

Sana Zulfiqar

Assistant Professor

School of Mechanical & Manufacturing Engineering

Email: sana.zulfiqar@smme.nust.edu.pk

Contact:



About

Dr. Sana Zulfiqar is working as Assistant Professor in the School of Mechanical & Manufacturing Engineering. Dr. Sana Zulfiqar has a PhD in MECHANICAL ENGINEERING. Dr. Sana Zulfiqar has published 13 research articles & conference papers having a citation count of 25, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in MECHANICAL ENGINEERING	2018 - 2023
Universiti Sains Malaysia , Malaysia	
MS in AEROSPACE ENGINEERING	2012 - 2014
Institute of Space Technology , Pakistan	
BE in MECHANICAL ENGINEERING	2003 - 2007
NED UET Karachi , Pakistan	

Experience

Assistant Professor	2023- Present
School of Mechanical & Manufacturing Engineering	
GRADUATE RESEARCH ASSISTANT (GRA)	2019 - 2022
UNIVERSITI SAINS MALAYSIA (USM) , Malaysia	
LECTURER	2012 - 2018
UET, TAXILA , Taxila	
PROJECT ENGINEER	2009 - 2009
M.G. ENGINEERING ASSOCIATES, KARACHI , KARACHI	
TRAINEE ENGINEER-HSE	2008 - 2009
PAKISTAN PTA, PORT QASIM, KARACHI , KARACHI	

Thermal Characterization of Silver-Based Conductive Polymers for Flexible Electronics

2025

Zurairhana Bachok Abdullah Aziz Saad Sana Zulfiqar Aizat Abas Marina Marzuki
Scientific Research Journal, Vol 22, Special issue, Pages 1-18

Impact Factor: N/A

DOI: <https://doi.org/10.24191/srj.v22is.10958>

Structural Assessment of Silver Conductive Ink using Nanoindentation

2024

Zurairhana Bachok Abdullah Aziz Saad Sana Zulfiqar Aizat Abas Mohamad Danial Shafiq Muhammad Fadhurul Izwan Abdul Malik
Journal of Current Science and Technology, Volume 14, No. 2, Article Number 37

Impact Factor: N/A

DOI: <https://doi.org/10.59796/jcst.V14N2.2024.37>

Optimizing ageing conditions for commercial NiTi archwires: Insights from thermal phase transformation and tensile deformation analysis

2024

Asad Munir Muhammad Fauzinizam Razali Abdus Samad Mahmud Chinwei Ng Sana Zulfiqar
Journal of Mechanical Engineering and Sciences, Volume 18, Issue 1, Pages 9845-9852

Impact Factor: 1.100 | **Quartile:** 4

DOI: <https://doi.org/10.15282/jmes.18.1.2024.4.0779>

Hyper-elastic characterization of Polydimethylsiloxane by optimization algorithms and finite element methods

2024

Sana Zulfiqar Abdullah Aziz Saad Ilyas Ahmad Huqqani Zulkifli Ahmad Feizal Yusof Zurairhana Bachok
Arabian Journal for Science and Engineering, Pages 1-23

Impact Factor: 2.600 | **Quartile:** 2

DOI: <https://doi.org/10.1007/s13369-024-08814-z>

Numerical Analysis and Validation of Characterization of Polydimethylsiloxane Using Hyper-elastic Constitutive Models

2023

Sana Zulfiqar Abdullah Aziz Saad Zulkifli Ahmed Feizal Yusof Zurairhana Bachok
Pertanika Journal of Science and Technology, Volume 31, Issue 6, Pages 3059-3075

Impact Factor: 0.600 | **Quartile:** 3

DOI: <https://doi.org/10.47836/pjst.31.6.23>

Mechanical Analysis and Constitutive Modeling of Nonlinear Behavior of Silver-based Conductive Ink

2023

Sana Zulfiqar Abdullah Aziz Saad Zulkifli Ahmed Zurairhana Bachok
International Journal of Automotive and Mechanical Engineering, Volume 20, Issue 3, Pages 10635-10648

Impact Factor: 1.000 | **Quartile:** 4 | **Citations:** 2

DOI: <https://doi.org/10.15282/ijame.20.3.2023.07.0821>

Analysis and Characterization of Polydimethylsiloxane (PDMS) Substrate by using Uniaxial Tensile Test and Mooney-Rivlin Hyperelastic Model

2022

Sana Zulfiqar Abdullah Aziz Saad Zulkifli Ahmed Feizal Yusof K Fakpan
Journal of Advanced Manufacturing Technology (JAMT), Volume 16, No. 1, Pages 61-72

Impact Factor: N/A

DOI: <https://jamt.utm.edu.my/jamt/article/view/6280>

Alternative manufacturing process of 3-dimensional interconnect device using thermoforming process

2021

Sana Zulfiqar Abdullah Aziz Saad MFM Sharif Z Samsuddin MYT Ali FC Ani Zulkifli Ahmed MK Abdullah
Microelectronics Reliability, Volume 127, Article Number 114373

Impact Factor: 1.418 | **Quartile:** 4 | **Citations:** 13

DOI: <https://doi.org/10.1016/j.microrel.2021.114373>

Structural Analysis and Material Characterization of Silver Conductive Ink for Stretchable Electronics

2021

Sana Zulfiqar Abdullah Aziz Saad Zulkifli Ahmed Feizal Yusof Zurairhana Bachok
International Journal of Integrated Engineering, Volume 13, Issue 5, Pages 128-135

Impact Factor: N/A | **Citations:** 5

DOI: <https://doi.org/10.30880/ijie.2021.13.07.016>

Conference Proceedings

Validation of Experimental Analysis of the PC Thermoformed Product Using Finite Element Methods

2022

Sana Zulfiqar Abdullah Aziz Saad Mohd Fikri Mohd Sharif Z Samsuddin Mohd Yusuf Tura Ali Fakhrozi Che Ani Zulkifli Ahmed Muhammad Khalil Abdullah
4th International Conference on Vibration, Sound and System Dynamics (ICVSSD 2022), res.country(157,)

Citations: N/A

DOI: 10.1063/5.0178348

Structural Analysis of Silver-Based Conductive Ink Under Cyclic Loading

2022

Sana Zulfiqar Abdullah Aziz Saad Zulkifli Ahmed Feizal Yusof Zuraihana Bachok
Green Materials and Electronic Packaging Interconnect Technology Symposium, res.country(157,)

Citations: N/A

DOI: 10.1007/978-981-19-9267-4_25

Book Chapters

Stress analysis of stretchable conductive polymer for electronics circuit application

2020

N. A Aziz Abdullah Aziz Saad Zulkifli Ahmed Sana Zulfiqar Fakhrozi Che Ani Z Samsuddin

In: *Handbook of Materials Failure Analysis: With Case Studies from the Electronic and Textile Industries*, Chapter 8, Pages 205-224

Citations: 4

DOI: 10.1016/B978-0-08-101937-5.00008-7