



AISSMS

COLLEGE OF ENGINEERING

ज्ञानम् सकलजनहिताय
Accredited by NAAC with "A+" Grade



Department of Chemical Engineering

Faculty Profile

Prof.(Dr) Makarand Y Naniwadekar

PhD (Chemical Engineering)

Assistant Professor

✉ mynaniwadekar@aiissmscoe.com
makarand.naniwadekar@gmail.com

☎ (020) 26058587; Extn: 1204

🔗 <https://scholar.google.com/citations?hl=en&user=cHXzRkIAAAAJ>

🔗 <https://www.linkedin.com/in/dr-makarand-naniwadekar-734b1418/>



Research Areas / Areas of Interest

Artificial Intelligence and Machine Learning techniques applied for Chemical and Biochemical Systems, Process Development

Personal Details

Date of Birth : 16 /07 / 1975

Domicile: Maharashtra

Gender : Male

Blood Group: B+ve

Contact Details: Flat No. 204, Bldg. No. D-1, Shivsagar City Phase – 1, SN 17,
Wadgaon Bk., Pune – 411 041.

Academic Background

S. NO.	Qualification	Specialization	University	Class/Grade	Year of Passing
1	Ph.D.	Chemical Engineering	Savitribai Phule Pune University Pune	--	May 2019
2	M.E.	Chemical Engineering	Shivaji University Kolhapur	I st Class with Distinction	May 2008
3	B.E.	Chemical Engineering	Shivaji University Kolhapur	I st Class with Distinction	May 1996

Work Experience

S. No.	Type of Experience	Years	Months
1	Teaching	21	06
2	Research	01	00
3	Industry	2	00
4.	Others	--	--
Total		24	00

Subjects / Courses Taught

S. No.	Subject	UG/PG	Class (FE/SE/TE/BE/ME)	No of times Subject Taught
1	Chemical Process Technology	UG	TE (Chemical)	10

2	Process Engineering Costing and Plant Design	UG	BE (Chemical)	07
3	(Elective III) Food Technology	UG	BE (Chemical)	05
4	(Elective IV) Petrochemical Engineering	UG	BE (Chemical)	05
5	(Elective IV) Environmental Engineering	UG	BE (Chemical)	01
6	Computer Aided Design	PG	ME (Chemical)	02
7.	Advanced Transport Phenomena	PG	ME (Chemical)	01

Research Publications

	National	International	State	SCI/ Scopus Indexed	UGC Approved
Journals	01	08	00	04	04
Conferences	01	01	00	01	01

Publication Details (Journals)

S. No	Document Details	Authors	Year	Source Details	ISBN/ ISSN	Publisher
1.	Cost estimation and Profitability Analysis for Alkaline Depolymerization of Poly Ethylene	Naniwadekar M Y, Jadhav A S	2005	National Journal of The Institution of Engineers, 86, 16-20	ISSN 1385-8947	IE(I) Journal- CH

	Terephthalate Waste					
2	Kinetic Study of Mono(2-ethylhexyl) phthalate as plasticizer	Naniwadekar M Y, Jadhav A S, N H Shinde, S V Anekar	2011	International Journal of Advanced Engineering Technology 2 (2), 37-51	ISSN 0976-3945	Technical Journals online
3	Study of adsorption of oil from oily water using human hair	Jadhav A S, Naniwadekar M Y, N H Shinde, S V Anekar	2011	International Journal of Advanced Engineering Technology 2 (2), 321-332	ISSN 0976-3945	Technical Journals online
4	Cost estimation and optimum route selection for the production of aconitic acid	M Y Naniwadekar, A S Jadhav, A Ghosh, A Sahu	2013	International Journal of Basic and Applied Chemical Sciences 3(4), 79-87	ISSN: 2277-2073	CIBTECH
5	Enzymatic hydrolysis of maize for synthesis of ethanol	A S Jadhav, M Y Naniwadekar, S Rananavare	2013	International Journal of Chemical and Petrochemical Technology 3(4), 7-14	ISSN: 2277-4807	Trans Stellar Journal Publications
6	Optimum heat integration of cumene process by	Naniwadekar M Y, Jadhav A S	2015	International Journal of Current Research	ISSN 0975-833X	Journal of Current Research

