

SHABNAM SIDDIQUI

Assistant professor

Department of Chemical Engineering

PO No. 1908, Bull Temple Road

Bengaluru 560019

[Email:Shabnamsiddiqui.che@bmsce.ac.in](mailto:Shabnamsiddiqui.che@bmsce.ac.in)

Mobile: 8095749186

Education

M.Tech. in Chemical Engineering with 78.8% (Gold Medal).

(Specialization in Environmental Management)

Government Engineering College, Ujjain (MP)-India, 2006

B.E in Chemical Engineering with 75%

Government Engineering College, Ujjain (MP) - India, 2004

Work Experience

- 1 year, worked as guest lecturer in College of Pharmacy, Vikram University (MP), 2006-07.
- 11 years, from 25th April 2008 to till date working as an Assistant Professor, Dept. of Chemical Engineering in B M S College of Engineering (Autonomous Institute), **Program Accredited by NBA in Tier-I of Washington Accord**, Bengaluru.

Achievements

- Gold Medalist in M.Tech.
- Awarded as a Best Environmental Engineering student in 2006.

Projects

- M.Tech Project on “Modeling and Simulation of Sulphur Dioxide Absorption in Spray Tower”.
- B.E Major Project on “Drinking Water Treatment and Disinfectant Byproduct Formation”.
- Minor Project on “Design of Flanges”.

Projects Guided

- UG Project in 2010-11 on “Techniques for the development of un-machined Fiber Reinforced Plastic (FRP) Cylinders”.

- UG project in 2011-12 on “Simulation of Atmospheric Distillation Unit Using Aspen Plus to maximize Kerosene Recovery”.
- UG project in 2011-12 on “Novel Method for Production of Spherical Open Pore Replicated Aluminum Foam”.
- UG project in 2012-13 on “Bioleaching of heavy metals from spent catalyst”.
- UG project in 2013-2014 on “Biosynthesis of TiO₂ NPs and its Application as Photocatalyst” funded by TEQIP II.
- PG project in 2014-2015 on “Development of Hybrid Helical Photobioreactor to Improve Micro-algae Cultivation for Biodiesel Production” funded by TEQIP II.
- UG project in 2015-2016 on “Extraction of Pectin from different fruit waste”.
- UG project on 2017-2018 on “Heat Transfer Enhancement in a Double Pipe Heat Exchanger Using Zinc Oxide Nano-Fluid” funded by TEQIP II.
- UG project on 2018-2019 on” Development of Polydimethylsiloxane for Abrasive Flow Finishing Process” funded by TEQIP III.

Publications

- Shabnam Siddiqui, Y K Suneetha.”Heat Transfer Enhancement in a Double Pipe Heat Exchanger using Zinc Oxide Nanofluid”. *Manufacturing Technology Today (MTT)*. Vol. 18, No. 7, July 2019
- N Sirisha, Shabnam Siddiqui, S Panada.”Impact of Integrating Self-Study Module in Chemical Engineering Course” *Journal of Engineering Education Transformations*. Volume 32 , No. 2, October 2018, ISSN 2349-2473, eISSN 2394-1707
- Shabnam Siddiqui, G N Rameshaiah, Kavya G. “Development of Photobioreactor for improvement of algal biomass production”. *International Journal of scientific research*. Vol-4, Issue-01, January-2015.
- G N Rameshaiah, S Shabnam, J Pallavi.”Nano fertilizers and nanosensors-An attempt for developing smart agriculture” *IJERGS Journal*. Vol-3, Issue-1, 2015.
- Y K Suneetha, Shabnam Siddiqui, G N Rameshaiah. “Preparation and Performance Evolution of Nanoparticles of Cobalt-Molybdenum Catalyst for Hydrosulphurization of Diesel”, *CHEMCON-2011*, Vol-II, Page no. 289-90.

Paper Presented in Conferences

- Presented Paper on “ Heat transfer enhancement in double Pipe Heat Exchanger using Zinc Oxide Nano fluid” in the National Conference on Smart manufacturing & Industry 4.0” on May 30th & 31st , 2019 at Central Manufacturing Technology, Bengaluru.
- Presented Paper on “CFD Simulation of Nano fluid as a Coolant in Double Pipe Heat Exchanger” in International Conference SPICE’18, on 6th March 2018 at Adhiyamaan College of Engineering, Hosur, Tamil Nadu.

- Presented Paper on “Green synthesis of titanium dioxide using *Ocimum tenuiflorum* leaf extract and its application as a photo catalyst” in Chemference 15, on 5th -6th December at IIT Hyderabad.

Technical Activities

Guest Lectures

- Delivered a guest lecture on “Radiation Heat Transfer” at Department of Biotechnology (PES University, Bengaluru) on 24th April 2019.
- Delivered a lecture and handled a session in three days Faculty Development program on “Process Simulation using UniSim® Design Software” 15th to 17th March 2018, BMSCE, Bengaluru.
- Delivered a hands-on session in “Classical Modeling Concepts & Hands on Training using UniSim® Simulation Software” 30th June 2014 to 2nd July 2014 at B. M. S. College of Engineering, Bengaluru. 30th June 2014 to 2nd July 2014

Training

- One day training on “Biofuel Production and Characterization” at Sathyabama Institute of Technology, Chennai (27th June 2019)
- Training Program on “Instructional Design & Delivery Systems” conducted by Government of India.

Workshops Organized

- Faculty Development program on “Process Simulation using UniSim® Design Software” 15th to 17th March 2018, BMSCE, Bengaluru.
- “Classical Modeling Concepts & Hands on Training using UniSim® Simulation Software” 30th June 2014 to 2nd July 2014 at B. M. S. College of Engineering, Bengaluru. 30th June 2014 to 2nd July 2014.
- Faculty Development Program on “Modeling using Microsoft Office Excel”. (July 21st - 25th, 2014)

Workshops Attended

- One week FDP on “Contact and Non-Contact Measurement” B. M. S. College of Engineering, Bengaluru (22nd – 27th July 2019)
- One week Faculty Development Program on “Recent Advances in Chemistry of Materials for Engineering Applications”, BMS College of Engineering, Bengaluru. (11th - 15th July 2016)
- International conference on “Liberal Education and the Future of the University” at BMS College of Engineering, Bangalore. (2016)
- Two days workshop on “Renewable Energy” organized by ISTE, BMSCE Chapter BMS College of Engineering, Bengaluru (13th -14th March, 2015)

- Two days ChEmference'15 at Indian Institute of Technology, Hyderabad (2015)
- Faculty Development Program on “Classical Modeling Concepts and Hands on Training using *UniSim* Simulation Software”.(30th June -2nd July 2014)
- Faculty Development Program on “Modeling using Microsoft Office Excel”.(July 21st - 25th , 2014)
- Refresher course on “ classical Control Theory & Design Matlab /Simulink”.(22nd and 23rd May 2014)
- Workshop on “Computational Fluid Dynamics” conducted by IIT Bombay.
- Faculty Development Workshop on “Food Process Engineering” conducted by MSRIT, Bengaluru.
- Workshop on “Engineering Thermodynamics” conducted by IIT Bombay.
- Workshop on “Pipeline Design and Simulation” conducted by MSRIT, Bengaluru.

Competence

Computer skills:

Simulation software: *UniSim (Process Simulation Tool)*, *Hysis*

Programming languages -- C, C++

CFD Modeling Tools - *Gambit*

CFD Solver - *Fluent*.