

Curriculum Vitae



1. Name : YOGESH CHANDRAKANT ROTLIWALA
2. Date of Birth : 4-09-1973
3. Age (as on date) : 47
4. Nationality : INDIAN
5. Sex : MALE
6. Marital Status : MARRIED
7. Religion : HINDU
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NEAR PRAGATI NAGAR APT., VESU, SURAT 395007
11. Academic Qualification :

Sr. No.	Examination/ Degree	Board / University	Year	% (CPI)	Class	Main Subject
1.	*Ph.D.	VNSGU, Surat (SVRCET)	2011	-	-	Chemical Engineering
2.	M.E(Chemical Engineering)	MSU, Vadodara	2000	65.48	First Class	Chemical Engineering
3.	B.E (Chemical Engineering)	DDU, Nadiad	1997	69.20	Distinction	Chemical Engineering
4.	Diploma (Chemical Engineering)	TEB, Gandhinagar	1994	72.91	Distinction	Chemical Engineering

*Title of thesis: Resource recovery from waste plastics and biomass;

Guide: Dr.Parimal Parikh, Professor, Chemical Engineering Department, SVNIT, Surat

12. Experience:

Experience	Academics	Research	Industry	Others	Total
27 years	26 years	15 years	1 year	23 years as Chief coordinator of Environmental Adit Cell	27 years

13. Details of Experience:

Sr. No.	Organization	Period	Designation
1.	Pacific School of Engineering, Palsana, Surat	9/6/16 to Till date (7 Yrs & 3 months)	Principal
2.	S.N.Patel Inst. of Tech. & Research Centre, Bardoli	12/6/9 to 10/5/2016 (7 Yrs)	Principal (1/4/15 to 9/4/16)
			Professor & Head, Chem Dept. (1/1/12 to 31/3/15)
			Associate Professor, Chem Engg Dept (till 31/12/11)
			T & P officer (till 12/6/10)
3.	N.G.Patel Polytechnic, Bardoli	10/7/2000 to 11/6/09 (9 Yrs)	Head of Chem. Dept.
4.	SVNIT, Surat	10/11/97 to 30/6/2000 (2 Yr & 8 Months)	Adhoc Lecturer
5.	Beta Organic Pvt. Ltd., Navsari, Gujarat, India	12/4/97 to 8/11/97 (7 months)	Trainee Engineer

14. Research Papers Published:

Sr. No.	National/ International	Subject	Name of Journal	Month & Year
1.	International	Neem oil nano-emulsion formulation by PIT method	Indian J. of Chemical Technology (Impact Factor: 0.76) CSIR	January 2023
2.	International	Co-pyrolysis based activated Bio-char: Characterization and its utilization for secondary treated pulp and paper industry wastewater	Materials Today: Proceedings (Impact Factor: 1.24) Elsevier (ISSN: 2214-7853)	January 2022

3.	International	Methane enrichment of bio-gas from carbohydrates using a single-stage process involving a bio-electrochemical system and anaerobic digester	Materials Today: Proceedings (Impact Factor: 1.24) Elsevier (ISSN: 2214-7853)	January 2022
4.	International	Neem oil-based nano-emulsion formulation by low energy phase inversion composition method: Characterization and antimicrobial activity	Materials Today: Proceedings (Impact Factor: 1.24) Elsevier (ISSN: 2214-7853)	January 2022
5.	International	Influence of sugarcane bagasse addition in co-pyrolysis with sewage sludge on the thermogravimetric	Materials Today: Proceedings (Impact Factor: 1.24) Elsevier (ISSN: 2214-7853)	December 2021
6.	International	Municipal sewage sludge/Biomass co-pyrolysis in a batch reactor: Physico-Chemical analysis of the products	ADB U-Journal of Engineering Technology UGC care (ISSN:2348-7305)	July 2021
7.	International	Nanoemulsions: A review on low energy formulation methods, characterization, applications and optimization technique	Materials Today: Proceedings (Impact Factor: 1.24) Elsevier (ISSN: 2214-7853)	December 2019
8.	International	Modified Fenton Process for the treatment of textile wastewater	J. of Environ. Res. & Devel. (IF:4.301)	June 2014
9.	International	Pyrolysis of sugarcane trash for the production of Bio-oil	Int. J. of Eng. Res. & tech., (ISSN 2278-0181)	September 2014
10.	International	Thermal co-processing of high density polyethylene with coal, fly ashes and biomass: characterization of liquid products	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects (Impact factor: 0.894) Taylor & Francis Group (ISSN 1556-7036)	March 2012
11.	International	Evaluation of air quality near traffic junctions in the city of Surat, India using air quality index	Research Journal of Chemistry and Environment, RG J Impact:0.24	June 2011
12.	International	Study of thermal co-pyrolysis of de-oiled cake of Jatropha with plastics	Waste Management & Research (Impact factor: 1.114) SAGE journal (ISSN 1096-3669)	March 2011
13.	International	Thermal degradation kinetic study of rice-bran with high density polyethylene	Korean Journal of Chemical Engineering (Impact factor: 1.241)	August 2010

