

## Eng. Syed Sadiq Ali

Lecturer

### Personal Data:

Nationality | INDIAN  
Date of Hire | 02/10/2013  
Date Rank Obtained | | 02/10/2013  
Department | CHEMICAL ENGINEERING  
Email | [ssali@kfu.edu.sa](mailto:ssali@kfu.edu.sa)  
Office No | 2052  
Office Phone No | 0135898582



### Education:

| Academic Degree  | Major                | Specialty                       | Place of Issue            | Address         | Date       |
|------------------|----------------------|---------------------------------|---------------------------|-----------------|------------|
| Doctorate (PhD)  | CHEMICAL ENGINEERING | CHEMICAL AND ENERGY ENGINEERING | University of Technology  | Johor, Malaysia | 10/10/2023 |
| Masters (M.Sc.)  | CHEMICAL ENGINEERING | CHEMICAL PROCESS ENGINEERING    | King Saud University      | RIYADH, KSA     | 20/03/2011 |
| Bachelor (B.Sc.) | CHEMICAL ENGINEERING | CHEMICAL ENGINEERING            | Aligarh Muslim University | ALIGARH, INDIA  | 15/06/2008 |

### PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions):

|        |                                                                                                                        |
|--------|------------------------------------------------------------------------------------------------------------------------|
| PhD    | Hydrodynamics study of enhanced ultrafine powders fluidized beds using flow pulsation and microjet assisted techniques |
| Master | Improvement of fluidization of nano particles by particle mixing and pulsated flow                                     |

### Experiences:

| Title of Job     | Address of Work                      | Country      | Date |                |
|------------------|--------------------------------------|--------------|------|----------------|
| Lecturer         | King Faisal University, AlAhsa       | Saudi Arabia | From | October 2013   |
|                  |                                      |              | To   | Present        |
| Researcher       | King Saud University, Riyadh         | Saudi Arabia | From | March 2011     |
|                  |                                      |              | To   | September 2013 |
| Process engineer | Reliance Industries Limited, Bharuch | India        | From | September 2008 |
|                  |                                      |              | To   | December 2008  |

### Research Interests:

1. Fluidization of nanopowders
2. Process Modeling and Simulation
3. Process Control

### Publications:

| #  | Name of author(s)                                                                                                 | Title of Publication                                                                                                                                                           | Publisher and Date of Publication      | Link of Publication                                                                               |
|----|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------------------|
| 1. | SKS Hossain, AFA Rahman, A Arsad, <b><u>Syed Sadiq Ali*</u></b>                                                   | Effect of Ultrasonication Parameters on the Structural, Morphological, and Electrical Properties of Polypyrrole Nanoparticles and Optimization by Response Surface Methodology | Polymers<br>(2023)                     | <a href="https://doi.org/10.3390/polym15061528">https://doi.org/10.3390/polym15061528</a>         |
| 2. | SKS Hossain, B Dey, <b><u>Syed Sadiq Ali</u></b> , A Choudhury                                                    | Fabrication of Flexible Poly(m-aminophenol)/Vanadium Pentoxide/Graphene Ternary Nanocomposite Film as a Positive Electrode for Solid-State Asymmetric Supercapacitors          | Nanomaterials<br>(2023)                | <a href="https://doi.org/10.3390/nano13040642">https://doi.org/10.3390/nano13040642</a>           |
| 3. | <b><u>Syed Sadiq Ali</u></b> , Agus Arsad, KL Roberts, Mohammed Asif                                              | Effect of Inlet Flow Strategies on the Dynamics of Pulsed Fluidized Bed of Nanopowder                                                                                          | Nanomaterials<br>(2023)                | <a href="https://doi.org/10.3390/nano13020304">https://doi.org/10.3390/nano13020304</a>           |
| 4. | Safdar Hossain SK, <b><u>Syed Sadiq</u></b> , Chin Kui Ayodele, Dr Ayodele, Bamidele Victor                       | Performance Analysis and Modeling of Bio-Energy Recovery from Agro-industrial Wastewater                                                                                       | Frontiers in Energy Research<br>(2022) | <a href="https://doi.org/10.3389/fenrg.2022.980360">https://doi.org/10.3389/fenrg.2022.980360</a> |
| 5. | SK Safdar Hossain, Bamidele Victor Ayodele, <b><u>Syed Sadiq Ali</u></b> , Chin Kui Cheng and Siti Indati Mustapa | Comparative Analysis of Support Vector Machine Regression and Gaussian Process Regression in Modeling Hydrogen Production from Waste Effluent                                  | Sustainability<br>(2022)               | <a href="https://doi.org/10.3390/su14127245">https://doi.org/10.3390/su14127245</a>               |
| 6. | <b><u>Syed Sadiq Ali</u></b> , Agus Arsad, KL Roberts, Mohammed Asif                                              | Effect of Voidage on the Collapsing Bed Dynamics of Fine Particles: A Detailed Region-Wise Study                                                                               | Nanomaterials<br>(2022)                | <a href="https://doi.org/10.3390/nano12122019">https://doi.org/10.3390/nano12122019</a>           |
| 7. | Avijit Basu, <b><u>Syed Sadiq Ali</u></b> , Safdar Hossain, Mohammed Asif                                         | A Review of the Dynamic Mathematical Modeling of Heavy Metal Removal with the Biosorption Process                                                                              | Processes<br>(2022)                    | <a href="https://doi.org/10.3390/pr10061154">https://doi.org/10.3390/pr10061154</a>               |