	heat exchanger network			7(8), 18995-19003		
7	Process Development of Pesticide Production from Azadirachta Indica A. Juss	Naniwadekar M Y, Jadhav A S	2012	International Journal of Agriculture Innovations and Research 1(2), 65- 70	ISSN 2319-1473	Timeline publication (open Access)
8	Prediction of coal ash fusion temperatures using computational intelligence based models	Naniwadekar M Y, Tambe S S, Tiwary S, Mukherjee A, Das T B	2018	International Journal of Coal Science Technology 5(4), 486- 507	ISSN 2095-8293	Springer-Nature
9	Prediction of rate constants of photocatalytic degradation of pharmaceutical pollutants by artificial intelligence based genetic algorithm formalism	Tiwary S, Naniwadekar M Y, Kamble S P, Tambe S S	2017	Current Environmental Engineering 5 (1), 58- 67	ISSN 2212-7186	Bentham Science Publishers

Publication Details (Conferences)

S. No	Document Details	Authors	Year	Conference Details	ISBN	Organised by
1.	Prediction of Rate Constant of Photocatalytic Degradation of	Makarand Naniwadekar, Shishir Tiwary,	2017	International Conference on Sustainable	ISBN 978-981-	NCL, Pune

	Pharmaceutical Pollutants by utilizing Artificial Intelligence based Genetic Programming Formalism	Sanjay P. Kamble, Sanjeev S. Tambe		Development for Energy and Environment, 1, 11	15-4638-9	
2	Prediction of cetane number of biofuels using artificial intelligence based models			NexGen Technologies for Mining and Fuel Industries 1(1), 617-626	ISBN 978-93-85926-40-2	CSIR-Central Institute of Mining and Fuel Research, Dhanbad, India.

PhD / ME / BE Student Guided for Project

Level	Ph.D.	M.E. (PG)	B.E. (UG)
No. of Student guided	-	-	45

Professional Memberships

Professional Body	Level (National/ International)	Type (Fellow/Life/Annual)	Membership No.
IIChE	International	Life	LM-26474
ISTE	International	Life	LM- 40748
AMIE	National	Associate Member	AM092859-6

Patents / IPR Filed / Granted

S. No	Investigator Details	Title	Year	Status (Filed/Granted)	Details

Books Published

S. No	Title	Name of the Publisher	ISBN/ISSN Number

Research Grants Received

S. No	Program	Duration	Funding Agency	Grant Amount

Details of Workshop / STTP / FDP / Seminar / Conferences Organized

S. No	Title	Type	Duration	Level (State/National/International)	Sponsoring Agency
01	Environment and Green Technology for Sustainable Development	Organizing Committee	January 18-19, 2019	National Seminar	Chem. & Civil Engg. Dept., AISSMSCOE
02	Advances in Chemical Reactor Design	Organizing Committee	February 27-28, 2017	National Seminar	Dept. of Chemical Engg, AISSMSCOE, Pune
03	Water Management in India	Organizing Committee	May 29, 2017	Indo-German International Conference	Dept. of Chemical and Civil Engg, AISSMSCOE, Pune
04	Intensification of Chemical Processing using Novel Reactors	Organizing Committee	9-10 & 22 Jan 2015	State Level Seminar	AISSMSCOE and SPPU Pune

05	Advances in Heat Transfer	Organizing Committee	28-29 Feb 2012	National Seminar	AISSMS COE and SPPU Pune
----	---------------------------	----------------------	----------------	------------------	--------------------------

