

Sudesh Devchand Ayare

B.Tech., M.Tech., Ph.D. (Chemical Engineering)

Phone: +91 9405732206

E-mail: sudeshayare84@gmail.com

Professional Profile

Currently working as an **Associate Professor** at the Department of Chemical Engineering, Gharda Institute of Technology, Lavel, Dist. Ratnagiri, Maharashtra, India. Joined this Institute on **26th July 2011**.

Handling a responsibility of **Dean, Internal Quality Assurance Cell** of Gharda Institute of Technology, Lavel since Dec 2025.

Worked as **Member for College Development Committee from 2020-2025** at Gharda Institute of Technology, Lavel

Worked as **Chairman for Admission and Branding Committee from 2023 to 20125** at Gharda Institute of Technology, Lavel

Worked as **Program Officer for National Service Scheme (NSS) from 2012 to 2014** at Gharda Institute of Technology, Lavel

Worked as **Chairman for Cultural Club and Nature Club from 2012 to 2016** at Gharda Institute of Technology, Lavel

Worked as **Senior Supervisor of Mumbai University Examinations** in May-June 2020 (Online Examinations) and May-June 2013.

Worked as an **NBA and NAAC** accreditation team member at Gharda Institute of Technology.

Worked as a member of the CAS Committee for the academic year 2025.

Worked as **Trainee Field Officer (Project) in Vinati Organics Limited, Lote** in July 2008 to August 2009.

Experience

15+ years of teaching experience for teaching **Under-Graduate** Chemical Engineering course. Taught important subjects of Chemical Engineering like Heat Transfer Operation, Fluid Flow Operation, Process Calculations, Chemical Reaction Engineering, Solid Fluid Mechanical Operation, Chemical Process Technology, Process Engineering, Project Management for Chemical Process Industries, Research Methodology etc.

Education

Ph.D. in Chemical Engineering (1st March 2021) from **Institute of Chemical Technology, Mumbai**

Title of the Thesis: Improvement in industrial waste water treatment based on use of combination approaches.

Supervisor: Dr. P. R. Gogate

Post Graduate course, ‘Master of Technology’, in Chemical Engineering in 2011, from Dr. Babasaheb Ambedkar Technological University, Lonere (D. BATU).

Under Graduate course, ‘Bachelor of Technology’, in Chemical Engineering in 2008, from Dr. Babasaheb Ambedkar Technological University, Lonere (D. BATU).

Research Areas

Wastewater Treatment processes, Advanced Oxidation Processes, Heat Transfer Operations.

Research Profile

Research Profile

Total Publications: 09

Publications in Peer-Reviewed Journals: 08

Scopus/Web of Science Indexed Publications: 08

Conference Publications: 01

Book Chapters: 04

Books Authored/Edited: 05

Citations: 141

h-Index: 06

i10-Index: 04

Prominent Publishing Journals: **Ultrasonics sonochemistry, Chemical Engineering and Processing: Process Intensification, Separation and Purification Technology, Environmental Technology & Innovation, Clean Technologies and Environmental Policy.**

Publications

1. **S.D. Ayare**, P.R. Gogate, Sonocatalytic treatment of phosphonate containing industrial wastewater intensified using combined oxidation approaches, **Ultrasonic Sonochemistry** 51 (2019) 69–76.

2. **S.D. Ayare**, P.R. Gogate, Sonophotocatalytic oxidation-based treatment of phthalocyanine pigment containing industrial wastewater intensified using oxidizing agents, **Separation and Purification Technology** 233 (2020) 115979.
3. **S.D. Ayare**, P.R. Gogate, Sonochemical, photocatalytic and sonophotocatalytic oxidation of flonicamid pesticide solution using different catalysts, **Chemical Engineering & Processing: Process Intensification** 154 (2020) 108040.
4. **S.D. Ayare**, P.R. Gogate, Degradation of Tricyclazole fungicide using combined oxidation strategies based on ultrasound, ultraviolet, and microwave irradiations. **Separation & Purification Technology**, 26 (2022)102533.
5. **S. D. Ayare**, S. Doltade, S. P. Tekade, A review on current scenario of energy, nuclear reactor technology and cold trap. **Clean Technologies and Environmental Policy** (2024) 1-15.
6. S. Kulkarni, A. P. Adsul, **S. D. Ayare**, S. V. Pandit, S.N. Hundekari, O. Pattanaik, Advances in Crowd Counting and Density Estimation Using Convolutional Neural Networks, **International Journal of Intelligent Systems and Applications in Engineering** (2024) 12 (6s), 707-719.
7. S.P Jadhav, **S.D Ayare**, P.R Gogate, Intensified degradation of tartrazine dye present in effluent using ultrasound combined with ultraviolet irradiation and oxidants, *Environmental Monitoring and Assessment* 196 (5), 431.
8. **S.D Ayare**, S.P. Jadhav, J.V. Mapara, Experimental investigation for twisted tape as an augmentation device in plain tube, *Sadhana*, Springer, 2025 50 (3) 1-9.

Achievements

1. Received the **grant** in the tune of **Rs. 35000/-** from **University of Mumbai** for Minor Research Grant Project 2019-20.
2. Awards won by the project in Mumbai University Research Convention (Avishkar 2023).
3. Project represent the University of Mumbai in “16th Aavishkar” Maharashtra State Inter-University Research Convention at Maharashtra University of Health Sciences, Nashik.
4. Received the NPTEL Silver Medal Certification on completing the Course “Heat Transfer” on 27 October 2024 under the Government of India initiative.
5. Successfully completed seven modules of the National Initiative for Technical Teachers Training (NITTT) conducted by NITTTTR under the aegis of AICTE and the Ministry of Education, Government of India.

Extra-Curricular Activities

1. Successfully completing the MOOC online Certification 12-week Course (NPTEL) “**Chemical Engineering Fluid Dynamics and Heat Transfer**” on Jan- Apr. 2023.
2. Worked as a **Subject Expert Committee member** for the **Heat Transfer Operation** in Chemical Engineering Programme to the revision of syllabus (Rev- 2019 ‘C’).
3. Worked as a **Subject Expert Committee member** for the **Process Calculation** in Chemical Engineering Programme to the revision of syllabus (Rev- 2019 ‘C’).
4. Worked as a **Subject Expert Committee member** for the **Instrumentation Process Dynamic and Control** in Chemical Engineering Programme to the revision of syllabus (Rev- 2019 ‘C’).
5. Participated in a **Two-week ISTE Workshop on Heat Transfer** Conducted by **Indian Institute of Technology, Mumbai** in Dec 2011 at Vishwakarma Institute of Technology, Pune.
6. Participated in a **Two-week ISTE Workshop on Engineering Thermodynamics** Conducted by **Indian Institute of Technology, Mumbai** in Dec 2012 at Gharda Institute of Technology, Lavel.
7. Participated in a **Two-week ISTE Workshop on Fluid Mechanics** Conducted by **Indian Institute of Technology, Kharagpur** in May 2014 at Gharda Institute of Technology, Lavel.
8. Participated in a **Two-week ISTE Workshop on Control System** Conducted by **Indian Institute of Technology, Kharagpur** in Dec 2014 at Gharda Institute of Technology, Lavel.

Personal details

Date of Birth: **01st July 1983**

Languages knew: Marathi, English, and Hindi

Marital Status: Married

Father's Name: Mr. Devchand S. Ayare

Mother's Name: Mrs. Daya Devchand Ayare

Declaration

The information provided in the curriculum vitae is true and best of my knowledge.

Sincerely,

Dr. Sudesh Ayare