|     |                                                                                |                                                                                                                                                                                  |                                                                         |                                                                                                     |
|-----|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| 8.  | <b>Syed Sadiq Ali</b> , Agus Arsad, Safdar Hossain, Mohammed Asif              | A Detailed Insight into Acoustic Attenuation in a Static Bed of Hydrophilic Nanosilica                                                                                           | Nanomaterials<br>(2022)                                                 | <a href="https://doi.org/10.3390/nano12091509">https://doi.org/10.3390/nano12091509</a>             |
| 9.  | SKS Hossain, <b>Syed Sadiq Ali</b> , S Rushd, BV Ayodele, CK Cheng             | Interaction effect of process parameters and Pd-electrocatalyst in formic acid electro-oxidation for fuel cell applications: Implementing supervised machine learning algorithms | International Journal of Energy Research<br>(2022)                      | <a href="https://doi.org/10.1002/er.7602">https://doi.org/10.1002/er.7602</a>                       |
| 10. | <b>Syed Sadiq Ali</b> , Agus Arsad, Safdar Hossain, Avijit Basu, Mohammed Asif | Energy Optimization and Effective Control of Reactive Distillation Process for the Production of High Purity Biodiesel                                                           | Processes<br>(2021)                                                     | <a href="https://doi.org/10.3390/pr9081340">https://doi.org/10.3390/pr9081340</a>                   |
| 11. | <b>Syed Sadiq Ali</b> , S. K. Safdar Hossain, Mohammed Asif, Avijit Basu       | Dynamics of partially collapsing pulsed fluidized bed                                                                                                                            | Canadian Journal of Chemical Engineering<br>(2021)                      | <a href="https://doi.org/10.1002/cjce.24235">https://doi.org/10.1002/cjce.24235</a>                 |
| 12. | Safdar Hossain et al, <b>Syed Sadiq Ali</b>                                    | Bimetallic Pd-Co Nanoparticles Supported on Nitrogen-Doped Reduced Graphene Oxide as Efficient Electrocatalysts for Formic Acid Electrooxidation                                 | Catalysts<br>(2021)                                                     | <a href="https://doi.org/10.3390/catal11080910">https://doi.org/10.3390/catal11080910</a>           |
| 13. | <b>Syed Sadiq Ali</b> , Agus arsad, Mohammed Asif                              | Effect of modified inlet flow strategy on the segregation phenomenon in pulsed fluidized bed of ultrafine particles: A collapse bed study                                        | Chemical Engineering and Processing - Process Intensification<br>(2020) | <a href="https://doi.org/10.1016/j.cep.2020.108243">https://doi.org/10.1016/j.cep.2020.108243</a>   |
| 14. | E. H. Al-Ghurabi, <b>Syed Sadiq Ali</b> , Sulaiman M. Alfadul, Mohammed Asif   | Experimental investigation of fluidized bed dynamics under resonant frequency of sound waves                                                                                     | Advanced Powder Technology<br>(2019)                                    | <a href="https://doi.org/10.1016/j.appt.2019.08.028">https://doi.org/10.1016/j.appt.2019.08.028</a> |
| 15. | <b>Syed Sadiq Ali*</b> , Mohammed Asif, Avijit Basu                            | Design and simulation of high purity biodiesel reactive distillation process                                                                                                     | Polish Journal of Chemical Technology<br>(2019)                         | <a href="https://doi.org/10.2478/pjct-2019-0022">https://doi.org/10.2478/pjct-2019-0022</a>         |
| 16. | <b>Syed Sadiq Ali</b> , Avijit Basu, Sulaiman M. Alfadul, Mohammed Asif        | Nanopowder fluidization using combined assisted fluidization techniques of particle mixing and flow pulsation                                                                    | Applied Sciences<br>(2019)                                              | <a href="https://doi.org/10.3390/app9030572">https://doi.org/10.3390/app9030572</a>                 |

