

FACULTY PROFILE



1. Name of the Teaching Staff: - **Rajendra Saudagar Raut**
2. Designation: - **Assistant Professor**
3. College: **AISSMS COE, Chemical Engineering**
4. University: **SPPU, Pune**
5. Area of Interest: **Ethanol, Fermentation, Waste to Energy , Waste Water Treatment etc.,**
6. Contact details: Flat No: D/407, Saptarang Aakash Co-Op Hsg. Soc. Near Bhekrai Mata
Mandir, Bhekrai Nagar, Fursungi, Tal: Haveli, Dist: Pune, Pin: 412308

Email id:rsraut@aissmscoe.com

Phone No:9881620339

6. Blood group: **O^{RH} Positive**

7. DOB: **01/06/1978**

8. Domicile: **Maharashtra**

9. Gender: **Male**

10. Date of Joining: **14/08/2013**

12. Qualification details

- **B. E.** in Chemical Engineering from T.K.I.E.T Warananagar, in the year 2000 (**1996-2000**)
- **Master of Chemical Engineering** From ICT (UDCT) Mumbai in the year **2003 (2001-2003)**
- **GATE-2000**
- **Process Simulation using CHEMCAD** software training course completed from Ingenious Process Design Systems, Mumbai

13. Experience (Years & Months): - 16 Years and 09 Months

Sr. No	Designation	Name of Organization	Period
1	Assistant Chemical Engineer	Bhama S.S. K Ltd., Takali, Solapur	August 2000 to July 2001
2	Sr. Executive	Snowtech Process Equipment Pvt Ltd., Rabale, Mumbai	August 2003 to December 2003
3	Lecturer	TKIET Warananagar	Jan 2004 to September 2004
4	Production Manager	PAX Chem Mumbai	October 2004 to February 2009
5	Technical Officer	Vasantdada Sugar Institute,	February 2009 to July 2013

		Pune	
6	Assistant Professor (PG)	AISSMS College of Engineering, Pune	August 2013 to Till Date

14. Subject taught:

Sr. No.	Subject	UG/PG	Class (FE/SE/TE/BE/ME)
1	PO, Bioprocess Engg, Industrial Pollution Control RM, ATP, AT etc.,	PG	ME
2	Env., TP, MT-I, MT-II, Food Technology, Petroleum Refining, Softskill etc.,	UG	SE, TE and BE

Result: 100% Result for the subject which I taught in last five years

1. Process Optimization – Academic Year 2013-14
2. Industrial Pollution Control - Academic Year 2014-15
3. Research Methodology- Academic Year 2015-16
4. Bioprocess Engineering -Academic Year 2015-16
5. Petroleum Refining- Academic Year 2017-18 and 2018-19

15. Responsibilities handled at Institute/university (On various bodies/chairman etc.)

1. Industry Institute Interaction Committee Chairman for Academic year 2014-15
2. AISSMS ET 2014, Chairman Prize Distribution Committee
3. AISSMS ET 2015 and 2016 Coordinator Prize Distribution Committee
4. Sivanjeeli 2016 Coordinator Prize Distribution Committee
5. Sivanjeeli 2017 Coordinator Prize Distribution Committee
6. Sivanjeeli 2018 Coordinator Decoration Committee
7. Department Industry Institute Interaction Coordinator from 2014-15 to Till date
8. Department placement Coordinator for AY-2015-16
9. PG Coordinate for Academic Year 2015-16, 2016-17, 2017-18 and 2018-19
10. NBA Criteria-II Department Coordinator
11. Industry Institute Interaction Meet 2016 Coordinator
12. Industry Institute Interaction Meet 2017 Coordinator