			Springer (ISSN 1975-7220)	
14.	International	Resource recovery through catalytic cracking of waste plastics	Waste and Resource Management, (H Index: 7), ICE (ISSN 17476534)	May 2008
15.	International	Synergistic pyrolysis of high density polyethylene and Jatropha and Karanj cakes: a thermogravimetric study	Journal of Renewable & Sustainable Energy (Impact factor: 0.925) AIP (ISSN 1941-7012)	May 2009

15. Research Papers Presented/Conference attended:

Sr. No.	National/ International	Subject	Name of Institute	Month & Year
1.	International	Biodiesel production from Milk scum oil	Waste to Fuel Conversion Technology, Atlantic City, USA	June 2019
2.	National	Bio-oil production through pyrolysis of water Hyacinth	SChemcon, ICT, Mumbai	October 2018
3.	International	Utilization of iron bearing sludge for brick production	World conference on applied science and engineering, Goa	January 2018
4.	National	PET-Coke utilization and assessment of stack emission	SVNIT, Surat	March 2017
5.	International	Waste water treatment by egg shall	SNPIT & RC, Bardoli	April 2015
6.	International	Fenton treatment for dye industry effluent	SNPIT & RC, Bardoli	April 2015
7.	International	Co-pyrolysis of plastics & biomass	Waste to fuel conference, Connecticut, USA	September 2012
8.	National	Resource recovery from spent wash	The Deccan Sugar Technologists' Association (India), Pune	July 2012
9.	International	Pyrolysis of deoiled cake of Jatropha	International Congress of Chemistry & Environment, Malaysia	May 2011
10.	National	Pyrolysis of Bagasse and characterization of bio-oil	Annual convention of Sugar technologist, Chennai	December 2010
11.	International	Thermal pyrolysis of waste plastics	DTU, New Delhi	January 2010
12.	International	Electro-Chemical waste treatment	SVNIT, Surat	December 2009
13.	National	Clean Development Mechanism	Sugar technologist association, Udaipur	November 2009
14.	International	CDM project of biodiesel production	SVNIT, Surat	May 2008
15.	International	Pyrolysis of waste plastics	Pondicherry University, Pondicherry	January 2007
16.	National	Cleaner production assessment	Bannari Aman, Erode	December

		in a textile mill		2006
17.	National	Oxygenated Diesel	Chemcon 2004, Mumbai	December 2004
18.	International	Use of oxygenates for diesel exhaust emission reduction	Fuels & Lubs, New Delhi	October 2004
19.	National	Bio-diesel from waste cooking oil	SVNIT, Surat	October 2003
20.	National	Emission norms for Automobile vehicles	SVNIT, Surat	October 2003
21.	National	Introduction to semiconducting polymers	CLRI, Chennai	December 2001
22.	National	Pyrolysis of waste tyres	Chemcon 1997, Panjab University, Chandigarh	December 1997

16. Seminar/conference/workshop attended:

Sr. No.	National/ International	Title	Name of Institute	Month & Year
1.	2 Days Training	Laboratory Management System & Internal auditing (ISO 17025:2017)	Green Economy Foundation, Mohali	June 2021
2.	1 week STTP	Environmental Audit made easy	GPCB, Gandhinagar	December 2019
3.	1 week STTP	Advances & Challenges in Refining and petrochemical process	Chem. Engg. Deptt., SVNIT, Surat	June 2019
4.	2 Days Workshop	Outcome based Education & NBA	SNPIT & RC, Umraha	May 2019
5.	1 week STTP	AICTE-ISTE sponsored Python programming with machine learning	Pacific School of Engineering, Surat	March 2019
6.	1 week STTP	ISTE-GTU sponsored Municipal solid waste management for a smart city	Pacific School of Engineering, Surat	December 2018
7.	14 th Annual convention	Chemical engineering congress (SCHEMCON 2018)	Institute of Chemical Technology (ICT), Mumbai	October 2018
8.	3 days STTP	Environmental Impact Assessment	GPCB, Gandhinagar	July 2014
9.	1 day Seminar	Nuclear Energy: Powering the Sustainable Development	SNPIT & RC, Bardoli	July 2013
10.	3 days workshop	Nanotechnology: Applications for Sustainable Development	SVNIT, Surat	April 2013
11.	1 week STTP	EIA and environmental awareness	G R Creation India (P) Ltd., Noida	February 2013
12.	1 day Seminar	Carbon credit: Trading and its prospects	TIFEC, SCET, Surat	March 2008
13.	4 days STTP	Institutional Management & Accreditation	NITTTIR, Bhopal	January 2007
14.	1 day workshop	Pollution-An Anthropogenic disaster	BBIT, V. V. Nagar	April 2006
15.	1 day workshop	Importance & Relevance of PhD for achieving Excellence	SVNIT, Surat	December 2005

