Adeel Javed

Associate Professor

US-Pakistan Center for Advanced Studies in Energy

Email: adeeljaved@uspcase.nust.edu.pk

Contact: 512229716

LinkedIn: www.linkedin.com/in/adeel-javed-turbo



About

Dr. Adeel Javed is working as Associate Professor in the US-Pakistan Center for Advanced Studies in Energy. Dr. Adeel Javed has a PhD in Thermal Power And Turbomachinery Systems. Dr. Adeel Javed has published 33 research articles & conference papers having a citation count of 677, carried out 4 projects and filed 0 intellectual property.

Qualifications

PhD in Thermal Power And Turbomachinery Systems Delft University of Technology , Pakistan	2008 - 2014
MS in Aerospace Propulsion Cranfield University , Pakistan	2006 - 2007
BE in N/A NUST, Islamabad , Pakistan	2001 - 2005
Experience	
Associate Professor US-Pakistan Center for Advanced Studies in Energy	2022- Present
Associate Professor US-Pakistan Center for Advanced Studies in Energy	2021 - 2021
Associate Professor US-Pakistan Center for Advanced Studies in Energy	2021 - 2021
Associate Professor US-Pakistan Center for Advanced Studies in Energy	2021 - 2021
Assistant Professor US-Pakistan Center for Advanced Studies in Energy	2019 - 2021
Assistant Professor US-Pakistan Center for Advanced Studies in Energy	2016 - 2019
Postdoctoral Researcher École Polytechnique Fédérale de Lausanne (EPFL) , EPFL IGM LAMD, Maldière 71b, H - 2002 Neuchâtel 2, Switzerland	2014 - 2016
Application Specialist Mitsubishi Turbocharger and Engine Europe MTEE , Damesluisweg 2, 1332 EC Almere, Netherlands	2012 - 2014
Lecturer NUST , RCMS	2008 - 2008
Awards	
ASME	2013

Professional Memberships

PEC Since 2017

ASME-IGTI Gas Turbine Conference 2014 best paper award of Microturbines, Turbochargers and Small Turbomachines (MTST) committee.

Research Projects

National Projects	
Demonstration of Technical Feasibility, Cluster Development and Commercial Viability of Modern Biomass Energy Conversion Technologies in Pakistan. Funding Agency: UNIDO Amount: PKR 11,200,000.00 Status: Completed	2019
Technical Studies on Climate Change and Energy Sector of Pakistan Funding Agency: Global Change Impact Studies Center Amount: PKR 1,205,000.00 Status: Completed	2018
Design and Fabrication of a small wind turbine for operation in low wind speed regions Funding Agency: PSF Amount: PKR 540,600.00 Status: Completed	2017
An Advance Rotor for H-Darrieus Type Vertical Axis Wind Turbine Funding Agency: USAID Amount: PKR 3,000,000.00 Status: Approved_inprocess International Projects	2017
Research Articles	
Sustainable and cost-effective hybrid energy solution for arid regions: Floating solar photovoltaic with integrated pumped storage and conventional hydropower Adeel Javed Majid Ali Kafait Ullah Syed Ali Abbas Kazmi Jehanzeb Nasir Journal of Energy Storage, Volume 74, Part B, Article Number 109417 Impact Factor: 9.4 Quartile: 1 Citations: 15 DOI: https://doi.org/10.1016/j.est.2023.109417	2023
Techno-economic feasibility analysis of hydrogen production by PtG concept and feeding it into a combined cycle power plant leading to sector coupling in future Muhammad Haroon Bukhari Adeel Javed Syed Ali Abbas Kazmi Majid Ali Mateeb Talib Chaudhary Energy Conversion and Management, Volume:282, Article Number:116814 Impact Factor: 10.4 Quartile: 1 Citations: 18 DOI: 10.1016/j.enconman.2023.116814	2023
Simulation study on flow behavior around a wall-mounted finite height square cylinder with corner chamfer Ahmed Hammad Md Yamin Younis Naveed Akram Emad Uddin Adeel Javed Fausto pedro Garcia Márquez Journal of Wind Engineering and Industrial Aerodynamics, Volume 229, Article Number 105157 Impact Factor: 4.437 Quartile: 1 Citations: 14 DOI: https://doi.org/10.1016/j.jweia.2022.105157	2022
Capacity optimization of pumped storage hydropower and its impact on an integrated conventional hydropower plant operation Jehanzeb Nasir Adeel Javed Majid Ali Kafait Ullah Syed Ali Abbas Kazmi Applied Energy, Volume 323, Article Number 119561 Impact Factor: 11.446 Quartile: 1 Citations: 54 DOI: https://doi.org/10.1016/j.apenergy.2022.119561	2022
Multiparametric optimization of a reheated organic Rankine cycle for waste heat recovery based repowering of a degraded combined cycle gas turbine power plant Muhammad Reshaeel Adeel Javed Ahmad Jamil Majid Ali Mariam Mahmood Adeel Waqas Ahmad Energy Conversion and Management, Volume 254, Article Number 115237 Impact Factor: 10.4 Quartile: 1 Citations: 30 DOI: https://doi.org/10.1016/j.enconman.2022.115237	2022
Multiparametric optimization for reduced condenser cooling water consumption in a degraded combined cycle gas turbine power plant from a water-energy nexus perspective Ahmad Jamil Adeel Javed Abdul Wajid Muhammad Omar Zeb Majid Ali Muhammad Imran Asif Hussain Khoja	2021

