Curriculum Vitae of Dr. Suha K. Shihab (Ph.D., JMI)

Objective

To excel in academics and research through acquisition of knowledge and conduction of the state-of-art research in the field of Production engineering, Manufacturing Processes: traditional and nontraditional machining, welding processes, metal forming; Materials Technology; Optimization of manufacturing processes; Simulation and modeling of manufacturing processes that enables me to provide my services to the best of my capabilities to the organization I shall be associated with to make it a center of excellence conducive for promoting teaching-learning process for the fraternity.

Personal Information

Designation: Professor

Date & Place of Birth: November, 23, 1975, IRAQ

Nationality: Iraqi

Passport Details: Holds passport valid until November 14, 2016. Other passport

details would be provided as and when required.

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Institutional email address: suha_shihab_eng@uodiyala.edu.iq

Postal address: Department of Materials Engineering, College of Engineering, University of

Diyala, Diyala, ZIP 32001, Iraq.

Areas of Research Interests

- Production Engineering
- Manufacturing processes: Machining Processes, Metal Forming processes, Welding processes
- Materials Technology and Materials Characterization
- Design of Experiment and Optimization of Manufacturing Process Parameters
- Finite Element Analysis using ANSYS, ABAQUS Programs

Educational Qualifications

- Ph.D., Mechanical Engineering (2015)
 - Jamia Millia Islamia (A Central University), New Delhi, India. (English Curriculum)

Thesis Title: Experimental Studies on Turning High Hardness Alloy Steel with High Performance Tools

- M.Sc., Production Engineering & Metallurgy (2005)
 - University of Technology-Baghdad- Iraq. (English Curriculum)
 - Thesis Title: A finite element analysis of orthogonal machining using different tool edge geometries.
- B.Sc., Production Engineering & Metallurgy (1997)
- University of Technology-Baghdad- Iraq. (English Curriculum)

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Training and Courses

 Attended a Course on "Methods of Teaching" at College of Education—University of Diyala, Iraq in 2005.

- Attended a Training course on "IronCAD program" at University of Technology, Baghdad, Iraq, in 2009
- Completed an English Language Course at International Language Schools of Canda, New Delhi, India, in 2011.
- Completed an English Language Proficiency Course sponsored by the Indian Council for Cultural Relations at Jamia Millia Islamia (A Central University), New Delhi, India, in 2014.
- Completed English Language for five Courses in International School Languages (inlingua), New Delhi, India, during 2011 to 2013.

Languages

English: Written and spokenArabic: Mother tongue.

Employment History (Academic Experience)

- **Professor**, Department of Materials Engineering, College of Engineering, University of Diyala, Diyala, Iraq (2022 onward)
- **Associate Professor**, Department of Materials Engineering, College of Engineering, University of Diyala, Diyala, Iraq (2015 -2022)
- **Lecturer**, Department of Mechanical Engineering, College of Engineering, University of Diyala, Diyala, Iraq (2009-2011).
- **Lecturer**, Department of Electrical Power Engineering College of Engineering, University of Diyala, Diyala, Iraq (2005-2009).
- **Lecturer**, Department of Electrical Power and Electronic Engineering, College of Engineering, University of Diyala, Diyala, Iraq (1999-2002).
- External lecturer in the Mechanical Department, Technical Institute Technology, Baqubah, Diyala, Iraq (1999).

Courses Taught

Production Engineering, Manufacturing Processes, Metal Cutting, Advanced Metal Cutting, Metal Forming, Advanced Metal Forming, Engineering Plasticity, Application Mathematics, Statistical Data Analysis, Computer Aided Design and Manufacturing (CAD/CAM), Engineering design, Advanced Engineering Design, Production Automation and Mechanization, Mechanics, Inspection and Materials Selection, Strength of Materials, Control and Measurement Instruments, Materials Science, Mechanical Drawing, Strength of Materials, Industrial Engineering, Workshop Technology, Design of Experiments, Research Methodology.

