-2017
5	Chhajed Monika S.	Development of Reactor for Biochemical Reactions	2016-2017	July-2017
6	Thakur Parag P.	Intensification of Uranium Separation Process Using Microreactor	2017-2018	July-2018
7	Alone Rohini S.	Microencapsulation Using Biodegradable Polymer	2017-2018	July-2018
8	Gurav Bhushan V.		2018-2019	Ongoing