Impact Factor: 11.446 Quartile: 1 Citations: 12 DOI: https://doi.org/10.1016/j.apenergy.2021.117764	
Performance evaluation of ORC system using evacuated flat plate Photovoltaic-Thermal collector as an evaporator Izaz Ahmed Qureshi Dr. Adeel Waqas Majid Ali Aamir Mehmood Adeel Javed Solar Energy, Volume 230, Pages 859-873	2021
Impact Factor: 7.188 Quartile: 2 Citations: 12 DOI: doi.org/10.1016/j.solener.2021.10.087	
Optimization of a wind farm by coupled actuator disk and mesoscale models to mitigate neighboring wind farm wake interference from repowering perspective Mehtab Ahmed Khan Adeel Javed Sehar Shakir Abdul Haseeb Syed Applied Energy, Volume 298, Article Number 117229 Impact Factor: 11.446 Quartile: 1 Citations: 24	2021
DOI: https://doi.org/10.1016/j.apenergy.2021.117229	
Performance enhancement of single-phase induction motor using GA based multi-objective optimisation Muhammad Bin Younas Hassan Abdullah Khalid Adeel Javed H Yetis T. Goktas M. Arkan International Journal of Electronics, Pages 1-20 Impact Factor: 1.336 Quartile: 4 Citations: 6 DOI: https://doi.org/10.1080/00207217.2021.1969445	2021
Techno-economic modeling of biomass gasification plants for small industries in Pakistan Muhammad Ali Qamar Adeel Javed Rabia Liaquat Muhammad Hassan Biomass Conversion and Biorefinery, Pages 1-11 Impact Factor: 4.050 Quartile: 2 Citations: 3 DOI: https://doi.org/10.1007/s13399-021-01767-5	2021
Micro Gas Turbine Small-Scale Effects in Range Extended Electric Vehicles Adeel Javed Hassan Abdullah Khalid Syed Umer bin Arif Muhammad Imran Ahmed Rezk Zafar Ali Khan Journal of Energy Resources Technology, Pages 1-18 Impact Factor: 3.070 Quartile: 3 Citations: 5 DOI: https://doi.org/10.1115/1.4051384	2021
Thermal Performance Evaluation of Circular-Stadium Double Pipe Thermal Energy Storage Systems Muhammad Asjid Majid Ali Adeel Waqas Adeel Javed Nadia Shahzad Ali Abdullah Muhammad Umar Iqtidar Journal of Energy Storage, Volume 36, Article Number 102403 Impact Factor: 8.907 Quartile: 1 Citations: 7 DOI: https://doi.org/10.1016/j.est.2021.102403	2021
Techno-economic evaluation of a solar PV integrated refrigeration system for a cold storage facility Hamid Ikram Adeel Javed Mariam Mahmood Musannif Shah Majid Ali Adeel Waqas Sustainable Energy Technologies and Assessments, Volume 44, Article Number 101063 Impact Factor: 7.632 Quartile: 2 Citations: 41 DOI: https://doi.org/10.1016/j.seta.2021.101063	2021
Numerical Investigation of Non-Uniform Flow in Twin-Silo Combustors and Impact on Axial Turbine Stage Performance Hafiz Muhammad Hassan Adeel Javed Asif Hussain Khoja Majid Ali Muhammad Bilal Sajid Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, Pages 1-13 Impact Factor: 1.616 Quartile: 4 Citations: 18 DOI: https://doi.org/10.1177/0957650920982103	2021
Effect of tower elasticity on the performance and fatigue character of monopile support tower for tidal current turbine Sakhi Jan Saeed Badshah Mujahid Badshah Adeel Javed Applied Ocean Research, Volume 106, Article Number 102446 Impact Factor: 3.761 Quartile: 1 Citations: 6 DOI: https://doi.org/10.1016/j.apor.2020.102446	2021
Wind Speed and Power Forecasting of a Utility-Scale Wind Farm with Inter-Farm Wake Interference and	2020

