

Tariq Talha

Associate Professor

College of Electrical & Mechanical Engineering

Email: tariq.talha@ceme.nust.edu.pk

Contact: 0518741531

LinkedIn:



About

Dr. Tariq Talha is working as Associate Professor in the College of Electrical & Mechanical Engineering. Dr. Tariq Talha has a PhD in Computational Fluid Dynamics. Dr. Tariq Talha has published 22 research articles & conference papers having a citation count of 295, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Computational Fluid Dynamics	2006 - 2012
University of Warwick , England	
MS in Mechanical Engineering	2004 - 2006
NUST, Islamabad , Pakistan	
BS in Mechanical Engineering	1998 - 2001
NUST, Islamabad , Pakistan	

Experience

Associate Professor	2025- Present
College of Electrical & Mechanical Engineering	
Assistant Professor	2017 - 2017
College of Electrical & Mechanical Engineering	
Assistant Professor	2012 - 2017
College of Electrical & Mechanical Engineering	

Awards

HEC Indigenous PhD Schol	2004
MS Leading to PhD scholarship awarded by HEC under Indigenous PhD Scholarship Program,	

Professional Memberships

PEC

Research Articles

Experimental study of unglazed transpired solar collectors integrated with buildings in humid sub-tropics	2025
Tariq Talha Abdur Rehman Mazhar Usama Bin Perwez Shuli Liu Muhammad Talha Muhammad Moiz Ahtasham Afzal	
Energy and Buildings , Volume 339, Article Number:115767	
Impact Factor: 6.6   Quartile: 1	
DOI: 10.1016/j.enbuild.2025.115767	
A novel numerical investigation of a solar PCM heat exchanger for indoor temperature stabilization	2024
Aurang Zaib Abdur Rehman Mazhar Tariq Talha Yongliang Shen Shuli Liu	
Journal of Energy Storage , Volume 100, Part A, Article Number 113560	
Impact Factor: 8.900   Quartile: 1   Citations: 3	
DOI: 10.1016/j.est.2024.113560	
Effect of the shape of flapping airfoils on aerodynamic forces	2024
Fahad Butt Tariq Talha Muhammad Rehan Khan Abdur Rehman Mazhar Mahad Butt Jana Petru Asiful H. Seikh	
Heliyon , Volume 10, Issue 8, Article Number e29561	

