

Dr. Sameer Mahadeorao Wagh

Associate Professor, Department of Chemical Technology, Laxminarayan
Institute of Technology, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur,

Cell Phone : 7276514004

Personal Email: sameerwaghlit@gmail.com



Academic Qualifications:

B.Tech (Chem. Engg.) 1996, M.Tech (Chem. Engg.) 1998, PhD (Chem. Engg) 2011
Laxminarayan Institute of Technology, Rashtrasant Tukadoji Maharaj Nagpur University,
Nagpur,

Research Interest

Hydrodynamics, Computational Fluid dynamics, Polymer Composites, Process control and
Process Intensification.

Positions Held in Past: (Professional (Teaching) Experience)

- 03rd July.2016 to Till date: Associate Professor (CAS) in Chemical Technology Department of Laxminarayan Institute of Technology, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.
- 6th October, 2016 to 5th August 2019: As Head of Department in Plastic and Polymer Technology of Laxminarayan Institute of Technology, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.
- from.
- 03rd July. 2008 to 02nd July. 2016: Assistant Professor in Chemical Technology Department Laxminarayan Institute of Technology, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur
- 03rd July. 2003 to 2nd July 2008: Lecturer in Chemical Technology Department of Laxminarayan Institute of Technology, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.
- 1st July 1998 to 2nd July 2003 Engineer in INDORAMA SYN. (I) LTD. from in Condensation Polymerisation Unit (CP).

Administrative Experience:

- Worked as a member of Engineering College Inspection committee appointed by Joint Director, Technical Education, Regional Office, Nagpur.

Membership of professional bodies

Indian Society for Technical Education	(LM 50119)
The Institution of Engineers (India)	(M-138618-7)
The Indian Science Congress Association	(L20930)
Indian Institute of Chemical Engineers	(LM-45307)

Awards and Recognition

- i) ‘Chatrapati Rajarshi Shahu State level Bahujan Mitra Puraskar’ for the year 2011 received from Chatrapati Rajarshi Shahu Yuva Mitra Mandal, Dhule, Maharashtra, for notable contribution in the field of education.
- ii) ‘Maniratna Shikshak Gaurav Award – 2012’ received from Dr Manibhai Manvseva Trust, Pune on 2nd October 2012.
- iii) Mahatma Gandhi International Peace Award received from International Human Rights Justice Federation at 27th Indian Independence Literature Conference, India 2013, on 28th July 2013 at Satara.
- iv) Received First prize for Paper Presentation: ‘Optimum Operating Volume of Ethanol as a Blending Agent in Gasoline Fuel’ in 1st International conference on Thermal Power : Chemistry and Sustainable Environment (TPCSE-2015) Organized by Environment Cell, Chandrapur Super Thermal Power Station, Chandrapur, 5th June 2015.
- v) Paper Presented: ‘Petroleum Products: Composition and Uses’ in 4rd Annual International Conference on Innovations and Research in Engineering Science and Technology, ICIRSET-18, by Tulsiramji Gaikwad-Patil College of Engineering & Technology, Nagpur, 23th – 24th February 2018. Best Paper Award
- vi) Paper Presented: ‘Synthesis of Polymer Nanocomposites’ in 5th International Conference on Innovations and Research in Engineering Science and Technology, ICIRSET-19, by Tulsiramji Gaikwad-Patil College of Engineering & Technology, Nagpur, 22nd – 23rd March 2019. Best Paper Award
- vii) Paper Presented: ‘Simple Technique to achieve BS-VI Norm for Petroleum fuel.’ in AICTE sponsored International Conference on Management Practices, Innovations and Research, MPIR-19, by Tulsiramji Gaikwad-Patil College of Engineering & Technology, Nagpur, 20th -21st December 2019. Best Paper Award

Research Projects

- i) UGC Major Research Project of Rs. 12 Lakh completed on the topic ‘Management of solid waste (vegetable de oiled cake) generated from vegetable oil mills/refinery by converting in into value added products like activated carbon’. (2013-2016)
- ii) Research Project sanctioned under University Research Project Scheme of Rashtrasant Tukadoji Maharaj Nagpur University of Rs 2.5 Lakh for the research project entitled “Synthesis of Polymer Nano Composite with Improved Properties” (17th January 2018 - 2020)