		in Technical Education		
16.	2 week Winter school	Waste water treatment emphasis on Anaerobic and Membrane separation technology	Pondicherry Engineering College, Pondicherry	December 2002
17.	1 week STTP	Methodology for Environmental Audit	En-vision Environmental Consultant, Surat	December 2002

Invited Talk:

Sr. No.	Subject	Name of Institute	Month & Year
1.	Solid Waste Management	Bureau of Indian Standards, Surat	October 2022
2.	Recent trends in Chemical Engineering	Government Polytechnic, Daman (ATAL Academy)	June 2021
3.	Resource recovery from Municipal Solids	BVM, V.V.Nagar	January 2019
4.	ZLD for industrial sector	CGPIT, Mahuva	March 2016
5.	Environmental Audit: A tool for EMS	GPCB, Gandhinagar	June 2015
6.	Environmental Audit: A tool for EMS	Pacific School of Engineering, Surat	June 2015
7.	Water and waste water treatment	BVPI diploma study, Bardoli	October 2015
8.	Smart Water for smart city	Surat Municipal Corporation, Surat	October 2015
9.	Innovation lies in simplicity	SCET, Surat	October 2015
10.	Research Proposal	SVNIT, Surat	June 2013
11.	Go Green	Sayan Sugar Factory, Sayan	August 2012
12.	Plastics awareness	Nagarpalika, Bardoli	August 2011

Workshop/Seminar/STTP/Social activity organized:

- Six days GTU-ISTE FDP program was arranged on Municipal waste management for a smart city at Pacific school of Engineering, Surat (**January 2019**).
- Two days workshop on CAD in Chemical Engineering at SNPIT & RC, Bardoli (**April 2015**).
- Two days National Seminar on Renewable energy & Environmental Protection at SNPIT & RC, Bardoli (**May 2013**).
- STTP on Waste water treatment and utilization for domestic purpose at SNPIT & RC, Bardoli (**May 2011**).

- National level One day workshop on Sustainable development through Energy & environmental Audit, Synergy 2009 at SNPIT & RC, Bardoli (**October 2009**).
- National level One day conference on Biodiesel–towards energy independence, BIOFUELS 2007 at N.G.Patel Polytechnic, Bardoli (**May 2007**).
- State level one day Interactive Meet on Occupational health & Safety Management System at N.G.Patel Polytechnic, Bardoli (**September 2006**).
- State level workshop on Environmental Management System for Sugar Industries, EMSSI 2005 at N.G.Patel Polytechnic, Bardoli (**June 2005**).

17. Subjects Taught:

Sr. No.	Subject	Discipline	Semester/ Year
1.	Petroleum refining & Petrochemicals	Chemical Engineering	Final Year
2.	Mass transfer Operation	Chemical Engineering	Pre-final Year
3.	Process Calculation	Chemical Engineering	Second Year
4.	Project	Chemical Engineering	Final Year
5.	Environmental Engineering	Civil Engineering	Third Year
6.	Environmental studies	All	First Year

