



Sinhgad Institutes

Sinhgad Technical Education Society's

Sinhgad College of Engineering



Dr. Shrikant Shrimant Barkade

Ph. D (Chemical Engg.), DBM

ssbarkade.scoe@sinhgad.edu

9822751020

Significant Achievement

- ➔ Member, Advisory Committee of Pune District for Maharashtra Centre for Entrepreneurship Development
- ➔ Member, Board of Studies in Chemical & Petrochemical Engineering at SPPU, Pune.
- ➔ Recognized PhD **Research Guide** from University of Pune
- ➔ Recognized Master **Research Guide** from University of Pune
- ➔ 1st Prize winner in Quiz Competition at AQUA 2016 – Aqualndia

Academic Qualification

Degree	Institute Name	University Name	Year of Passing	Percentage	Grade	Qualification Status
Ph.D.	UICT, Jalgaon (Formerly known as UDCT, Jalgaon)	North maharashtra university Jalgaon	2014	-	-	Completed
D.B.M.	Prin. K.P. Mangalvedhekar Institute of Management Carrier Development & Research, Solapur	Shivaji university	2001	60.0%	First	Completed
ME	Bharati Vidyapeeth's College of Engineering, Pune	Bharati vidyapeeth university, pune	2006	-	First	Completed
BE Chemical	Tatyasaheb Kore Institute of Engineering and Technology, Warananagar	Shivaji university	1999	63.4%	First	Completed

Experience Summary: Total: 18.5 Yrs. (Teaching: 16.5 Yrs., Industry: 2.2 Yrs.)

Name of Organization	Designation	Duration	Nature of experience/Job Profile
Sinhgad College of Engineering, Pune	Placement Coordinator* (Sinhgad Engg. Institutes) *Additional Charge	From 5 th January 2017	Fetching the new companies for improving Campus Placement Developed Internship network for 10 Engg. Institutes
	Associate Professor	From 1 st April 2016	Involved in the NAAC activities VAP Coordinator for final year students Institute Sponsorship Coordinator for Sinhgad Karandak
	Assistant Professor (6 th pay)	5.9 yrs	Involved in the Documentation activities of Department Accreditation Process(NBA). Organized one week FDP on Sophisticated Instrumental Analysis Techniques. Research in Functional Nanolatex for Engineering applications
	Sr. lecturer (5 th pay)	2 yrs	Introduced Piping Design Engineering, Energy Conservation, Nanotechnology Electives.
	Lecturer	2.9 yrs	Development of Computer aided Chemical Engineering -II laboratory. Counseling of students for Career Development
Ecoboard Industries Limited	Shift Incharge	2.2 yrs	Manufacturing of Resins: (Urea Formaldehyde, Melamine Urea Formaldehyde, Melamine Formaldehde), Wax Emulsions & Different types of Hardeners. Analysis of Resins & Process Samples. Also Plant & Utility maintenance.
National Chemical Laboratory (Sponsored ME Project)	Project Trainee	1 yr	Research in Separation of Epichlorohydrin from Heterogeneous Azeotropic Mixture. (Quaternary system)

Software Skills

PROCESS SIMULATION

- - ✓ Steady State - UNISIM DESIGN, HYSYS
 - ✓ Dynamic State - UNISIM DESIGN, DYNISIM
- MATHCAD
- PVLITE