PUBLICATIONS

A) International Journals

- 1) Sameer M. Wagh, Kishore V. Koranne, Raju B. Mankar, and Ram L. Sonolikar, Flow regimes in a two phase reversed flow jet loop bioreactor, *Biotech Bioprocess. Engg.*, 15 (3) (2010a) 497-504.
Publisher - Springer, ISSN: 1226-8372, Impact factor 1.004.
- 2) S. M. Wagh, K.V. Koranne, R. B. Mankar, R. L. Sonolikar. Gas holdup in a two-phase reversed flow jet loop reactor, *Can. J. Chem. Eng.*, 88 (5) (2010b) 793-800.
Publisher - Wiley, ISSN: 0008-4034, , Impact factor 0.707.
- 3) Dadasaheb Gaikwad; Rakhi Sonkusare; Sameer Wagh, Composite Leaf Spring for Light Weight Vehicle- Materials, Manufacturing Process, Advantages & Limitations, *Int J Engg Techsci*, 3(2) 2012,410-413
- 4) Sameer M. Wagh, Kishore V. Koranne, Ram L. Sonolikar, Operating and hydrodynamic characteristics of a reversed flow jet loop bioreactor (RFJLB) with ejector, *Bioresource Technology*, 110 (2012) 417-422.
Publisher - Elsevier Ltd., ISSN: 0960-8524, Impact factor 4.98 (Last five Years 5.35).
- 5) Sameer M. Wagh, Mohashin E Alam Ansari, Pragati T. Kene, Axial and Radial Gas Holdup in Bubble Column Reactor, *Bulletin of the Korean Chemical Society*, 35 (6) (2014) 1703-1705. <http://dx.doi.org/10.5012/bkcs.2014.35.6.1703>
Publisher- Korean Chemical Society. ISSN: 0253-2964(Print),1229-5949(Online) Impact Factor 1.01
- 6) N. B. Selukar and S. M. Wagh, Gasoline and Diesel Synthesis from Waste Lubricating oil: A Kinetic Approach, *Journal of Applied Chemistry, ICAET-2014*, 1 (2014) 22-25.
Publisher. IOSR Journals, International Organization of Scientific Research ISSN 2278-5736.
- 7) Anant R. Sontake, Sameer M. Wagh, The Phase-out of Perfluorooctane sulfonate (PFOS) and the global future of Aqueous Film Forming Foam (AFFF), innovations in fire fighting foam. *Chemical Engineering and Science*, 2(1) (2014), 11-14.
DOI:10.12691/ces-2-1-3 Science and Education Publishing ISSN (Print): 2328-7381; ISSN (Online): 2328-7373
- 8) Sameer M. Wagh, Personal Protective Equipments, *J. of Applied Fire Science*, 23 (4) 509-516,2013-2014.
DOI: 10.2190/AF.23.4.i, Baywood Publishing Co. ISSN (Print): 1044-4300; ISSN (Online): 1541-4183. Impact Factor: 0.1
- 9) Rahul D. Mahajan, Sammer M. Wagh, Amol More, Mahadev Patil, Muralidhar Mundhe, Kunal Patil, Study of average velocity of fluids in baffled reversed flow Jet loop reactor, *International Journal of Engineering Research*, 4 (2) (2015) 76-80.
Innovative Research Publications ISSN:2319-6890(online), 2347-5013(print) (CONF)
- 10) Rahul D. Mahajan, Sameer M.Wagh, Study of Average Circulation velocity of liquids in baffled reversed flow Jet loop reactor, *International Journal of Engineering Research*, 4 (2) (2015) 110-113. Innovative Research Publications ISSN:2319-6890(online), 2347-5013(print) (CONF)
- 11) Prashant Dhanke, Nitin Kanse, Dhundiraj Deshpande, Sameer Wagh, Production of Bio-Diesel using Ultrasonic Cavitation Reactor, *Asian Journal of Convergence in Technology*