18. Students Project guided (As per GTU):

“ Thermochemical conversion of Water Hyacinth to Bio-oil ”, guided project to final year students of Chemical Engineering (UG, Batch 2019), Pacific School of Engineering, Surat
“ Yield & characterization of Milk scum oil derived Bio-diesel ”, guided project to final year students of Chemical Engineering (UG, Batch 2018), Pacific School of Engineering, Surat
“ UF-RF driven treatability study for final discharge of effluent from CETP ”, guided project to final year students of Chemical Engineering (UG, Batch 2017), Pacific School of Engineering, Surat
“ Exhaust emission study of diesel-bio-oil driven diesel engine ”, guided to final year students of Mechanical Engineering (UG, Batch 2013), S. N. Patel Institute of Technology & Research Centre, Umrakh, Bardoli
“ Production of Bio-oil from bagasse in an Auger reactor ”, guided final year students of Mechanical Engineering (UG, Batch 2013), S. N. Patel Institute of Technology & Research Centre, Umrakh, Bardoli
“ Development of user-friendly feedstock for bio-gas unit ”, guided final year students of Mechanical Engineering (UG, Batch 2013), S. N. Patel Institute of Technology & Research Centre, Umrakh, Bardoli
“ Technical Evolution of HHO kit to reduce fuel consumption in two wheeler ”, guided project to the final year students of Electrical Engineering (Batch 2012), S. N. Patel Institute of Technology & Research Centre, Umrakh, Bardoli

Mentor for Student start-up incubation project (SSIP) under GTU:

Sr. No.	Discipline	Pass-out Year	Project/Product Title	Grant Approved, Rs.	Date
1.	Mechanical	2019	Fabrication of User-friendly, Compact and Economical Bio-gas Unit	25,000	29-09-2018
2.	Mechanical	2019	Development of Hydrokinetic Propeller turbine for luminating Canal Road	40,000	19-12-2018
3.	Mechanical	2020	Dual Axis Rotary Drum Composter	12,000	23-01-2019
4.	Mechanical	2019	Cross flow turbine for Agro Application	15,000	23-01-2019
5.	Civil	2019	Utilization of water hyacinth in Concrete.	42,800	19-12-2018
6.	Chemical	2018	Biofuel/ Shree Rang Bioenergy	1,90,000	19-12-2018

19. Ph.D. research project guided / Govt. aided projects executed:

(A) Supervised two research scholars for Ph.D. (registered under GTU, Ahmedabad)

1. Production and characterization of Municipal sludge derived bio-oil (Completed 18/6/2022)
2. Formulation of Neem oil derived Nano-emulsion (Completed 4/10/2022)
3. Efficient performance of anaerobic digester (On-going)

(B) Government aided projects executed as a “Principal Investigator” along with team and completed successfully

Sponsoring Agency	Amount Received, Rs.	Name of Co-Investigator	Year
Songadh Nagarpalika, Surat	7.5 lakh	1. Mr. D. B. Parekh, Project Coordinator, SNPIT, Bardoli	March 2015 to March 2017 (Completed)
Ministry of new & Renewable Energy, New Delhi	15 lakh	1. Dr. P. A. Parikh, Professor, Chem. Engg. Deptt. ,SVNIT, Surat 2. Mr. D. B. Parekh, Project Coordinator, SNPIT, Bardoli	March 2014 to March 2015 (Completed)
Indian National Science Academy, New Delhi	0.2 lakh	NIL(Seminar Grant) “Renewable Energy & Environmental Protection”	June 2013

Ministry of new & Renewable Energy, New Delhi	0.5 lakh	NIL(Seminar Grant) “Renewable Energy & Environmental Protection”	June 2013
Science & Engineering Research Board, New Delhi	0.5 lakh	NIL(Seminar Grant) “Renewable Energy & Environmental Protection”	June 2013
Science & Engineering Research Board, New Delhi	0.79 lakh	NA (Travel grant to present a paper at USA, Connecticut)	September 2012
Ministry of New & Renewable Energy, New Delhi	18.95 lakh	1. Dr. P. A. Parikh, Professor, Chem. Engg. Deptt. ,SVNIT, Surat 2. Mr. D. B. Parekh, Project Coordinator, SNPIT, Bardoli	November 2011 to November 2012 (Completed)
Gujarat Energy Development Agency, Gandhinagar	2.54 lakh	1. Dr. P. A. Parikh, Professor, Chem. Engg. Deptt. ,SVNIT, Surat 2. Mr. D. B. Parekh, Project Coordinator, SNPIT, Bardoli	June 2009 to June 2011 (Completed)

(C) Patent/Design application:

1. Design patent granted by IP office, Mumbai on Domestic Anaerobic digester, Design number: 317512/001, Class: 23/99, dated 3/1/2020.
2. Indian patent published on Formulation of Neem oil nano-emulsion by Phase Inversion Temperature method using Non-Ionic surfactant, Application No.202121043613 A, Journal No. 52/2021, dated 24/12/2021.
3. Design patent granted by IP office, Mumbai on Single-Chambered Bio-Electrochemical System, Design number: 351034/001, Class: 23/01, dated 8/10/21.

