# Syed Ali Abbas Zaidi

# Assistant Professor

School of Mechanical & Manufacturing Engineering

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# **About**

Dr. Syed Ali Abbas Zaidi is working as Assistant Professor in the School of Mechanical & Manufacturing Engineering. Dr. Syed Ali Abbas Zaidi has a PhD in Mechanical. Dr. Syed Ali Abbas Zaidi has published 15 research articles & conference papers having a citation count of 252, carried out 1 projects and filed 0 intellectual property.

### Qualifications

PhD in Mechanical	2011 - 2015
Osaka University , Japan	
MS in Mechanical	2007 - 2009
NUST, Islamabad , Pakistan	
BS in Mechanical	2003 - 2007
UET Taxila , Pakistan	
Experience	
Assistant Professor	2022- Present
School of Mechanical & Manufacturing Engineering	
Assistant Professor	2020 - 2020
School of Mechanical & Manufacturing Engineering	
Assistant Professor	2018 - 2020
School of Mechanical & Manufacturing Engineering	
Assistant Professor	2018 - 2018
School of Mechanical & Manufacturing Engineering	
Postdoc	2015 - 2018
ETH Zurich , Rämistrasse 101	

# **Research Projects**

# **National Projects**

Implementation of counter-extrapolation method in immersed boundary method for heat transfer in gas-solid system

Funding Agency: HEC Amount: PKR 473,000.00 Status: Approved\_inprocess

# **International Projects**

2019

# **Research Articles** Resistance Force on a Spherical Intruder in Fluidized Bed 2020 Syed Ali Abbas Zaidi Journal of Applied Fluid Mechanics, Volume 13, No. 3, Pages 1027-1035 Impact Factor: 1.405 | Quartile: 4 | Citations: 5 DOI: DOI: 10.29252/jafm.13.03.30626 Effect of vortices on power output of vertical axis wind turbine (VAWT) 2020 Ammar Naseem Emad Uddin Zaib Ali Jawad Aslam Sami Ur Rahman Shah Muhammad Sajid Syed Ali Abbas Zaidi Adeel Javed Muhammad Yamin Younis Sustainable Energy Technologies and Assessments, Volume 37, Article Number 100586 Impact Factor: 5.353 | Quartile: 2 | Citations: 32 DOI: https://doi.org/10.1016/j.seta.2019.100586 2018 Particle velocity distributions and velocity fluctuations of non-Brownian settling particles by particleresolved direct numerical simulation Syed Ali Abbas Zaidi Physical Review E, Volume: 98 Issue: 5 Article Number: 053103 Impact Factor: 2.353 | Quartile: 1 | Citations: 20 DOI: 10.1103/PhysRevE.98.053103 Particle resolved direct numerical simulation of free settling particles for the study of effects of 2018 momentum response time on drag force Syed Ali Abbas Zaidi Powder Technology, Volume: 335 Pages: 222-234 Impact Factor: 3.413 | Quartile: 1 | Citations: 20 DOI: 10.1016/j.powtec.2018.04.058 Study of particle inertia effects on drag force of finite sized particles in settling process 2018 Syed Ali Abbas Zaidi Chemical Engineering Research and Design, Volume: 132 Pages: 714-728 Impact Factor: 3.073 | Quartile: 2 | Citations: 29 DOI: 10.1016/j.cherd.2018.02.013 Hindered settling velocity & structure formation during particle settling by direct numerical simulation 2015 Ali Abbas Zaidi Takuya Tsuji Toshitsugu Tanaka Procedia Engineering, Volume 102, Pages 1656 - 1666 Impact Factor: N/A | Citations: 31 DOI: https://doi.org/10.1016/j.proeng.2015.01.302 Direct numerical simulations of inertial settling of non-Brownian particles 2015 Syed Ali Abbas Zaidi Takuya Tsuji Toshitsugu Tanaka Korean Journal of Chemical Engineering, Volume: 32 Issue: 4 Pages: 617-628 Impact Factor: 1.408 | Quartile: 3 | Citations: 16 DOI: 10.1007/s11814-014-0241-x Direct numerical simulation of finite sized particles settling for high Reynolds number and dilute 2014 suspension Syed Ali Abbas Zaidi Takuya Tsuji Toshitsugu Tanaka

2014

International Journal of Heat and Fluid Flow, Volume: 50 Pages: 330-341

Impact Factor: 1.596 | Quartile: 2 | Citations: 37 DOI: 10.1016/j.ijheatfluidflow.2014.09.007

# A new relation of drag force for high Stokes number monodisperse spheres by direct numerical simulation

Syed Ali Abbas Zaidi Takuya Tsuji Toshitsugu Tanaka

Advanced Powder Technology, Volume: 25 Issue: 6 Pages: 1860-1871

Impact Factor: 2.638 | Quartile: 1 | Citations: 60

DOI: 10.1016/j.apt.2014.07.019

### **Conference Proceedings**

### Numerical Simulation of Inline Arrangement of Spheroid Particles in Different Orientations

2019

Abuzar Jamil Emad Uddin Ali Abbas Zaidi Zaib Ali Jawad Aslam Omer Gilani Abuzar Jamil Emad Uddin Ali Abbas Zaidi Zaib Ali Jawad Aslam Omer Gilani ASME-JSME-KSME 8th Joint Fluids Engineering Conference, res.country(233,)

Citations: N/A

DOI: https://doi.org/10.1115/AJKFluids2019-4623

### Automated Classification of Retinal Diseases in STARE Database Using Neural Network Approach

2019

Syed Omer Gilani jawad aslam Naireen Zaheer Adeeb Shehzaad Syed Ali Zaidi

2019 IEEE Canadian Conference of Electrical and Computer Engineering (CCECE), res.country(38,)

Citations: 2

DOI: 10.1109/CCECE.2019.8861588

### Design and Capturing of Shock Wave in Ejector by Numerical Simulations

2019

Ali Abbas Zaidi Emad Uddin

16th International Bhurban Conference on Applied Sciences and Technology, res.country(177,)

Citations: N/A

DOI: 10.1109/IBCAST.2019.8667160

#### Simulation of flow in the intake pipe of an internal combustion engine

2019

Ali Abbas Zaidi

16th International Bhurban Conference on Applied Sciences and Technology, res.country(177,)

Citations: N/A

DOI: 10.1109/IBCAST.2019.8667114

### Effect Of bi-bispersity on particle clustering in sedimentation

2018

Ali Abbas Zaid

ICFME 2018: International Conference on Fluid Mechanics and Engineering, res.country(109,)

Citations: N/A
DOI: N/A

### Vertical drag force acting on intruders of different shapes in granular media

2017

Ali Abbas Zaid Christoph Müller

8th International Conference on Micromechanics on Granular Media, res.country(75,)

Citations: N/A

DOI: 10.1051/epjconf/201714002011