- 2(3) 2015, 1-3 Special issues on Chemical Engineering Issn No.:2350-1146, I.F-2.71 Innovative Research Publications ISSN:2319-6890(online), 2347-5013(print) (CONF)
- 12) Sameer M. Wagh, Divya P. Barai and Megha H. Talwekar, Design Sensitivity Analysis Of Evaporator Using CHEMCAD, Asian Journal Of Science And Technology, 7 (6) (2016) 3065-3067.
Science And Technology ISSN: 0976-3376 Impact Factor 6.315 (For 2016), <https://www.journalajst.com/sites/default/files/issues-pdf/3104.pdf>
 - 13) Sameer M. Wagh, Divya P. Barai, Megha H. Talwekar, Study Of Effect On Operating Parameters Of Shell And Tube Heat Exchanger Using CHEMCAD, International Journal Of Pure And Applied Research In Engineering And Technology (IJPRET), 4 (12) (2016) 11-20.
ISSN: 2319-507X Impact Factor: 4.226
 - 14) Mukesh B. Sawarkar, Sameer M. Wagh, Investigation on Treatment of Paper and Pulp Industry Waste Water using Air Column Reactor, International Advanced Research Journal in Science, Engineering and Technology 4 (3), 2017, 169-171.
Special issue: AGNI-PANKH 16, Jawaharlal Darda Institute of Engineering and Technology, Yavatmal, Tejass Publishes DOI 10.17148/IARJSET, ISSN (Online) 2393-8021 ISSN (Print) 2394-1588 Impact Factor: 4.821 (CONF)
 - 14) Rahul D. Mahajan, Sameer M. Wagh, Study of average circulation velocity of fluids in baffled reversed flow Jet loop reactor, International Journal of Engineering Research and Technology. 10 (1) 2017, 280-284.
International Research Publication House ISSN 0974-3154 Impact Factor:
 - 15) A R Sontake and S M Wagh, Fire Dynamics and Human Behavior-An Analytical Approach, Fire Engineer, 4(1) 2017, 29-32.
Institution of Fire Engineers (India), ISSN 0970-3969.
 - 16) Sameer M. Wagh, Divya P. Barai, Megha H. Talwekar, Comparative Vibration Analysis of Segmental Baffles with no Tubes in Window Baffles in STHE Using CHEMCAD, Asian Journal of Science and Technology, 8 (8) 2017 5361-5364
Science And Technology ISSN: 0976-3376 Impact Factor 6.315 (For 2016)
 - 17) Sameer M. Wagh, Divya P. Barai, Megha H. Talwekar , Vibration Analysis of an Evaporator Using CHEMCAD, International Journal Of Innovations In Engineering Research And Technology [IJIERT], 4(8) 2017 27-31.
NOVATEUR PUBLICATIONS, ISSN: 2394-3696, Impact Factor: 3.535.
 - 18) Sameer M. Wagh, Divya P. Barai, Megha H. Talwekar, Vibration Analysis Of Shell And Tube Heat Exchanger By Changing Baffle Spacing Using CHEMCAD, International Journal of Latest Trends in Engineering and Technology, 9(1), 2017, .087-091, SN Education society India DOI: 10.21172/1.91.13, ISSN 23193778, e-ISSN:2278-621X.
Impact Factor: 4.49. <http://dx.doi.org/10.21172/1.91.13>
 - 19) Prashant Dhanke,, Sameer Wagh, Nitin Kansec, Degradation of Fish Processing Industry Wastewater in Hydrocavitation Reactor, Materials Today: Proceedings 5 (2) (1), 2018 3699–3703 Elsevier ISSN 2214-7853. (CONF)
<https://doi.org/10.1016/j.emcon.2019.12.001>
 - 20) Prashant Dhanke, Abhijeet Patil, Vivek Kore, Pavan Thakare, Unmesh Patil, Sameer Wagh, Phosphate removal from industrial wastewater effluent using modified coal fly