13. NAAC Criteria-II Department Coordinator

16. Publications:

Paper Published in Conferences:-

1. Sarika Shelke, Taha Shaik and Rajendra Raut presented paper on “Ethanol from Sugar Beet” in SCHEMCON, Kolkatta, Organised by IICHE
2. Mahale Deepika, Dalbhanjan Rachana and Rajrndra Raut presented paper on “Biomass Gasification: A new approach towards energy conservation” in national conference on Frontier Technologies in Waste Management at AISSMS COE, Pune.
3. Deb Birnita, Bilwal Jay and Rajrndra Raut presented paper on “Volume reduction of distillery spentwash by using multiple effect evaporation system” in national conference on Frontier Technologies in Waste Management at AISSMS COE, Pune
4. Pawale Satish, Kokol Akshay and Rajrndra Raut presented paper on “Ethanol from cellulose” in national conference on Frontier Technologies in Waste Management at AISSMS COE, Pune
5. Pratiksha Warke, Prashant Warke, Naina Deshmukh and Rajendra S Raut presented paper on State Point Analysis to Design and Measure the Performance of a Clarifier in National Conference Sanvaragm 2016, at BVU COE, Pune on 26-27 March 2016.
6. Kiran Chavhan, Asish Mohod, Rajendra S Raut and Sanjay Danao presented paper on Desulfurization of Petroleum Products through Aqueous Ionic Liquids in National Conference Sanvaragm 2016, at BVU COE, Pune on 26-27 March 2016.
7. Kalyani Mishra. Asish Mohod, Rajendra S Raut and Sanjay Danao presented paper on Application of Nano Fluids in Heat Transfer and Energy Saving in National Conference Sanvaragm 2016, at BVU COE, Pune on 26-27 March 2016.
8. Shrutika Shrirao, Rajendra S Raut* and Sanjay Danao presented paper on Design of Crystallizer for Sugar Manufacturing in National Conference Sanvaragm 2016, at BVU COE, Pune on 26-27 March 2016.
9. Darshani Thakare, Naina Deshmukh, Ashish Mohod Rajendra S Raut and Sanjay Danao presented paper on Role of Calcium Oxide and Other Chemicals in Manufacturing of Sugar in National Conference Sanvaragm 2016, at BVU COE, Pune on 26-27 March 2016.

10. Komal Bhangale, Kanchan Bawankar, Rajendra S Raut and Kanhaiya Jethani on Membrane Aromatic Recovery System (MARS): Recovery of aromatic acids and bases from aqueous wastewater streams in National Conference- Sanvaragm 2016, at BVU Pune on 26-27 March 2016.
11. P.M. Warke, Raut R S, Dr. V. L. Gole presented paper on Treatment of Phenolic Pollutants Using Large Scale Photocatalytic Reactor in National Conference Sanvaragm 2016, at BVU COE, Pune on 26-27 March 2016.
12. Shital Zope , Rajendra S Raut and Sanjay Danao presented paper on Bio-methanation of Distillery Waste Water in National Conference Sanvaragm 2016, at BVU COE, Pune on 26-27 March 2016.
13. Seema Tamnar, Rajendra S Raut, Kanhaiya Jethani and Sanjay Danao presented paper on Municipal Solid Waste Management in National Conference Sanvaragm 2016, at BVU COE, Pune on 26-27 March 2016.
14. Sanghamitra Purnekar, Prashant Warke, Rajendra S. Raut and Sanjay Danao presented paper on Multiple Effect Evaporation System for Distillery Spent Wash to Achieve Zero Liquid Discharge and Energy Generation in National Conference Sanvaragm 2016, at BVU COE, Pune on 26-27 March 2016.
15. Naina Deshmukh, Rajendra S Raut, Kanhaiya Jethani and Sanjay Danao presented paper on Coal Gasification: The Energy of Future in National Conference Sanvaragm 2016, at BVU COE, Pune on 26-27 March 2016.
16. Justin K. George, Naina Deshmukh, Rajendra S Raut and Kanhaiya Jethani presented paper on Carbon Dioxide Capturing and Sequestration In National Conference- Sanvaragm 2016, at BVU COE, Pune on 26-27 March 2016.
17. Kiran Shinde, Rajendra S Raut, Prashant M Warke, Manisha M Bagal, Shruti P. Hinge, Ashish V. Mohod presented paper on Intensification of waste water treatment process by introducing air in the sonochemical reactor in National Conference Sanvaragm 2016, at BVU COE, Pune on 26-27 March 2016.
18. Momin Sufiyan, Swathipriya S, Rajendra S Raut, Naina S Deshmukh, Manisha V. Bagal, Shruti P. Hinge, Ashish V. Mohod presented paper on Combined removal of Rhodamine B and Rhodamine 6G from wastewater using novel treatment approaches based on ultrasonic and ultraviolet irradiations in National Conference Sanvaragm 2016, at BVU