20. Research & Consultancy Experience:

1. Working as a Chief Co-ordinator for GPCB, Gandhinagar approved Schedule-I Environmental Audit team since 2002 (17 years).
2. Supervised more than 500 Environmental Audit reports.
3. Guided to established laboratory for Civil Material testing
4. Worked as a “Technical Manager” for NABL accredited Env. Testing laboratory

Consultancy details:

Title of consultancy work	Client	Period
Technology development for waste plastics to liquid fuel for Vyara Nagarpalika, Vyara, Gujarat	Debrisolve Pvt. Ltd., Bardoli	2017-till date
Technology development for waste plastics to liquid fuel for Vyara Nagarpalika, Vyara, Gujarat	Debrisolve Pvt. Ltd., Bardoli	2018-till date
Environmental consultancy	Chemical industries of Gujarat State	2002 to till date

Environmental audit (Schedule-I)	Allotted by Gujarat Pollution Control Board (GPCB), Gandhinagar	2002 to till date
Civil Material Testing	Limited	2015 to till date
R & D and scale up technology for Waste Biomass and Plastics for upgraded Bio-oil	Aaditya Aromedic and Bio Energies Pvt. Ltd., Navsari	2013-till date
Process establishment for the production of Bio-diesel from non-edible seeds and potential waste	Aaditya Aromedic and Bio Energies Pvt. Ltd., Navsari	2008- 2012

Some noteworthy projects (Environmental pollution control) supervised as follows:

- Cleaner Production Assessment for Agrochemical Industry
- Treatability-Feasibility study report for zero liquid discharge scheme
- Environmental Management Adequacy verification and detailed project report for TSDF site.
- Environmental management plan for the use of Pet-Coke at Thermal power plant.
- Use of Psychometric evaporator for the treatment of effluent from dyes intermediate production unit.
- Utilization of domestic sewage effluent for the treatment of final discharge effluent from the Penicillin G manufacturing unit.
- Treatability study for the common effluent treatment plant (CETP) of textile effluent to achieve zero effluent discharge.
- Technical study and verification of zero effluent schemes proposed by pharmaceutical industry. It mainly includes study and performance of multiple effect evaporator, reverse osmosis plant and cooling tower.
- Design verification of incinerator as per the guidelines of Central pollution control board for pharmaceutical and agrochemical industry.
- Laboratory scale treatability of black colored effluent discharge from the production of bleached cotton linters in the nitrocellulose plant and scale up to the requirement of the industry.
- Experimental study of recovery of copper and zinc from brass ash with zero effluent discharge and implementation to industry.

21. Honors and awards:

Awards won:

International Award from Academic bodies/Industries

Sr.No.	Award	Organizer	Place	Duration	
				From	To
1.	International Travel Grant to attend and present paper at Waste to Fuel conference	Science & Engineering Research Board, New Delhi	Connecticut, USA	14/9/12	1/10/12
2.	International Travel Grant to attend conference on Waste conversion technology	Spectrum Dyes & Intermediates, Palsana	New Jersey, USA	1/6/19	11/6/19

National Award from Academic bodies

Sr.No.	Award	Organizer	Place	Month & Year
1.	National Award for Innovative technology development	Central Institute of Plastics Engineering	Bangalore	February 2015

		and Technology (CIPET), New Delhi		
2.	ISTE-Syed Sajid Ali National Award for outstanding research work in the field of Renewable Energy	Indian Society for Technical Education, New Delhi	Kerala	November 2014
3.	Noel Deerr Gold Medal awarded by for best paper titled "Thermal Pyrolysis of Bagasse: Yield and Characterization of Bio-oil".	"The Sugar Technologists Association of India	Pune	August 2010

State Award from Academic bodies

Sr.No.	Award	Organizer	Place	Month & Year
1.	Best Teacher of the year- Engineering	SGCCI, Surat	Surat	September 2022
2.	Outstanding contribution in R & D area of Domestic Biogas plant	SGCCI, Surat	Surat	March 2021
3.	Innovation to Impact Award	Gujarat Technological University (GTU), Ahmedabad	Ahmedabad	February 2017
4.	Best Chemical Engineer/Technologist Award	IICHE, Ankleshwar Regional Chapter	Ankleshwar	February 2016

22. Professional Membership:

1. Life Member, Indian Institute of Chemical Engineers (LM-53266)
2. Life Member, Indian Society of Technical Education (LM- 86062)
3. Chartered Engineer (India), The Institution of Engineers (M-1594944)
4. Fellow Member, International congress of Chemistry & Environment
5. PAUL HARRIS FELLOW, The Rotary Foundation of Rotary International