

Dr. Girish Manoharrao Deshmukh

Professor (CAS),

Department of Petrochemical Technology

Laxminarayan Institute of Technology

Rashtrasant Tukadoji Maharaj Nagpur University

Nagpur- 440033 (Maharashtra)

Cell Phone: 9422823731

Personal Email: gmdeshmukh7@rediffmail.com



❖ Academic Qualifications:

B. Tech (Chemical Engineering), 1987, Amravati University,

M. Tech (Petro-chemical Technology), 1989, L.I.T. Nagpur University,

Ph.D. (Chemical Engineering), 2005, Dr. B. A. Tech. University, Lonere.

❖ Research Interest:

Biofuels, Heterogeneous systems, Catalysis and Reaction Engineering.

❖ Experience:

A) Industrial Experience:

Sr. No.	University/Organization	Post	Period of service		Years
			From	To	
1	DCL Polyesters Ltd., Nagpur	Assistant Engineer	December 21, 1989	November 7, 1991	2 Years

B) Teaching Experience:

Sr. No.	University/Organization	Post	Period of service		Year/ Month
			From	To	
1	Dr. Babasaheb Ambedkar Technological University, Lonere	Lecturer	November 11, 1991	November 10, 1997	06
2	Dr. Babasaheb Ambedkar Technological University, Lonere	Lecturer (senior scale grade)	November 11, 1997	November 10, 2002	5 year

3	Dr. Babasaheb Ambedkar Technological University, Lonere	Lecturer (selection scale grade).	November 11,2002	June 20,2003	7 month
			May 24,2004	September 23, 2005	1 year 4 month
		Assistant Professor	June 21,2003	May 23,2004	11 month
			September 24,2005	December 31, 2005	3 month
		Associate Professor	January 1, 2006	May 14, 2013	7 years 4 month
		Associate Professor	August 1, 2013	August 5, 2013	5 days
4	Laxminarayan Institute of Technology; Rashtrasant Tukadoji Maharaj Nagpur University Nagpur	Director	May 15, 2013	July 31, 2013	2 month 15 days
5	Laxminarayan Institute of Technology; Department of Petrochemical Technology Rashtrasant Tukadoji Maharaj Nagpur University Nagpur	Head and Associate Professor	August 6, 2013	August 6, 2016	03 Years
6	Laxminarayan Institute of Technology; Department of Petrochemical Technology Rashtrasant Tukadoji Maharaj Nagpur University Nagpur	Head and Professor	August 6, 2016	Till Date	Years
Total Experience					30 Years 6 Months

C) Administrative experience at University level:

Sr. No.	University/Organization	Post	Period of service		Year
			From	To	
1	Dr. Babasaheb Ambedkar Technological University, Lonere	I/C Registrar	October 11, 2010	April 14, 2013	2 years 6 months
2			January 20,2007	October 10, 2010	3 years 9 months

	Dr. Babasaheb Ambedkar Technological University, Lonere	Head, Department of Petrochemical Technology	May 8, 1992	March 1996	04 years
	Laxminarayan Institute of Technology;		June 22, 2001	August 31, 2001	02 month
	R.T.M Nagpur University		August 06,2013	July 06, 2021	07 years 10 months
3	Dr. Babasaheb Ambedkar Technological University, Lonere	Chief Rector of University Hostels	June 2006	June 2009	03 yrs
4	Dr. Babasaheb Ambedkar Technological University, Lonere	Training and Placement Officer	December 14, 2005	January 2008	02 yrs
	Laxminarayan Institute of Technology; R.T.M Nagpur University		July 16,2018	Till Date	03 years
5	Dr. Babasaheb Ambedkar Technological University, Lonere	Assistant Rector of University Dhavalgiri Hostel	July 20, 2001	December 2005	04 yr 6 month
6	Dr. Babasaheb Ambedkar Technological University, Lonere	Rector of University Gagangiri Hostels	January 2006	June 2009	03 yrs 6 month
7	Dr. Babasaheb Ambedkar Technological University, Lonere	Academic Council Member	June 2003	May 2006	03 years
			January 2007	May 2013	06 years
8	Dr. Babasaheb Ambedkar Technological University, Lonere	Purchase committee member	June 1992	March 31, 1993	01 year
9	Dr. Babasaheb Ambedkar Technological University, Lonere	Board of studies of Petrochemical Engineering	September 7, 1995	March 1996	01 years
			January 20,2007	May 2013	06 years