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Journal Publications

1. Noor Hassan Ali, **Suha K Shihab**, Muzher Taha Mohamed, *Physical Properties of Hybrid Epoxy Composites Reinforced with Carbon Fiber and Ceramic Particles*, Diyala Journal of Engineering Sciences, 2022

- 2. Jabbar Gattmah, Fahrettin Ozturk, **Suha K. Shihab**, Sadettin Orhan, *Influencing the residual stresses in tubes drawn with a floating plug by changing tool parameters*, Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2022
- 3. Noor Hassan Ali, **Suha K. Shihab**, Muzher Taha Mohamed, *Mechanical and physical characteristics of hybrid particles/fibers-polymer composites: A review*, Materials Today: Proceedings, 2022.
- 4. Khalaf Nasralla, **Suha K. Shihab**, Adel K. Mahmoud, and Jabbar Gattmah, *Estimation of induced residual stresses and corrosion behavior of machined Inconel 718 superalloy: 3D-FE simulation and optimization*, International Journal of Computational Materials Science and Engineering, Vol. 11, No. 1 (2022)
- 5. Mohamed Serier, Sheymaa Alazzawi, Amina Chikh, Mohamed Berrahou, Tariq Ahmad, **Suha K. Shihab**, Arshad Noor Siddiquee, *Parametric studies of friction stir welding with tool using a vibrating shoulder*, Materials Today: Proceedings, 2022.
- 6. Mohamed Serier, Namrata Gangil, Amina Chikh, Affaf Tabti, Sheymaa Alazzawi, Ahmad Majid Qazi, **Suha K. Shihab**, *Numerical study of a cantilever beam carrying a crack by response surface methodology*, Materials Today: Proceedings, 2022.
- 7. Gattmah, J., **Suha K Shihab** and Mohamed, M.T., *3D FE Analysis of Induced Residual Stresses and Forming* Temperature *in Hot Rolled AZ31 Mg Alloy*, Journal of Mechanical Engineering Research and Developments, Vol. 44, No. 9, pp. 404-417, 2021
- 8. Mohd Atif Wahid, **Suha K Shihab**, Rohit Shandley, Ashish Jacob, Tanveer Majeed, *Friction Stir Welding Process Vis-a-Vis Human Health*, Ergonomics for Improved Productivity, Springer, 2021
- 9. Noor Zaman Khan, Reshma Yasmin Siddiquie, **Suha K Shihab**, Arshad Noor Siddiquee, Zahid A Khan, *Analyzing the Important Factors Causing Fatigue in Industrial Workers Using Fuzzy MCDM Technique*, Ergonomics for Improved Productivity: Proceedings of HWWE 2017, 2021
- 10. **Suha K. Shihab**, Jabbar Gattmah, Hala M. Kadhim, Experimental Investigation of Surface Integrity and Multi-Objective Optimization of End Milling for Hybrid Al7075 Matrix Composites, Silicon, Vol.13, No.5: 1403-1419, 07 June 2021.
- 11. **Suha K Shihab**, Ethar Mohamed Mubarak, Rawaa Hamid Al-Kalali, *Influence and Optimization of Surface Roughness on Surface Integrity during Turning Using Grey Relational Analysis*, Journal of Harbin Institute of Technology (New Series), Vol.28, No.2, 2021, DOI: 10.11916/j.issn.1005-9113.2019063,
- 12. **Suha K Shihab**, Rawa Hammed Mohamed, Ethar Mohamed Mubarek, *Optimization of Process Parameters in Cladding of Stainless Steel over Mild Steel*, Materials Today: Proceedings Vol.16: 816–823, 2019
- 13. Noor Zaman Khan, **Suha K Shihab**, Rajesh Attri, Arshad Noor Siddiquee, Zahid A. Khan, *Prioritization of the Lower Back Pain Risk Factors Among Industrial Workers Using Best-Worst Method*, International Journal of Occupational Safety and Ergonomics, DOI: 10.1080/10803548.2019.1600303, 23 May 2019

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14. Khalaf Nasralla, **Suha K. Shihab**, Adel K .Mahmoud, *Finite Element Modeling and Optimization of Estimated Cutting Forces during Machining of Inconel 718*, SSRG International Journal of Material Science and Engineering (IJMSE), Vol. 4, No. 3, Sep -Dec 2018.