COE, Pune on 26-27 March 2016.

19. Mayuri Dhuri, Merlin Velloore, Naina S Deshmukh, Shruti P Hinge, Rajendra S Raut, Manisha M Bagal, Shruti P Hinge, Ashish V. Mohod presented paper on SYNTHESIS OF MEDIUM CHAIN TRIGLYCERIDES in National Conference Sanvaragm 2016, at BVU COE, Pune on 26-27 March 2016.
20. Shahbaj Shaikh, Rajendra S Raut, Naina S Deshmukh, Manisha M Bagal, Shruti P. Hinge, Ashish V Mohod, Kanaihya R Jethani presented paper on Removal of Patent Blue V Dye Using Air-Bubble induced oxidation based on Small Glass Balls: Intensification studies in National Conference Sanvaragm 2016, at BVU COE, Pune on 26-27 March 2016.

International Publications

1. **Rajendra S Raut** , Distillery Waste Water (Spent Wash) Biomethanation- Waste to Energy Generation, International Journal for Science and Advanced Research in Technology, Volume 4, 2018,
2. Varsha Yadhav, **Rajendra S Raut** , Acid Based Hydrolysis Treatment of Sugar Cane Leaves to Manufacture Ethanol, International Journal for Science and Advanced Research in Technology, Volume 4, (2018) 6-10
3. A V Mohod, S P Hinge, **Rajendra S Raut**, M V Bagal, D V Pinjari, Process Intensified Removal of Methyl Violet 2B Using modified Cavity-Bubbles oxidation reactor, Journal of Environmental Chemical Engineering, (2017) 574-582.

Seminar/Workshop/Conference Attained

1. Participated in International Seminar on “ Distillation Technology- Principles and Practice at ICT, Mumbai, in 2002
2. One day conference attained on “**Trouble shooting of HPLC**” at Hewlett Packard, Mumbai.
3. Organized National Conference with **CPCB, Delhi** in VSI on “**Problems faced by Indiandistillery for spent wash treatment to achieve zero liquid discharge**”.
4. Arranged International Conference on “Emerging technologies for maximizing return from sugar cane bagasse” on 12th June 2012 in with joint venture of VSI and NCL,

Pune.