10	Rashtrasant Tukadoji Maharaj Nagpur University Nagpur	Member Incharge of University skill development & Entrepreneurship Guidance center	September 05,2013	January 18,2019	5 yrs 4 months
11	Rashtrasant Tukadoji Maharaj Nagpur University Nagpur	BOS member of Chemical Technology	September 2013	Till Date	8 years
12	Laxminarayan Institute of Technology; R.T.M Nagpur University	R.T.I Officer	August 2013	Till Date	8 years
13	Laxminarayan Institute of Technology; R.T.M Nagpur University	IIChe Co- ordinator/Member	July 2014	Till Date	7 years
14	Laxminarayan Institute of Technology; R.T.M Nagpur University	Head, Pulp and Paper Technology	December 2014	July 2019	4 yrs 7 months
15	Laxminarayan Institute of Technology; R.T.M Nagpur University	L.I.T Management Committee Member	December 09,2015	Till Date	6 year s

D) Research experience:

Sr. No.	University/Organization	Topic	Period of research		Year
			From	To	
1	UGC sanctioned Major Research Project F. No. 34-391/2008 (SR) dated 26/12/2008	Oxidative Absorption of Hydrogen Sulfide using Iron Chelate Complex	28/12/2008	June 2012	03

2	National Chemical Laboratory, Pune(during my Ph.D. work)	Heterogeneous combustion reactions of VOC's	March 1999	October 21,2003	04
3	Dr. Babasaheb Ambedkar Technological University, Lonere(Ph.D. students working under my guidance)	Chelate degradation and Heavy metal removal	October 2005	October 2009	04
4	Dr. Babasaheb Ambedkar Technological University, Lonere (M.Tech./Ph. D. students working under my guidance)	Alternative fuels (Biodiesel, Gasohol)	March 2007	Till date	
5	L.I.T RTM Nagpur University,(Ph.D student)	Eco and environmental friendly bio-diesel and its blend	December 12,2016	Till date	

E) Member of Professional society

- i. Life member of Indian society for technical education (ISTE), LM 12217
- ii. Life member of catalysis society of India.
- iii. Life member of Indian Institute of Chemical Engineers (IChE) LM

1) Publications (International 12, National 04, In process 06)

A) Publications in International Journal:

Publications in National Journal:

Sr. No.	Name of Authors	Title of Paper	Name of the Journal	Issue No.	Year of Publication
1	G. M. Deshmukh	Re-refining of used lubricating oil	Chemical Engineering World	11	November 1999
2	G. M. Deshmukh	Acid Effects on Liquid – Liquid Equilibria	Chemical Weekly, Mumbai	45	1999 (163-166)
3	G.M. Deshmukh, S. N. Randive and M. M. Shekh	Poweralcohol: Effect of Ethanol Blending in Gasoline	Chemical Engineering World	06	2003 (75-76)

4	G.M. Deshmukh, T. K. Shaikh, D. K. Chalke and Narendra Kumar	Fuel Ethanol: Design of azeotropic distillation column	Chemical Engineering World	08	2004(75-77)
---	---	--	----------------------------	----	-------------

2) Conferences (*International 01, National 13*):-

A) International Conference:

Sr.No.	Name of Authors	Title of Paper	Presented At	Year
1	G.M. Deshmukh, V. R. Choudhary	Kinetics of the complete combustion of dilute methane, propane and toluene over Mn-doped ZrO ₂ catalyst	17 th International congress of chemical and process engineering (CHISA), Prague, Czech Republic,	27-31 st August 2006

(B) National Conference:

Sr.No.	Name of Authors	Title of Paper	Presented at	Year
1	G.M. Deshmukh,	Prevention of hazardous through technological alternatives	Indian society of Environmental Science and Technology (ISEST), Ratnagiri	February 22-23 rd , 1997
2	G.M. Deshmukh, and V. S. Sathe	Pollution due to hazardous pollutants and emission sources from petrochemical industry	Indian society of Environmental Science and Technology (ISEST), Ratnagiri	February 22-23 rd , 1997
3	G.M. Deshmukh, and V. S. Sathe	Environmental Audit (ISO 14000)	Indian society of Environmental Science and Technology (ISEST), Ratnagiri	February 22-23 rd , 1997
4	Chaudhari S. V. and G.M. Deshmukh	Oxidative degradation of chelates in redox desulfurization	CHEMCON 2007, Kolkata	December 27-30, 2007
5	Chaudhari S. V. and G. M. Deshmukh	Biogas-Renewable resource for power generation	CHEMCON 2007, Kolkata	December 27-30, 2007
6	G.M. Deshmukh, Aparna Shete and Deepali Pawar	Oxidative absorption of hydrogen sulfide using Iron-chelate based process: Chelate Degradation	Institute of Technology, Nirma University, Ahmedabad- 382481	December 8-10, 2011