FDP/STTP/Workshop Attended

Sr. No.	Title of Program	Date & Duration	Organization
1	One week online Faculty Development Program on "Sophisticated Analytical Instruments: Principles and Applications to Chemical and Material Sciences (SAIPACMS-2020)"	21 st -25 th July 2020	Sinhgad College of Engineering, Pune.
2	One Day Online Webinar Sponsored by NBA on Awareness Webinar on Outcome Based Education and Accreditation	27 th November 2020	Directorate of Technical Education, Maharashtra State and College of Engineering Pune
3	One Week Online FDP on "Future Materials: Nanocomposites"	15 th - 21 st June, 2020	Bharati Vidyapeeth College of Engineering, Pune
4	One Week Online FDP on "Research in Environmental Engineering and A way Forward"	15 th - 20 th June, 2020	Pimpri Chinchwad College of Engineering, Pune in Association with Environment Conservation Association, Pune (ECA)
5	Online FDP on "Chemical Engineering Towards Sustainability & Process Intensification"	15 th - 17 th June 2020	Gharda Institute of Technology, Lavel
6	Online FDP on "Municipal Solid Waste Management during COVID-19 Pandemic"	28 th -30 th May-2020	Anurag Group of Institutes, Telangana
7	International conference of pervasive computing	23 rd -24 th Feb, 2020	Sinhgad college of Engineering, Pune
8	FDP on "Computational Fluid Dynamics (CFD) and its Applications"	15 th – 20 th Nov. 2019	Anurag Group of Institutes, Telangana
9	Webinar on "Intellectual Property (IP) Standing in Individual Phase and in a Startup's Achievement"	4 th July 2020	Sinhgad Institute of Technology and Science, Narhe, in association with MHRD'S Institute Innovation cell
10	Webinar on "Introduction to Process Intensification"	09 th June 2020	K. K. Wagh Institute of Engineering Education & Research, Nashik in Association with Maxspeed Technologies Pvt. Ltd
11	Webinar on "Future Prospects of MSME after Covid 19"	15 th June 2020	MITAOE, Pune
12	Intellectual Property Rights & Patents	27 th Dec. 2016	SKNCOE College of Engineering, Pune
13	Unit Operations & Unit Processes with Plant Visit	06 th -08 th July 2015	RCF, Mumbai
14	One day Workshop on Syllabus Modification at SE	30 th April 2016	MIT Kothrud, Pune
15	One day Workshop on Syllabus Revision at SE and ME	26 th Feb. 2013	MIT Kothrud, Pune
16	Soft Skills Workshop	28 -30 Jan. 2009	Infosys Technologies
17	English Language Training	21 -22 Nov. 2008	Cognizant Technology
18	Advanced Analytical Techniques	12-14 Jan 2007	SCOE, Pune
19	Applications of MATLAB in Chemical Engineering	21- 23 April 2008	SCOE, Pune

	Computational Fluid Dynamics Research and Industrial Applications	1 st Feb. 2008	MAE Alandi
21	Profit Suit	09-10 Apr. 2008	Honeywell India at S.C.O.E., Pune.
22	High Performance Liquid Chromatography	05 - 06 Dec. 2007	Chemito Technologies Ltd., Nashik.

Research Work Contribution

- M. E. research projects guided: 12
- M. E. research project in collaboration with C-MET, Pune: 01
- M. E. research project in collaboration with ARAI, Pune: 01
- M. E. research project in collaboration with BARC, Mumbai: 02
- M. E. research project in collaboration with Uniqflux Membranes LLP, Pune: 01

Publications (International Peer Reviewed Journal)

- P. G. Bansod, **S. S. Barkade**, D. R. Bhutada, Biodiesel Production from Nagpur Thermal Power Plant Ash Used As Catalyst, **Indian Journal of Environmental Protection** ISSN: 0253 – 7141, 40 (9): 921-926 (Sept. 2020) (Scopus Index).
- **S. S. Barkade**, P. G. Bansod, V. R. Doss, S. P. Mardikar, Development of Poly(aspartic-co-glutamic acid) Green Antiscalant for Calcium Carbonate Scale Inhibition, **Advanced Science, Engineering and Medicine**, 11 (2020) 198-206.
- V. S. Ashtekar, O. A. Deorukhkar, **S. S. Barkade**, A. H. Lad, N. A. Donadkar, Simulation of reparation of Silver Hydrogen Peroxide using Computational Fluid Dynamics (CFD), **Test Engineering and Management**, 83 (2020) 2018 - 2026.
- P. G. Bansod, **S. S. Barkade**, D. S. Bhutada, S. M. Khodape, Enhancement of Separation Efficiency for Nanofiltration membrane using Water Soluble Polymer, **International Journal of Recent Technology and Engineering**, 8 (Sept. 2019) 1470-1474.
- Nirvik Sen, K. Saswani, K. K. Singh, **S. S. Barkade**, S. Mukhopadhyay, S. M. Chavan, Sk. M. Ali, K. T. Shenoy, Extraction of uranium(VI) by tri iso-amyl phosphate (TiAP) in ionic liquids, **Journal of Radioanalytical and Nuclear Chemistry**, 312 (May 2017) 255–262.
- **S. S. Barkade**, D. V. Pinjari, A. K. Singh, P. R. Gogate, J. B. Naik, S. H. Sonawane, A. B. Pandit, M. Ashokkumar, Ultrasound assisted miniemulsion polymerization for preparation of polypyrrole zinc oxide (PPy/ZnO) functional latex for LPG sensing, **Industrial Engineering and Chemistry Research**, 52 (2013) 7704-7712.
- **S. S. Barkade**, D.V. Pinjari, U. T. Nakate, A. K. Singh, P. R. Gogate, J. B. Naik, S. H. Sonawane, A. B. Pandit, Ultrasound assisted synthesis of Polythiophene/SnO₂ Hybrid nanolatex particles for LPG Sensing, **Chemical Engineering and Processing: Process Intensification**, 74 (2013) 115-123.
- **S. S. Barkade**, S. H. Sonawane, J. B. Naik, Ultrasound assisted Miniemulsion Synthesis of Polyaniline/Ag Nanocomposite and its Application for Ethanol vapor Sensing, **Colloids and Surfaces A: Physicochemical and Engineering Aspects**, 378 (2011) 94-98.
- Kapil Sathe, **S. S. Barkade**, S. H. Sonawane, Bharat Kale, Synthesis, Bio-degradability, Recent Applications and Future Scope of Poly(aspartic acid): A Review in **'International Conference on Sustainable Development for Energy and Environment'**, CSIR-National Chemical Laboratory, Pune, January 2017.