- ash, Desalination and Water Treatment 116 (2018) 232–241
doi:10.5004/dwt.2018.22516
Balaban Desalination Publications and Publisher Tayler & Francis ISSN Print 1944-3994, ISSN Online 1944-3986
- 21) Sameer Wagh, Pawan Gawali, Ashish Mohare, Dhananjay Balbudhe, Synthesis of Resorcinol-Formaldehyde Polymer Microspheres by Spray Drying technique, International Journal of Current Advanced Research, 7 (9) C (2018) 15416-15419 ISSN: O: 2319-6475, ISSN: P: 2319-6505, Impact Factor: 6.614, <http://dx.doi.org/10.24327/ijcar.2018.15419.2813> ,UGC app NO 43892.
 - 22) Nitish S. Jha, Pallavi Rathod, S.M. Wagh, and S. A. Pande, Investigation on the mechanical, thermal properties of polyamide 6/polypropylene blends with natural talc as filler, AIP Conference Proceedings 2104, 020019 -1 – 10 (2019); .(CONF) <https://doi.org/10.1063/1.5100387>
KDK college of engineering Nagpur in association with Luminescence Society of India (LSI) in International Conference on Multidimensional Role of Basic Science in Advanced Technology. ICMBAT 2018, ISBN No 9780 7354 1836 3, ISSN 0094 243X
 - 23) Nitish Jha, Sameer Wagh, Pratibha Gupta, pH and Temperature Responsive potassium polyacrylate Hydrogel used in drug delivery, Journal of Composition Theory’ 12 (7), 2019, Association of Teachers of Advanced Composition, ISSN 0731 6755, Impact Factor 5.7 <http://jctjournal.com/gallery/6-july2019.pdf>
 - 24) Prashant Dhanke,, Sameer Wagh, Abhijeet Patil, Treatment of Fish Processing Industry Wastewater Using Hydrodynamic Cavitational reactor with Biodegradability Improvement, Water Science and Technology, 80 (12) (2019), 2310-2319, IWA Publishing. Impact Factor 1.624. ISSN 0273-1223 EISSN 1996-9732 <https://doi.org/10.2166/wst.2020.049>
 - 25) Prashant Dhanke,, Sameer Wagh, Treatment of vegetable oil refinery wastewater with biodegradability index improvement, Materials Today: Proceedings 27(1) (2020) 181-187 Elsevier. (CONF) <https://doi.org/10.1016/j.matpr.2019.10.004>
 - 26) Prashant Dhanke,, Sameer Wagh, Intensification of the degradation of Acid RED-18 using hydrodynamic cavitation, Emerging Contaminants, 6, 2020 20-32 ISSN: 2405-6650 KeAi Chinese Root Global Impact. <https://doi.org/10.1016/j.emcon.2019.12.001>

Book Chapters

- 1) P. Dhanke and S. Wagh, Degradation of Vegetable Oil Refinery Wastewater Using Hydrodynamic Cavitation: A Process Intensification Technique., Novel Water Treatment and Separation Methods: Simulation of Chemical Processes, Apple Academic Press, January 2018, 141-150; ISBN hard: 978-1-77188-578-2., ISBN ebook: 978-1-315-22539-5. <https://doi.org/10.1201/9781315225395>
- 2) S. M. Wagh, D. P. Barai, and M. H. Talwekar, Sensitivity Analysis of Shell and Tube Heat Exchanger Using Chemcad., Novel Water Treatment and Separation Methods: Simulation of Chemical Processes, Apple Academic Press, January 2018, 271-280; ISBN hard: 978-1-77188-578-2., ISBN ebook: 978-1-315-22539-5. <https://doi.org/10.1201/9781315225395>

International and National conference (Paper / Poster Presentation) : 40

Popular / Guest Lectures/ Invited Lectures and Chairmanships at national or international conference/seminar etc : 17

Conferences arranged. 3

PhD Guidance : 3 Students Completed

- i) Anant R. Sontake, on the topic, Studies of foam concentrate compatibility and surfactant concentration of different types of foam and their impact on fire fighting capability towards fires of Class A and Class B fuels. Date of Registration- 22/04/2013; No Ph.D (Cell)/RRC/1956; Dated 03/04/2014, Thesis submitted on 16/12/2017, Awarded Notification 21/02/2020
- ii) Rahul Mahajan, on the topic, Hydrodynamic studies for Reversed flow jet loop reactor. Date of Registration- 14/01/2013; No Ph.D (Cell)/RRC/1399; Dated 21/08/2014, Thesis submitted on 06/01/18, Awarded Notification RTMNU/Ph.D. (Cell)/8/1569 Dated 9/9/21.
- iii) Prashant Bhimrao Dhanke, on the topic, Intensification of Degradation of waste water by hydrodynamic cavitation reactor with various advance oxidation processes. Date of Registration- 01/04/2014; No Ph.D (Cell)/RRC/19; Dated 04/02/2015. Requested for Extension. Awarded Notification RTMNU/Ph.D. (Cell)/20/1283 Dated 4/2/22

Personal Introspection

Besides academic activities, to Introspect SELF, Understand the Behavioral Science and to Develop Personality,

- i) *Akhand Shanti Sadhana Shibir Jiwan Mukti Darpan* by Vedant Kesari Swami Niranjanji Maharaj (Two Weeks)
- ii) Happy Thoughts Organisation arranged *Sadhana Shibir* (Saturday/Sunday, spread over Six months)
- iii) Art of Living Basic Course Part I Sudarshan Kriya (One week) and Divya Samaj Nirman (DSN) (Three Days)
- IV) Participated in Ten Day residential Vipassana Meditation Course at Dhammanaga Center, Mahurzari, Nagpur from 13th to 24th November 2019. Confirmation No. NM-24. Teacher - Mr Haresh Dholia.