7	G. M. Deshmukh and Anjali Kurve	Biogas production from vegetable waste Teachate: As an alternative energy renewable	“Avishkar”RTM Nagpur University, Inter-Collegiate Research Festival 2013-2014	3 rd -4 th January 2014
8	G. M. Deshmukh and Eshan Y. Jambhulkar	Catalytic Processing of Vegetable oils into Jet Fuel range Hydrocarbon using Heterogeneous Catalysts	National Level Technical Event TECHNO-thlon 2016 College of Engineering and Technology, Akola	11 th February 2016.
9	G. M. Deshmukh and Vaishali Waghmare	Thermodynamic Modeling of Pyrolysis Process	National Conference on Inter and Intra Disciplinary Blend of Chemical Engineering CHEMIX' 16 IChE Nagpur Regional Centre and IChE Students' Chapter, VNIT, Nagpur on	2 nd -3 rd April 2016
10	G. M. Deshmukh and Vaishali Waghmare	Experimental study of effect of Pressure on Pyrolysis of Biomass	National Conference on Advanced Technology, NCOAT-NIRMITI-2016 Priyadarshini Institute of Engineering and Technology, Nagpur on	11 th -12 th March 2016
11	G. M. Deshmukh and Sujit Modi	Reduction of Fuel consumption in Gasoline Engines by Introducing HHO gas into Intake manifold	Nagpur Science and Engineering Fair Raman Science Centre and Planetarium, Nagpur in collaboration with Technology Park, RTM Nagpur University and Indian Science Congress, Nagpur	19-21 February 2015
12	G. M. Deshmukh	The comparison of optimization technique for batch distillation technique	CHEMCON 2016,Kolkata	27-30 December 2016
13	G. M. Deshmukh	Study of physio-chemical properties and phase separation behavior of ethanol-diesel blends of CI engine	CHEMCON 2016,Kolkata	27-30 December 2016

3) Research and Development Projects (R & D and MODROB)

Sr. No.	Type of Project	Sponsoring Agency	Project topic	Amount Proposed (lakhs)	Completed/ongoing
---------	-----------------	-------------------	---------------	-------------------------	-------------------

1	MODROB	AICTE, New Delhi	Petroleum Testing and Research Lab	15.00	Completed. Ref no. 8024/RIFD/MOD-05/2011-12 dated Jan ,02,2012
2	MODROB	AICTE, New Delhi	Modernization of Polymer/Petroleum Testing laboratory	13.5	Completed (2006)
3	Major Research Project	UGC, New Delhi	Oxidative absorption of hydrogen sulfide by iron chelate complex	12.00	Completed F. No. 34-391/2008 (SR) dated 26/12/2008
4	Research Project	RTMNU UGC Research Project	Reduction of Fuel Consumption in Gasoline Engines by Introducing HHO gas into intake manifold	3.00	Completed 2015-2016
5	Faculty Development Programme	AICTE, New Delhi	Catalysis & Reaction Engineering	4.32	Completed 1. 16-27 th March 2020 2. 22 nd February-6 th March 2021
6	Consultancy project	Foto-Chem Tech Pvt.Ltd, Nagpur	Bio-fuel from Green Biomass	2.0	November 2022

4) Ph.D research fellow/students working under my guidance:

Year of registration	Programme	Name of Student	Topic	Status
2010	TEQIP (Networking)	Ms Sonali Choudhary	Study on Heterogeneous System	Awarded (2014)
December 12,2016	R.T.M Nagpur University	Mr. Sunil Chikte	Eco and environmentally friendly bio-diesel and its blend	In Process

5) Workshop organized:

Sr. No.	Name of Coordinator	Topic	Organized at	Date of programe
---------	---------------------	-------	--------------	------------------

1	G.M. Deshmukh, and V. V. Mahajani	Energy conservation and auditing in chemical process industries	Dr. Babasaheb Ambedkar Technological University, Lonere (Raigad)	December 15-16 ,2006
2	G.M. Deshmukh, and V. V. Mahajani	Chemical Plant Utilities	Dr. Babasaheb Ambedkar Technological University, Lonere (Raigad)	December 21-22, 2007
3	G.M. Deshmukh, and V. V. Mahajani	Steam Engineering-Innovative Approach	Dr. Babasaheb Ambedkar Technological University, Lonere (Raigad)	January 16-17, 2009