|     |                                                                                        |                                                                                                                            |                                                 |                                                                                                             |
|-----|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| 17. | <b>Syed Sadiq Ali</b> , E. H. Al-Ghurabi, A. A. Ibrahim, Mohammed Asif                 | Effect of adding Geldart group A particles on the collapse of fluidized bed of hydrophilic nanoparticles                   | Powder Technology<br>(2018)                     | <a href="https://doi.org/10.1016/j.powtec.2018.02.034">https://doi.org/10.1016/j.powtec.2018.02.034</a>     |
| 18. | <b>Syed Sadiq Ali</b> , Safdar Hossain, Mohammad Asif                                  | Dynamic modeling of the isoamyl acetate reactive distillation process                                                      | Polish Journal of Chemical Technology<br>(2017) | <a href="http://dx.doi.org/10.1515/pjct-2017-0009">10.1515/pjct-2017-0009</a>                               |
| 19. | <b>Syed Sadiq Ali</b> , Mohammad Asif                                                  | Effect of particle mixing on the hydrodynamics of fluidized bed of nanoparticles                                           | Powder Technology<br>(2017)                     | <a href="http://dx.doi.org/10.1016/j.powtec.2017.01.041">http://dx.doi.org/10.1016/j.powtec.2017.01.041</a> |
| 20. | <b>Syed Sadiq Ali</b> , E. H. Al-Ghurabi, A. Ajbar, Y. Mohd, M. Boumaza, Mohammad Asif | Effect of Frequency on Pulsed Fluidized Beds of Ultrafine Powders                                                          | Journal of Nanomaterials<br>(2016)              | <a href="http://dx.doi.org/10.1155/2016/4592501">http://dx.doi.org/10.1155/2016/4592501</a>                 |
| 21. | <b>Syed Sadiq Ali</b> , Mohammed Shahabuddin, Mohammad Asif                            | In Situ Monitoring of Dispersion Dynamics of Carbon Nanotubes during Sonication Using Electrical Conductivity Measurements | Journal of Nanomaterials<br>(2015)              | <a href="http://dx.doi.org/10.1155/2015/479053">http://dx.doi.org/10.1155/2015/479053</a>                   |
| 22. | <b>Syed Sadiq Ali</b> , Mohammad Asif                                                  | Bed Collapse Behavior of Pulsed Fluidized beds of Nano-powder                                                              | Advanced Powder Technology<br>(2014)            | <a href="http://dx.doi.org/10.1016/j.appt.2013.05.013">http://dx.doi.org/10.1016/j.appt.2013.05.013</a>     |
| 23. | Mohammad Asif, <b>Syed Sadiq Ali</b>                                                   | Bed Collapse Dynamics of Fluidized beds of Nano-powder                                                                     | Advanced Powder Technology<br>(2013)            | <a href="http://dx.doi.org/10.1016/j.appt.2013.01.005">http://dx.doi.org/10.1016/j.appt.2013.01.005</a>     |
| 24. | <b>Syed Sadiq Ali</b> , Mohammed Asif                                                  | Fluidization of nano-powders: Effect of flow pulsation                                                                     | Powder Technology<br>(2012)                     | <a href="http://dx.doi.org/10.1016/j.powtec.2012.03.035">http://dx.doi.org/10.1016/j.powtec.2012.03.035</a> |
| 25. | A Ajbar, Y. Bakhbakhi, <b>S. Ali</b> , M. Asif                                         | Fluidization of nano-powders: Effect of sound vibration and pre-mixing with group A particles                              | Powder Technology<br>(2011)                     | <a href="http://dx.doi.org/10.1016/j.powtec.2010.09.038">http://dx.doi.org/10.1016/j.powtec.2010.09.038</a> |
| 26. | M.A. Hakeem, M. M. Ali, R. Singhal, <b>Syed Sadiq Ali</b>                              | Modeling of Non-Isothermal Batch Reactor Using Fuzzy Logic                                                                 | IChE<br>(2009)                                  | <a href="http://dx.doi.org/10.1080/00194500903444334">10.1080/00194500903444334</a>                         |

#### Language Proficiency:

1. English