5. Attained 4 days National Conference organized by **AIDA** (All India Distillery Association) on “**Recent development in ethanol producing industries and problem faced by Indian distillery industry** at Bangalore”.
6. Attained on day conference at MCCIA, Pune on “**Zero liquid discharged in distillery**”.
7. Arranged 8 days “**ChemCAD Software training programme**” with Ingenious Process Solution Pvt. Ltd., Mumbai in Vasantdada Sugar Institute, Pune
8. Pollution control Performance analysis 5 days Visit to Jubilant Organosys, Gajraula, Uttar Pradesh, India for inspection of Luzhou boiler as a representative of CPCB
9. Arranged one week training program on “Compliance to Zero Discharge Norms in Distilleries –Technical Challenges and Solutions from 16 -20 January 2012, for **CPCB, MPCB and Maharashtra Government Officers in Vasantdada Sugar Institute, Pune with Central Pollution Control Board, Delhi.**
10. Arranged short term (one week) Training programme for **Ethiopian** students at Department of Alcohol Technical, Vasantdada Sugar Institute, Pune
11. Team Member in worlds first distillery spent wash gasification plant set up at Kopergaon SSK Ltd., Kolpewadi, Ahmednagar
12. Visited more than 125 distilleries (Molasses based and grain based) in India for process troubleshooting
13. Participated in National Conference on “ Frontier Technologies in Waste Management at AISSMS College of Engineering, Pune, January 15-17, 2014
14. Participated in National Seminar on “Advanced Computational Techniques for Engineering Applications at AISSMS College of Engineering, Pune, January 31 and Feb 01, 2014
15. Participated in International Conference on “Chemical Engineering –Emerging Dimension and Challenges Ahead at Dr S. S. Bhatnagar University Institute of Chemical Engineering and Technology, Panjab University, Chandigarh, December 27-30, 2014
16. Participated in State Level Seminar on “Intensification of Chemical Processing using Novel Reactor at AISSMS College of Engineering, Pune, January 9-10 and 22, 2015
17. Participated in National Level Seminar on “Sustainable Technologies for Specialty and Fine Chemical at AISSMS College of Engineering, Pune, March 18-19, 2016

18. Participated in National Conference on “Energy and Environment at BVU College of Engineering, Pune, March 26-27, 2016
19. Participated in National Level Seminar on “Advances in Chemical Reactor Design” at AISSMS College of Engineering, Pune, February 27-28, 2017
20. Participated in Knowledge Sharing Program on “Innovative Methods of Teaching” at AISSMS College of Engineering, Pune, July25, 2017
21. Participated in 33rd National convection of Chemical Engineers on “Nanotechnology and its application for Sustainable Development in Chemical Industries ” at The Institute of Engineers (India) , Pune, September 9-10, 2017
22. Participated in **Faculty Development Program** on “Project Based and Student Centric Learning Activities ” at AISSMS College of Engineering, Pune, February 23, 2018
23. Participated in Workshop on “Advanced Trends in Transportation and Environmental Engineering” at AISSMS College of Engineering, Pune, March 26, 2018
24. Arranged Industry Institute Interaction meet 2016, on October 1, 2016
25. Arranged Industry Institute Interaction meet 2017, on October 7, 2017
26. Participated in Workshop on “ Advances in Effluent Treatment: An Industrial Perspective” in BVU College of Engineering, Pune on 5 and 6 October 2018, Pune
27. Participated in **Faculty Development Program** on “Attainment and Assessment of CO, CO-PO, PO-PSO, CO -PEO ” at AISSMS College of Engineering, Pune, June 10, 2019 to June 15, 2019
28. Participated in **Faculty Development Program** on “Cyber security and Data Science ” at AISSMS College of Engineering, Pune, June 17, 2019 to June 22, 2019

17. Student Guided

M E –Chemical

Sr. No	Name of student	Area	Title or topic	Year of passing
1	Mr. Vipul Patil	Modeling and Simulation	Study Of A Multicomponent Distillation System & Wireless Data Acquisition	2013-14
2	Ms Thorat Prajakta L	Sugar	Material balance and heat	2014-15

		Industry	balance in sugar industry	
3	Mr Thube Yogesh B	Process	Second generation bioethanol production	2014-15
4	Ms Yadav Varsha N	Process	Pretreatment of sugarcane leaves for manufacturing of ethanol	2014-15
5	Ms Pratiksha Warke	Sugar Process	Design of Clarifier for the Production of Sugar	2015-16
6	Ms Shruti Shrirao	Sugar Process	Design of Crystallizer for Manufacturing of Sugar	2015-16
7	Miss. Sanghamitra U Purnekar	Waste Water Treatment	Design of Multiple Effect Evaporator for Waste Water treatment	2015-16
8	Ms Darshani Thakare	Sugar Process	Role of Calcium Oxide and Other Chemicals in Manufacturing of Sugar	2015-16
9	Darigonda M. Patil	Adsorption	Removal of Heavy Metal (Zinc) from Aqueous Solution by Using Natural Adsorbent BafI Fruit Shell Activated Carbon	2016-17
10	Salunkhe Vikas Bhimrao	CFD	Process & Engineering Study of LNG Process Plant by Dynamic Simulation	2016-17
11	Miss. Shital Nivrutti Zope	CFD	Design and Mathematical Modelling of Cyclone by CFD	2016-17
12	Ms Kalyani Mishra	CFD	Design and Mathematical Modelling of Spray Dryer by CFD	2016-17
13	Ms Kiran Chavan	CFD	Design and Mathematical Modelling of Crystallizer by	2016-17