6) Expert Lecture Delivered:

Sr. No.	Topic	Programe for	Organized at	Date of programe
1	Oil and Gas Projects	Post graduate students of NICMAR	NICMAR, Pune	September 07 to January 2008
2	Petroleum Refining Design of pipe still heater Chemical Reaction Engineering	L&T (Larson and Tubro) software training programe	Dr.BabasahebAmbedkar TechnologicalUniversity, Lonere (Raigad)	November 13-15,2008
3	Multicomponent Distillation Charectarization of Crude oil	B.Tech Chemical Engineering students	V.I.T Vellore	August 12-13 ,2019

7) Seminar/Workshop/Training attended

A) *ISTE Two weeks courses attended:*

Sr. No.	Topic	Organised at	Date of programe
1	Operation and maintaince of equipments in petrochemical engineering	M. S. University of Baroda, Vadodara	October 14-23, 1992
2	Total quality management	Sardar Patel college of Engineering, Mumbai	March 16-27, 1998
3	Management and control of environmental constraints	Jabalpur Engineering College, Jabalpur	October 3-15, 1998
4	T.Q. M. –Total Quality management	Walchand Institute of Technology, Solapur	23 November-4 December 1998
5	Environmental engineering systems optimization	VRCE, Nagpur	June 11-22 ,2001
6	Total quality management	G. H. Rasoni Polytechnic, Nagpur	29 October-10 November 2001

B) Seminar/Workshop Attended:

Sr. No.	Topic	Organised At	Date of programe
1	14 th National symposium on CATSYMP-98	Department of Chemistry, Anna University, Chennai	December 16-18, 1998
2	Petroleum refining and petrochemical technology	LIT, Nagpur	January 11-12, 1997
3	XXV Annual convention of ISTE	VRCE, Nagpur	December 29-31, 1995
4	Lubricant additives, waxes and petroleum speciality products	IIT, Mumbai	February 17-19, 1995
5	8 th LAWSPS symposium	IIT, Mumbai	January 21-23, 1993
6	Petrochemical-2000	IIT, Mumbai	September 12, 1992
7	Sludge treatment and membrane technology	Dr. BATU, Lonere(India and school of water science, Cranfield University U.K.)	January 16-25, 2001
8	Heterogeneous Catalysis	Banaras Hindu University, Varanashi	June 25-30,2001
9	CATSYMP-15 and IPCAT-2 National symposium on catalysis	National Chemical Laboratory, Pune	January 23-25, 2001
10	Sixth annual convention of Maharashtra – Goa section of ISTE	Dr. BATU, Lonere	December 14-15,2001
11	Industry-Institute interaction (under TEQIP)	College of Engineering, Pune	April 27-28,2006
12	Creativity and Innovation Techniques and patenting in India and abroad	Dr. BATU, Lonere	April 20-21, 2006
13	Management capacity and vision development	Sinhagad Institute of Management, Pune	January 20-22, 2006
14	Total quality management in technical education	Dr. BATU, Lonere	January 23-24, 2006
15	Energy environment and waste management	LIT, Nagpur	January 14-15,1993
16	Carbon credits from steam savings- Revisit energy conservation plans	Indian Chemical Council, Chennai	December 5, 2008
17	Patents & Related Issues	RTMNU Technology Park, Patent Cell, Nagpur.	October 28-29, 2013.
18	Virtual Classroom	RTMNU Technology Park, Nagpur.	January 16,2014
19	Workshop on National Skill Qualification Framework(NSQL)	AICTE hosted at Zulelal Institute of Technology	January 4,2015
19	Two days workshop on Chemical Reactor Design “Attainable Region Approach”	MIT, Department of Chemical Engineering, Alandi, Pune	December 3 rd -4 th 2015
20	Safety Hazardous	R.I.L Nagothane organised by CCPS,AIChe	September 5-7 th , 2017
22	AICTE Workshop on Curriculam Development	Thakur Engineering college, Kandivali, Mumbai	February 21 st ,2018
23	Outcome based Education and NBA process	M.I.T, Aurangabad	July 9-14, 2018
24	An Insight towards Assessment & Accreditation Process for Affiliated Colleges in India	IQAC RTM Nagpur University, Nagpur	July 29,2020

c) Training program attended:

Sr. No.	Topic	Organised At	Date of programe
1	Industrial safety, fire protection and first aid	DCL Polyesters Ltd., Nagpur	December 21-23, 1989
2	Analysis of pesticides	Yawalkar Pesticides Pvt. Ltd., Nagpur	September 11- November 10, 1989
3	In-plant Training	Akola Oil Industry Ltd, Akola	June 17- July 8, 1986
4	Training programme on HPLC	Chemito Technologies Pvt. Ltd., Nashik	December 14-16, 2004
5	Novel Separation Technique in Process Industries	VNIT, Nagpur	November 23–27 th , 2009
6	Moodle Workshop on Learning Management System	RTM Nagpur University, Nagpur	June 1-4 th , 2021

D) M. Tech. Projects guided :

Sr. No.	Name of Student	Year of Registration	Topic	Status
1	Mr. Khandalkar Umakant	2005-2006	Liquid phase oxidation of P-Cresol: Catalyst product	Completed
2	Ms. Khelkar Suvarna	2005-2006	Catalytic alkylation of Phenol	Completed
3	Mr.Undirwade Nitin	2006-2007	Removal of Heavy metal from Waste Stream	Completed
4	Mr. Mulla P N	2007-2008	Microwave assisted reaction	Completed
5	Miss Deepali Pawar	2008-2010	Oxidative absorption of hydrogen sulfide	Completed
6	Rahul Gorde	2013-2014	Absorption of H ₂ S form Bio-gas Chelate Degradation	Completed
7	Anjali Kurve	2013-2014	Alternative Renewable Energy Source: Biogas from Vegetable waste Leachate	Completed
8	Rahul B. Mahalle	2014-2015	Ethanol Utilization in Diesel Engine	Completed
9	Mousmi S. Chakravorty	2014-2015	Design of Atmospheric Distillation Coloum	Completed
10	Eshan Jambulkar	2015-2016	Experimental And Exhaust emission analysis of Diesel engine operating with Ethanol-diesel blend.	Completed
11	Vaishali Waghmare	2015-2016	Pyrolysis: Thermal treatment of solid waste	Completed
12	Punam Bagde	2015-2016	Optimization of Batch Distillation Coloumn by Genetic Algorithm	Completed
13	Aditya Lanjewar	2016-2017	Diesel Ethanol Blending with Effect of HHO	Completed
14	Harish Baviskar	2016-2017	Diesel water emulsified Fuel	Completed
15	Divyani Jadhav	2017-2018	Enzymatic Biodiesel production: A process development	Completed
16	Preeti Sinha	2017-2018	Biodiesel production using micro reactor and batch reactor:Optimization by RSM	Completed

15	Raj Kamble	2018-2019	Removal of Hydrogen Sulphide from biogas using Iron chelate process	Completed
16	Ashwajeet Gajbiye	2018-2019	Design of Crude Distillation Unit	Completed
17	Pranav Labade	2018-2019	Redox reaction of Red mud & storum carbonite	Completed
18	Yash Kumbhare	2019-2020	Compressed Biogas as an alternative Fuel	Completed
19	Vrushali Rewatkar	2019-2020	Catalytic Ozonation of Textile Effluent	Completed
20	Piyush Kant	2020-2021	Design of CDU and VDU using ASPEN	Completed
21	Himanshu Malwe	2022-2023	Biofuel from Green biomass	In-process

E) B. Tech. Projects guided: 220

List of major projects:-

i. Design of Multicomponent petroleum distillation column	ii. Combustion of volatile organic compounds
iii. Thermal cracking of hydrocarbons.	iv. Biodiesel: An alternative fuel.
v. Re-refining of used lubricating oil.	vi. HHO as an Alternative Fuel.
vii. Acid effect on liquid-liquid equilibria.	viii. Compressed Biogas as an alternative fuel
ix. Gasohol: An alternative fuel.	x. Desulphurization

I) Subjects Taught:

<i>At post graduate level:-</i>	<i>At Under Graduate level:</i>
1. Advanced Chemical Reaction Engineering 2. Advanced Petroleum Refining.	1. Chemical Reaction Engineering 2. Unit Operations (Solid- Fluid Operation). 3. Heat Transfer.

<ul style="list-style-type: none"> 3. Multicomponent Distillation 4. Catalysis and Reaction Engineering. 	<ul style="list-style-type: none"> 4. Petroleum Refinery Engineering. 5. Petrochemical Process Engineering. 6. Energy Conservation and Management. 7. Process Equipment Design and Drawing.
--	---