



# AISSMS

## COLLEGE OF ENGINEERING

ज्ञानम् सकलजनहिताय  
Accredited by NAAC with "A+" Grade



## Department of Chemical Engineering

### Faculty Profile

#### Dr. Maya Balasaheb Mane

PhD (Chemical Engineering)

Assistant Professor

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🔗 <https://scholar.google.co.in/citations?user=ZHQGDmQAAAAJ&hl=en>

🔗 <https://www.linkedin.com/in/dr-maya-mane-90254a71/>



#### Research Areas / Areas of Interest

Technology development, Process integration and intensification, Disinfection of water, Desulfurization of liquid fuels, API pollutant removal, advanced separation processes, adsorption, cavitation, coagulation, cavitation, extraction

#### Personal Details

**Date of Birth :** 29 / 08 / 1988

**Domicile:** Maharashtra

**Gender :** Female

**Blood Group:** O+ve

**Contact Details: Permanent:** Flat no. 5, Sarathi apartment, Shivalaya society, Sai chowk, Sus road, Pashan, Pune-411021

**Current:** Flat no. 5, Sarathi apartment, Shivalaya society, Sai chowk, Sus road, Pashan, Pune-411021

## Academic Background

S. NO.	Qualification	Specialization	University	Class/ Grade	Year of Passing
1	Ph.D.	Chemical Engineering	Academy of Scientific and Innovative Research	8.11 (CGPA)	2022
2	M.Tech.	Chemical Engineering	Bharati Vidyapeeth Deemed University, Pune	1 <sup>st</sup> class with Distinction)	2012
3	B.E.	Chemical Engineering	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	1 <sup>st</sup>	2009

## Work Experience

S. No.	Type of Experience	Years	Months
1	Teaching	02	02
2	Research	05	06
3	Industry	00	00
<b>Total</b>		<b>07</b>	<b>08</b>

## Subjects / Courses Taught

S. No.	Subject	UG/PG	Class (FE/SE/TE/BE/ME)	No of times Subject Taught
1	Process Calculations	UG	SE	2
2	Mass transfer	UG	TE	2
3	Instrumentation and Process control	UG	TE	2
4.	Chemical Reaction Engineering	UG	SE	2

## Research Publications

	National	International	State	SCI/ Scopus Indexed	UGC Approved
<b>Journals</b>	01	07	00	41.2	00
<b>Conferences</b>	08	02	00	00	--

## Publication Details (Journals)

S. No	Document Details	Authors	Year	Source Details	ISBN/ ISSN	Publisher
1.	Development of multipurpose biomass derived adsorbents using <i>Coccinia grandis</i> for removal of contaminants.	Surabhi S. Raj, <b>Maya B. Mane</b> , Pooja Thanekar, Kshama Balapure, Vinay M. Bhandari	2023	Clean Technologies and Environmental Policy	1618-9558	Springer
2.	Studies in instant water disinfection using natural oils.	Divya Dixit, Vinay M. Bhandari, <b>Maya B. Mane</b> , Kshama Balapure	2022	Biochemical Engineering Journal	2730-7700	Springer
3.	Developing spherical activated carbons from polymeric resins for removal of contaminants from aqueous and organic streams.	<b>Maya B. Mane</b> , Vinay M. Bhandari	2022	International Journal of Environmental Science and Technology	1735-2630	Springer
4.	Safe water and technology initiative for water disinfection: Application of natural plant derived materials	<b>Maya B. Mane</b> , Vinay M. Bhandari, Vivek V. Ranade	2021	Journal of Water Process Engineering	2214-7144	Elsevier

5.	Destroying antimicrobial resistant bacteria (AMR) and difficult, opportunistic pathogen using cavitation and natural oils/plant extract	<b>Maya B. Mane</b> , Vinay M. Bhandari, Kshama Balapure, Vivek V. Ranade	2020	Ultrasonics – Sonochemistry	1873-2828	Elsevier
6.	A novel hybrid cavitation process for entering and altering rate of disinfection by use of natural oils derived from plants.	<b>Maya B. Mane</b> , Vinay M. Bhandari, Kshama Balapure, Vivek V. Ranade	2020	Ultrasonics – Sonochemistry	1873-2828	Elsevier
7.	Determination of Exemestane in bulk and pharmaceutical dosage form by HPTLC	<b>Maya B. Mane</b> , Jaiprakash N. Sangshetti, Parmeshwar J. Wavhal, Pravin S. Wakte, Devanand B. Shinde.	2014	Arabian Journal of Chemistry	1878-5379	Elsevier
8.	Vapor Liquid Equilibria: A Review	<b>Maya B. Mane</b> and S. N. Shinde	2012	Scientific Reviews and Chemical Communications	2277-2669 (E)	Trade Science Inc

### Publication Details (Conferences)

S. No	Document Details	Authors	Year	Conference Details	ISBN	Organised By
1.	Newer spherical activated carbon materials and material modifications for deep desulfurization of fuels.	<b>Maya Mane</b> , Vinay Bhandari, LS Gayatri	2017	21st CRSI National Symposium in Chemistry		CSIR-IICT, Hyderabad during 14-16 July, 2017
2.	Spherical activated carbon adsorbents with metal modification for disinfection	<b>Maya B. Mane</b> , J. Jena, Vinay M. Bhandari, LS Gayatri	2018	National Science Day Symposium		CSIR-NCL, Pune during 26-27 Feb, 2018