<b>Impact Factor:</b> 4.000   <b>Quartile:</b> 2 <b>DOI:</b> <a href="https://doi.org/10.1016/j.heliyon.2024.e29561">https://doi.org/10.1016/j.heliyon.2024.e29561</a>	
<b>Experimental and numerical investigation of hydro-abrasive erosion in the Pelton turbine buckets for multiphase flow</b> <i>Muhammad Rehan Khan Sati Ullah Faez Qahtani William Pao Tariq Talha</i> <i>Renewable Energy</i> , Volume 222, Article Number 119829 <b>Impact Factor:</b> 8.7   <b>Quartile:</b> 1   <b>Citations:</b> 16 <b>DOI:</b> <a href="https://doi.org/10.1016/j.renene.2023.119829">https://doi.org/10.1016/j.renene.2023.119829</a>	2024
<b>Experimental investigation of a solar PCM heat exchanger for indoor temperature stabilization</b> <i>Aurang Zaib Abdur Rehman Mazhar Tariq Talha Muhammad Inshal</i> <i>Energy and Buildings</i> , Volume 297, Article Number 113478 <b>Impact Factor:</b> 6.7   <b>Quartile:</b> 1   <b>Citations:</b> 6 <b>DOI:</b> <a href="https://doi.org/10.1016/j.enbuild.2023.113478">10.1016/j.enbuild.2023.113478</a>	2023
<b>Heat Transfer Augmentation Using Duplex and Triplex Tube Phase Change Material (PCM) Heat Exchanger Configurations</b> <i>Aurang Zaib Abdur Rehman Mazhar Shahid Aziz Tariq Talha Dong-Won Jung</i> <i>Energies</i> , Volume 16 (10), Article Number 4037 <b>Impact Factor:</b> 3.252   <b>Quartile:</b> 3   <b>Citations:</b> 10 <b>DOI:</b> <a href="https://doi.org/10.3390/en16104037">10.3390/en16104037</a>	2023
<b>A Comprehensive Review on Investigation of Sediment Erosion of Pelton Wheel Turbine</b> <i>Sati Ullah Muhammad Rehan Khan Tariq Talha Muhammad Nasir Muhammad Ali Khan Aurang Zaib</i> <i>Pakistan Journal of Engineering and Technology</i> , Volume 5, Number 2, Pages 152-162 <b>Impact Factor:</b> 0 <b>DOI:</b> <a href="https://doi.org/10.51846/vol5iss2pp152-162">https://doi.org/10.51846/vol5iss2pp152-162</a>	2022
<b>A Parametric Study of the Effects of Critical Design Parameters on the Performance of Nanoscale Silicon Devices</b> <i>Tariq Talha Faraz Kaiser Malik Faisal Ahmed</i> <i>Nanomaterials</i> , Volume 10, Issue 10, Article Number 1987 <b>Impact Factor:</b> 5.076   <b>Quartile:</b> 2   <b>Citations:</b> 1 <b>DOI:</b> <a href="https://doi.org/10.3390/nano10101987">10.3390/nano10101987</a>	2020
<b>Modelling and Optimization of Small Scale Solar Organic Rankine Cycle for Islamabad, Pakistan</b> <i>Marva Hadia Tariq Talha</i> <i>International Journal of Engineering Works</i> , Volume 6, Issue 10, Pages 354-359 <b>Impact Factor:</b> 0 <b>DOI:</b> <a href="https://doi.org/10.34259/ijew.19.610354359">10.34259/ijew.19.610354359</a>	2019
<b>Numerical Investigation of the Effect of Leading-Edge Tubercles on Propeller Performance</b> <i>Fahad Rafi Butt Taria Talha</i> <i>Journal of Aircraft</i> , Volume: 56, Issue: 3, Pages: 1014-1028 <b>Impact Factor:</b> 1.110   <b>Quartile:</b> 2   <b>Citations:</b> 41 <b>DOI:</b> <a href="https://doi.org/10.2514/1.C034845">10.2514/1.C034845</a>	2019
<b>Configuration based modeling and performance analysis of single effect solar absorption cooling system in TRNSYS</b> <i>Muhammad Shoaib Ahmed Khan Muhammad Wajahat Khan Abdul Waheed Badar Fahad Sarfraz Butt Tariq Talha</i> <i>Energy Conversion and Management</i> , Volume 157, Pages 351-363 <b>Impact Factor:</b> 7.181   <b>Quartile:</b> 1   <b>Citations:</b> 85 <b>DOI:</b> <a href="https://doi.org/10.1016/j.enconman.2017.12.024">10.1016/j.enconman.2017.12.024</a>	2018
<b>Large-eddy simulations of temporally accelerating turbulent channel flow</b> <i>Dr. Yongmann M Chung Tariq Talha</i> <i>Journal of Turbulence</i> , Volume: 16, Issue: 11, Pages: 1091-1113 <b>Impact Factor:</b> 1.472   <b>Quartile:</b> 2   <b>Citations:</b> 6 <b>DOI:</b> <a href="https://doi.org/10.1080/14685248.2015.1052464">10.1080/14685248.2015.1052464</a>	2015
<b>Effectiveness of active flow control for turbulent skin friction drag reduction</b> <i>Dr. Yongmann M. Chung Tariq Talha</i> <i>Physics of Fluid</i> , Volume: 23, Issue: 2, Article Number: 025102 <b>Impact Factor:</b> 1.926   <b>Quartile:</b> 1   <b>Citations:</b> 82	2011