Contribution as Resource Person

S. No.	Place/ Organization	Topic	Level(National/Int/ State/Regional)	Date
1	Srijan Pune	DIPEX - 2013	State Level Project Competition	April 2013
2	Srijan Pune	DIPEX - 2017	State Level Project Competition	March 2017
3	Institution of Engineers (I) Pune	33 rd National Convention	National level Conference	September 2017
4	Vishwakarma Institute of Technology (VIT), Pune, organized by the Dept. of Chemical Engg., VIT, Pune.	National Workshop on Artificial Neural Network	National Workshop	19 th Sept, 2020
5	National Chemical Laboratory Pune	Training on- Artificial Intelligence basics	Regional	July 2019

Details of Workshop / STTP / FDP / Conferences Attended

S. N	Title	Type	Duration	Organizer	Sponsoring Agency
------	-------	------	----------	-----------	-------------------

1	Making Teaching - Learning Process Effective	STTP	Dec 20- 25, 1999	ISTE Chapter	Engineering Education Foundation, Pune
2	Promoting Quality Culture in Technical Institutions	STTP	25/05/2020 to 29/05/2020.	AISSMS College of Engg, Pune	AISSMSCOE, Pune-1
3	Nanostuctured Materials in Catalysis	Work shop	25-29 March 2019	SCOE, Pune-41	SCOE, Pune-41
4	Vision-Mission-PEO-PSO-PO-CO: Framing, Mapping, Assessment and Attainment	FDP	10-15 June 2019	AISSMS College of Engg, Pune	ISTE
5	Mission 10X	Work shop	21-25 Oct 2008	Wipro Technology	ISTE
6	Applications of Novel Artificial Intelligence and Machine Learning Techniques for Chemical and Petro-Chemical Industries	Work shop	28 Dec 2009 to 02 Jan 2010	C-DAC and MIT Pune	DST-SERC School
7	Recent Advances in Chemical Process Control	STTP	16- 28 May 2011	SCOE Pune	AICTE
8	Data Science	FDP	17- 22 June 2019	AISSMS COE Pune	MHRD and Shivaji University
9	Chemical Engineering Laboratory	Work shop	29 – 31 May 2009	ICT Mumbai	ICT Mumbai under UGC Networking Resource Center
10	Modelling and Simulation of Complex Systems	Work shop	7 -9 Jan 2016	Venture Center Pune	Venture Center Pune
11	Process Intensification of Chemical Processing Applications	Work shop	28 – 30 Jan 2011	ICT Mumbai	ICT Mumbai under UGC Networking Resource Center
12	Applications of MATLAB and Simulink for Engineers	Work shop	3- 7 June 2013	Department of Mechanical Engineering, COEP Pune	COEP Pune

13	Sustainable Development in Chemical Processes	FDP	21- 23 May 2020	KK Wagh College of Engineering, Nashik	KK Wagh Edu. Soc. Nashik
14	Advanced teaching tools Techniques and Methodologies for Outcome Based Education	FDP	01-05 Jun 2020	AISSMS COE Pune	Centre of Excellence in Teaching Learning

Major Professional Responsibilities Handled

S. No.	Role and Responsibilities
1	Exam Coordinator
2	NBA Coordinator
3	NAAC Criteria I Coordinator
4	Head- Cultural Gymkhana
5	GFM TE Chemical
6	Alumni Coordinator
7	IChE Students' Chapter Coordinator
8	Staff Advisor- Chemical Engineering Students Association (CHESA)

Awards Received

S. No.	Awards
1	Honored as "Chartered Engineer [India]" by The Institution of Engineers (I) in Chemical Engineering Division
2	Received award of excellence from the All India Shri Shivaji Society on Shahujayanti-2019 on 26/6/2019 for the award of PhD. in Chemical Engineering from SPPU.

Declaration: I hereby declare that all the statement made above are correct to the best of my knowledge and belief.

A handwritten signature in black ink, appearing to read 'M Y Naniwadekar', written in a cursive style.

Dr. M Y Naniwadekar

(Name with Signature)