			CFD	
14	Ms Supriya Shinde	Adsorption	Removal of Methylene Blue Dye By Activated Carbon Derived from Waste Biomass	2016-17
15	Mr Mangesh Kulkarni	Plant Design	Design of MSDH Plant for production fuel ethanol	2018-19
16	Adeshya Sahoo	Adsorption	Waste Water Treatment	2018-19

BE Guided: Total Students: 40

18. Professional Memberships (with grade):-

Professional Body	Level (National/ International)	Type (Fellow/Life/Annual)	Membership no.
IIChE	National	Life Member	LM-51548

19. Award /Recognition: Recipient of Junior Research Fellowship awarded by University Grant Commissions for Master of Chemical Engineering.

20. Industry Institute Interaction

1. Arranged Industry Institute Interaction meets
2. Signed MOU with Universal Forces Industries , Pune
3. Signed MOU with Indian Biodiesel Ltd, Baramat, Dist: Pune
4. Signed MOU with Mojj Engineering Systems Ltd., Pune
5. Signed MOU with Sairam Technical Services Ltd, Pune

21. Industrial Visits

1. Visited Shri Adinath SSK Ltd., Shelgaon-Bhalwani, Tal: Karmala, Dist : Solapur
2. Visited to Cipla Ltd , Kurkhumb, Tal: Daund, Dist : Pune
3. Visited to Krishna SSK Ltd., Rethare Karad, Satara
4. Visit to Bhima Patas SSK Ltd., Patas, Pune
5. Visited to Etlantas Beck, Pune

6. Visited to Mojj Engineering, Pune
7. Visited to Kisan Veer Satara SSK Ltd., Bhuj
8. Visited to Loknete SSK Ltd., Angar, Mohol Dist: Solapur
9. Visited to Warana SSK Ltd., Warananagar, Tal: Panhala Dist: Kolhapur
10. Visited to Rajarambapu SSK Ltd., Islampur, Tal:Walwa Dist: Sangali
11. Visited to Kumbhi Kasari SSK Ltd., Kudtre, Dist: Kolhapur
12. Visited to Kopargaon SSK Ltd., Kopargaon, Dist: Ahmednagar
13. Visited to Grainnotch Industries Ltd., Aurangbad
14. Visited to Rena SSK Ltd., Niwada, Dist: Latur
15. Visited to Anurag Sugar Mills Dist: Pune

22. Workshop/STTP/Seminar /FDP/Conference organized:

1. Frontier Technology in Waste Management in AISSMS College of Engineering, Pune
2. National Conference Sanvaragm 2016, at BVU COE, Pune
3. 03 days Faculty Development Training in AISSMS COE, Pune
4. Attended National Seminar on Intensification of Chemical Processing using Novel Reactors' on January 9-10 and 22, 2015
5. Attended 2nd Indo-German Colloquium on 'Water Management in India' January 28-29, 2015

23. Participation in various bodies of the Universities/ Autonomous Colleges/ Other Colleges, such as BoS and Academic Council

1. University Paper Setting of Chemical Engineering for SPPU, Pune
2. M E and B E Paper Checking for SPPU, Pune
3. University Paper Setting of Chemical Engineering for BVU, Pune
4. M.Tech and B.Tech Paper Checking for BVU, Pune

Rajendra S Raut