## Conference Proceedings

<b>Effect of displacing the separation plate on the heat exchange effectiveness of unglazed double skin transpired solar collector</b>	2024
<i>Muhammad Talha Tariq Talha Abdur Rehman Mazhar Ahtasham Afzal Muhammad Moiz</i> <i>2nd International Conference on Modern Technologies in Mechanical &amp; Materials Engineering (MTME-2024), res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1051/mateconf/202439801026	
<b>Numerical Study of Gas-Sand Two-Phase Flow Erosion in a Standard 90° Elbow †</b>	2023
<i>Nauman Khan Muhammad Rehan Khan Sati Ullah Tariq Talha Muhammad Ali Khan Zubair Sajid</i> <i>Third International Conference on Advances in Mechanical Engineering 2023 (ICAME-23), Islamabad, Pakistan,, res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.3390/engproc2023045028	
<b>Optimization of the Geometry and the Spanwise Positioning of the Leading-Edge Tubercles on a Helical Vertical-Axis Marine Turbine Blade</b>	2019
<i>Fahad Rafi Butt Tariq Talha</i> <i>World Congress on Engineering 2019 WCE 2019, res.country(231,)</i> <b>Citations:</b> N/A <b>DOI:</b> <a href="http://www.iaeng.org/publication/WCE2019/WCE2019_pp365-374.pdf">http://www.iaeng.org/publication/WCE2019/WCE2019_pp365-374.pdf</a>	
<b>A Parametric Study of the Effect of the Leading-Edge Tubercles Geometry on the Performance of Aeronautic Propeller using Computational Fluid Dynamics</b>	2018
<i>Fahad Rafi Butt Dr. Tariq Talha</i> <i>World Congress of Engineering 2018, res.country(231,)</i> <b>Citations:</b> N/A <b>DOI:</b> <a href="http://www.iaeng.org/publication/WCE2018/WCE2018_pp586-595.pdf">http://www.iaeng.org/publication/WCE2018/WCE2018_pp586-595.pdf</a>	
<b>Turbulent structures in unsteady wall-bounded flow subject to temporal acceleration</b>	2015
<i>Zhixin Wang Tariq Talha Yongmann M. Chung</i> <i>15th European Turbulence Conference 2015, res.country(165,)</i> <b>Citations:</b> N/A <b>DOI:</b> <a href="http://etc15.fyper.com/proceedings/proceedings/documents/335.pdf">http://etc15.fyper.com/proceedings/proceedings/documents/335.pdf</a>	
<b>DIRECT NUMERICAL SIMULATION OF A TURBULENT PIPE FLOW WITH TEMPORAL ACCELERATION</b>	2015
<i>Yongmann M. Chung Zhixin Wang Tariq Talha</i> <i>Ninth International Symposium on turbulence and Shear Flow Phenomena (TSFP-9) , res.country(13,)</i> <b>Citations:</b> N/A <b>DOI:</b> <a href="http://www.tsfp-conference.org/proceedings/2015/v3/8A-3.pdf">http://www.tsfp-conference.org/proceedings/2015/v3/8A-3.pdf</a>	
<b>DNS OF TURBULENT FLOW WITH TEMPORAL ACCELERATION</b>	2013
<i>Yongmann M. Chung Tariq Talha</i> <i>European Turbulence Conference 14 (ETC14), res.country(75,)</i> <b>Citations:</b> N/A <b>DOI:</b> <a href="http://etc14.ens-lyon.fr/openconf/modules/request.php?module=oc_proceedings&amp;action=view.php&amp;a=Accept&amp;id=549">http://etc14.ens-lyon.fr/openconf/modules/request.php?module=oc_proceedings&amp;action=view.php&amp;a=Accept&amp;id=549</a>	

Editorial Activities

<b>Thermal science and engineering progress</b> Reviewed Papers for Journals <b>Impact Factor:</b> 5.4	2025
<b>Journal of Saudi Chemical Society</b> Reviewed Papers for Journals <b>Impact Factor:</b> 5.8	2025
<b>International Communications in Heat and Mass Transfer</b> Reviewed Papers for Journals <b>Impact Factor:</b> 6.4	2025
<b>Johnson Matthey technology review</b> Reviewed Papers for Journals <b>Impact Factor:</b> 1.53	2025
<b>Heat Transfer Research</b> Reviewed Papers for Journals <b>Impact Factor:</b> 2.443	2025
<b>Heat Transfer Research</b> Reviewed Papers for Journals <b>Impact Factor:</b> 2.443	2023