Applied Energy , Volume 304, Article Number 117764

Seasonal Variation

Raja M. Asim Feroz Adeel Javed Abdul Haseeb Syed Syed Ali Abbas Kazmi Emad Uddin Sustainable Energy Technologies and Assessments, Volume 42, Article Number 100882

Impact Factor: 2.713 | Quartile: 1 | Citations: 15 DOI: https://doi.org/10.1016/j.seta.2020.100882

Impact Analysis of Large-Scale Wind Farms Integration in Weak Transmission Grid from Technical

2020

Perspectives

Shah Rukh Abbas Syed Ali Abbas Kazmi Muhammad Naqvi Adeel Javed Salman Raza Naqvi Kafait Ullah Tauseef-ur-Rehman Khan Dong Ryeol Shin

Energies, Volume 13, Issue 20, Article Number 5513 Impact Factor: 3.004 | Quartile: 3 | Citations: 20

DOI: 10.3390/en13205513

Thermal dry reforming of methane over La2O3 co-supported Ni/MgAl2O4 catalyst for hydrogen-rich

2020

syngas production

Asif Hussain Khoja Mustafa Anwar Sehar Shakir Muhammad Taqi Mehran Arslan Mazhar Adeel Javed Nor Aishah Saidina Amin

Research on Chemical Intermediates, Volume 46, Pages 3817-3833

Impact Factor: 2.914 | Quartile: 3 | Citations: 29 DOI: https://doi.org/10.1007/s11164-020-04174-z

Partial repowering analysis of a wind farm by turbine hub height variation to mitigate neighboring wind

2020

farm wake interference using mesoscale simulations

Abdul Haseeb Syed Adeel Javed Raja Muhammad Asim Feroz Ronald Calhoun

Applied Energy, Volume 268, Article Number 115050 Impact Factor: 9.746 | Quartile: 1 | Citations: 33 DOI: https://doi.org/10.1016/j.apenergy.2020.115050

Computational evaluation of an optimum leading-edge slat deflection angle for dynamic stall control in

2020

a novel urban-scale vertical axis wind turbine for low wind speed operation

Tariq Ullah Adeel Javed Ali Abdullah Majid Ali Emad Uddin

Sustainable Energy Technologies and Assessments, Volume 40, Article Number 100748

Impact Factor: 2.713 | Quartile: 1 | Citations: 52 DOI: https://doi.org/10.1016/j.seta.2020.100748

Effect of Modified Flow Schemes of Heat Transfer Fluid on Performance of Solar Absorption-Cooling

2020

System for an Educational Building in Pakistan

Iftikhar Bashir Butt Jinwang Tan Asfand Yar Ali Iftikhar Bashir Butt Jinwang Tan Adeel Waqas Majid Ali Adeel Javed Asfand Yar Ali

Applied Sciences, Volume 10, Issue 9, Article Number 3327

Impact Factor: 2.679 | Quartile: 2 | Citations: 7 DOI: https://doi.org/10.3390/app10093327

Kinetic study of dry reforming of methane using hybrid DBD plasma reactor over La2O3 co-supported Ni/MgAl2O4 catalyst

2020

Muhammad Tahir Nor Aishah Saidina Amin Adeel Javed Muhammad Taqi Mehran Asif Hussain Khoja