3.	Newer spherical activated carbon adsorbents for disinfection and industrial effluent treatment	<b>Maya B. Mane,</b> Vinay M. Bhandari, J. Jena, T. Sinha	2018	8th DAE-BRNS biennial Symposium on Emerging trends in separation science and technology (SESTECH 2018)		BITS Pilani, Goa Campus, Goa from 23-26 May, 2018
4.	Kinetics of disinfection using vortex flow of vortex diode in hydrodynamic cavitation	<b>Maya B. Mane,</b> K. Balapure, Vinay M. Bhandari	2018	National Symposium on Chemical Reaction Engineering		CSIR-NCL, Pune during 17-18 Dec, 2018
5.	Exploring Green Technologies: Newer materials and methods for disinfection of water	<b>Maya B. Mane,</b> Kshama Balapure, Vinay M. Bhandari	2019	International Conference on materials for the millennium MATCON 2019		cochin university of science and technology, kochi during 14-16 March, 2019
6.	Hybrid Cavitation Process using Natural Oils for Disinfection of Water	<b>Maya B. Mane,</b> Kshama Balapure, Vinay M. Bhandari	2020	International Conference on Eco-health & Environmental Sustainability, ICEES-2020		Navrachana University, Vadodara in association with University of Calgary, Canada during February 24-26, 2020
7.	Hybrid hydrodynamic cavitation technology for disinfection of water using natural additive	<b>Maya B. Mane,</b> Vinay M. Bhandari	2021	. Advances in Chemistry and Chemical Engineering 2021 (ACCE2021)		Department of Chemical Engineering, Sardar Vallabhbhai National Institute of Technology, Surat during April 16-17, 2021

## PhD / ME / BE Student Guided for Project

Level	Ph.D.	M.E. (PG)	B.E. (UG)
No. of Student guided	-	00	00

## Professional Memberships

Professional Body	Level ( National/ International)	Type (Fellow/Life/Annual)	Membership No.

## Patents / IPR Filed / Granted

S. No	Investigator Details	Title	Year	Status (Filed/Granted)	Details
1.	Vinay M. Bhandari, <b>Maya B. Mane</b> , Kshama Balapure	A NOVEL PROCESS FOR ENHANCING AND ALTERING REMOVAL OF BACTERIA BY USE OF NATURAL OILS DERIVED FROM PLANT OR EXTRACT IN CAVITATION	2019	Published	. Patent Filed- 20/07/2019 (201911021646).

## Books Published

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

## Research Grants Received

S. No	Program	Duration	Funding Agency	Grant Amount (INR)
1.	DST Women Scientist (WOS-A) from Department of Science and Technology (DST), Government of India to pursue PhD (Aug 2016 to Feb 2020).	3.6 years (2016-2020)	Department of Science and Technology (DST)	Rs. 19,78,000/-

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

S. No	Title	Type	Duration	Level (State/National/International)	Sponsoring Agency
01					

## Contribution as Resource Person

S. No.	Place/ Organization	Topic	Level(National/Int/ State/Regional)	Date

## Details of Workshop / STTP / FDP / Conferences Attended

S. N	Title	Type	Duration	Organizer	Sponsoring Agency
1					

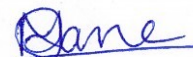
## Major Professional Responsibilities Handled

S. No.	Role and Responsibilities
1.	DST Women Scientist (WOS-A) from Department of Science and Technology (DST), Government of India to pursue PhD (Aug 2016 to Feb 2020)

## Awards Received

S. No.	Awards	Year
1	<b>DST Women Scientist (WOS-A) from Department of Science and Technology (DST), Government of India to pursue PhD</b>	Aug 2016 to Feb 2020
2	<b>Best Poster Award with Citation</b> for the paper entitled Newer spherical activated carbon materials and material modifications for deep desulfurization of fuels in <b>21<sup>st</sup> CRSI National Symposium in Chemistry 2017, Hyderabad.</b>	2017
3	<b>SERB-IGCW 2019 Green Chemistry Award-Top Three Nominee certificate in Knowledge Community Students</b> for Innovation for outstanding case studies incorporating the Principles of Green Chemistry and Engineering into Chemistry routes, Chemical designs and Manufacturing Practices; and steps taken towards pollution prevention while meeting the triple bottom line of People, Profit and Planet.	2019
4	<b>Best Oral Presentation Award with Trophy</b> for the paper entitled Hybrid Cavitation Process using Natural Oils for Disinfection of Water in at International conference on Ecohealth and Environmental Sustainability (ICEES-2020), Gujrat.	2020
5	<b>Director's Commendation Award with Citation</b> for Research Publication in Chemical Engineering/Technology-2020 for the paper entitled Destroying antimicrobial resistant bacteria (AMR) and difficult, opportunistic pathogen using cavitation and natural oils/plant extract, CSIR-NCL, Pune	2020

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



**Dr. Maya Balasaheb Mane**

(Name with Signature)