Book Chapter (International)

- Satish P. Mardikar, V.R. Doss, P.D. Jolhe, R.W. Gaikwad, S.S. Barkade. Nanocomposite adsorbent-based wastewater treatment processes: Special emphasis on surface-engineered iron oxide nanohybrids, **Handbook of Nanomaterials for Wastewater Treatment, Elsevier Inc. (May 2021).**
- S. D. Balgude, S. S. Barkade, S. P. Mardikar, Metal Oxides for High-Performance Hydrogen Generation by Water Splitting in: **Multifunctional Nanostructured Metal Oxides for Energy Harvesting and Storage Devices, Taylor & Francis-CRC Press, Boca Raton, (May 2020)**
- **S. S. Barkade**, D.V. Pinjari, U.D. Bagale, Potoroko Irina, Corrosion and nanocontainer-based delivery system, in: **Encapsulation of Active Molecules and Their Delivery System, Elsevier Inc. Amsterdam, (2020)**
- **S. S. Barkade**, Potdar S B, Landge V. K, Potoroko Irina, Flavor encapsulation and release studies in food, in: **Encapsulation of Active Molecules and Their Delivery System, Elsevier Inc. Amsterdam, (2020)**
- S. Shaikh, S.H. Sonawane, **S.S. Barkade**, B.A. Bhanvase, Synthesis of Inorganic, Polymer, and Hybrid Nanoparticles Using Ultrasound, in: **Handbook of Ultrasonics and Sonochemistry, Springer, Singapore, (July 2016).**
- **S. S. Barkade**, S. Mishra, P. R. Gogate, J. B Naik, S. H. Sonawane, Recent Trends of Carbon Nanotubes/Graphene Functionalization for Gas/Vapor Sensing: A Review, in: **Chemical Functionalization of Carbon Nanomaterials: Chemistry and Applications, Taylor & Francis-CRC Press, USA, (2015).**
- **S. S. Barkade**, B. A. Bhanvase, S. H. Sonawane, Sonochemical synthesis of Functional hybrid nanomaterials containing polyaniline and their applications, in: **Trends in Polyaniline Research**, Dr. Al-Nakib Chowdhury (Eds.), **Nova Science Publisher Inc, NY, USA, (2013).**

Conference Details

Name	Venue	Date	Level	Category	Type	Sponsored By
Second Conference on Recent Advances in Polymer Technology-2009	North Maharashtra University, Jalgaon	28 Dec 2009 to 29 Dec 2009	International	Research		Department of Chemical Technology, North Maharashtra University, Jalgaon-425001 India

Research Projects

Project name	Description	Status	Budget	Project type
Hydrogenation of substituted aromatic nitro compounds	This study is done in understanding the basics of sulfonation of aromatic compounds from point of view of research (mechanism and kinetics of the reaction, selectivity of the catalyst, yield of the product, deactivation mechanisms and its	Completed	150000	Sponsored Projects

kinetics etc.) and also by the industries for improving process efficiencies on plant scale. The developed generalized kinetic model will help in reducing the cost/investments in this research area in future and also will help in improving and optimizing the existing processes.			
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Declaration

I hereby declare that all the above information furnished by me are true to the best of my knowledge.

Date : 22-Feb 2022

Dr. Shrikant Barkade