International Journal of Hydrogen Energy, Volume 45, Issue 22, Pages 12256-12271

Impact Factor: 5.816 | Quartile: 2 | Citations: 50

DOI: 10.1016/j.ijhydene.2020.02.200

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

Effect of different activation processes on CaO/fly ash mixture for CO2 Capture

2020

Azra Nawar Adeel Javed Rashid Khan Majid Ali Adeel Waqas Naseem Iqbal

Energy and Fuels, Volume 34, Issue 2, Pages 2035-2044

Impact Factor: 3.605 | Quartile: 2 | Citations: 30 DOI: https://doi.org/10.1021/acs.energyfuels.9b03520

Choosing an appropriate timber for a small wind turbine blade: A comparative study

2019

Abolfazl Pourrajabian MaziarDehghan Adeel Javed DavidWood

Renewable and Sustainable Energy Reviews, Volume 100, Pages 1-8

Impact Factor: 12.110 | Quartile: 1 | Citations: 41

DOI: 10.1016/j.rser.2018.10.010

Small-scale turbocompressors for wide-range operation with large tip-clearances for a twostage heat pump concept	2016
Adeel Javed Cordin Arpagaus Stefan Bertsch Jürg Schiffmann Cordin Arpagaus Stefan Bertsch Jürg Schiffmann International Journal of Refrigeration-Revue Internationale Du Froid, Volume 69, Pages 285-302 Impact Factor: 2.779 Quartile: 1 Citations: 33 DOI: 10.1016/j.ijrefrig.2016.06.015	
Optimzation of a Centrifugal Compressor Impeller Design for Robustness to Manufacturing Uncertainties Adeel Javed Rene Pecnik J.P. van Buijtenen Journal of Engineering for Gas Turbines and Power, Volume 138(11), Article Number 112101 Impact Factor: 1.534 Quartile: 2 Citations: 48 DOI: 10.1115/1.4033185	2016
Effects of Manufacturing Noise on Microturbine Centrifugal Impeller Performance Adeel Javed Rene Pecnik Mattia Olivero j.p. van Buijtenen Journal of Engineering for Gas Turbines and Power-Transactions of the ASME, Volume 134, Issue 10, Article Number 102302 Impact Factor: 0.815 Quartile: 2 Citations: 22 DOI: 10.1115/1.4007420	2012
Conference Proceedings	
SYSTEM DESIGN OF A HIGH-SPEED E-TURBINE SYSTEM FOR WASTE HEAT RECOVERY IN AUTOMOTIVE VEHICLES Muhammad Ishaq Khan Adeel Javed International Conference on Renewable, Applied and New Energy Technologies, res.country(177,) Citations: N/A DOI: N/A	2018
Technical and financial analysis for a 50MW wind farm in Pasni, Balochistan Samreen Siddique Rashid Wazir Anam Zahra Naseem Iqbal Adeel Javed Mazhar Ali Fatima Ilyas 4th International Conference on Power Generation Systems and Renewable Energy Technologies, res.country(177,) Citations: N/A DOI: 10.1109/PGSRET.2018.8685937	2018
Vertical Axis Wind Turbine for Low Wind Speed Corridors Naseer Ahmed Khan Ali Abdullah Adeel Javed 1st InternationalConference on High Performance Energy Efficient Buildings and Homes (HPEEBH 2018), res.country(177,) Citations: N/A DOI: http://conferences.uet.edu.pk/hpeebh/2018/downloads/	2018
CFD Evaluation of 1kW Small-Scale Horizontal Axis Wind Turbine for Operations in Low Wind Speed Regions Jawad Ahmad Adeel Javed 1st International Conference on High Performance Energy Efficient Buildings and Homes (HPEEBH 2018), res.country(177,) Citations: N/A DOI: http://conferences.uet.edu.pk/hpeebh/2018/downloads/	2018
Heat transfer in microchannels using supercritical CO2 for Solar Tower Applications Muhammad Mohsin Tanveer Adeel Javed Muhammad Bilal Sajid Abdul samad Nouman Ali Muhammad Usman 2nd International conference on impact of Nanoscience on energy Technologies, res.country(177,) Citations: N/A DOI: N/A	2017

Editorial Activities

Reviewed Papers for Journals Impact Factor: 3.177	2019
Reviewed Papers for Journals	2019
Impact Factor: 3.177	2018
Reviewed Papers for Journals Impact Factor: 3.177	2018
Reviewed Papers for Journals Impact Factor: 3.177	