- 15. Adel K.Mahmoud, Khalaf Nasralla, **Suha K. Shihab**, *3D FE- Simulation of Thermally Assisted Turning of INCONEL-718 For Cutting Forces Prediction*, International Journal of Design and Manufacturing Technology (IJDMT), Vol. 9, No. 3: 1–12, September, 2018.
- 16. Nidhi Sharma, Zahid A. Khan, Arshad Noor Siddiquee, **Suha K. Shihab**, Mohd Atif Wahid, Effect of process parameters on microstructure and electrical conductivity during FSW of Al-6101 and Pure Copper, Materials Research Express, 2018.
- 17. **Suha K. Shihab,** Optimization of WEDM Process Parameters for Machining of Friction-Stir-Welded 5754 Aluminum Alloy Using Box–Behnken Design of RSM, Arabian Journal for Science and Engineering, Vol. 43, No. 9: 5017–5027, September 2018.
- 18. **Suha K. Shihab,** Noor Zaman Khan, Pratyush Myla, Sanjay Upadhyay, Zahid A. Khan and Arshad Noor Siddiquee, *Application of MOORA method for multi optimization of GMAW process parameters in stainless steel cladding*, Management Science Letters, Vol. 8, No.4: 241-246, February 2018.
- 19. **S.K. Shihab**, Exploring the Effect of Dimensional Tolerance of the Inserts During Multi-Objective Optimization of Face Hard Milling Using Genetic Algorithm, Engineering and Technology Journal, Vol. 35, Part A. No. 4, 2017.
- 20. **Suha K. Shihab,** Ethar Mohamed Mahdi Mubarak, *Multi-Objective Optimization Of Wire EDM Parameters by Applying MOORA Technique*, the Iraqi Journal For Mechanical And Materials Engineering, 2017
- 21. Shagufta, **Suha K. Shihab**, Zahid A. Khan, Arshad Noor Siddiqueed, Nidhi Sharma, *Optimization of Wire Electrical Discharge Machining Process Parameters Using Genetics Algorithm*, International Journal of Scientific & Engineering Research, Vol. 8, No. 7, July-2017.
- 22. P.V.Suresh Babu, Anil Kumar, **Suha K. Shihab**, Arshad Noor Siddiquee, *An investigation on Effects of End Milling process on Noise during Machining of Copper*, International Journal of Scientific & Engineering Research, Vol. 8, No.7, July-2017.
- 23. Md Kashif Reza, **Suha Karim Shihab**, Noor Zaman Khan, Mohd Atif Wahid, *Investigation on The Effect of Drilling Process Parameters on Surface Roughness*, International Journal of Scientific & Engineering Research, Vol. 8, No.7, July-2017.
- 24. Fayaz Ahmad Mir, Zahid A. Khan, Arshad Noor Siddiquee, **Suha K. Shihab**, *Investigations on the Effect of Radius Milling Process Parameters on Surface Roughness*, International Journal of Scientific & Engineering Research, Vol. 8, No.7: 140-147, July-2017.
- 25. Md Nasimuddin, Noor Zaman Khan, **Suha K. Shihab**, Arshad Noor Siddiquee, *Optimization Of Turning Parameters Using Taguchi Method*, International Journal of Scientific & Engineering Research, Vol. 8, No.7, July-2017.

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26. **Suha K. Shihab**, Zahid A. Khan, Arshad Noor Siddiquee, *Application of Grey Relational Analysis Along with Principal Component Analysis for Multi-Response Optimization of Hard Turning*, International Journal of Engineering Trends and Technology (IJETT), 38 (5): 238-245, August 2016.

- 27. **Suha K. Shihab, Ethar Mohamed Mahdi Mubarak,** *Evaluation of Surface Roughness and Material Removal Rate in End Milling of Complex Shape*, Universal Journal of Mechanical Engineering Vol.4, No.3: 69-73, 1st July-2016
- 28. **Suha K. Shihab**, Zahid A. Khan, Arshad Noor Siddiquee, *Analysis of chip morphology in dry hard turning of AISI 52100 alloy steel using RSM*, International Journal Machining and Machinability of Materials, Vol.17,No.6: 481–506, 2015
- 29. **Suha K. Shihab**, Zahid A. Khan, Arshad Noor Siddiquee, Noor Zaman Khan, *A Novel Approach to Enhance Performance of Multilayer Coated Carbide Insert in Hard Turning*, Archive of Mechanical Engineering, VOL. LXII, No. 4: 539-552, 2015.
- 30. Noor Zaman Khan, Arshad Noor Siddiquee, Zahid A. Khan, **Suha K. Shihab**, *Investigations on tunneling and kissing bond defects in FSW joints for dissimilar aluminum alloys*, Journal of Alloys and Compounds, Vol.648: 360-367, 2015.
- 31. **Suha K. Shihab**, Arindam Kumar Chanda, *Multi Response Optimization of Milling Process Parameters Using MOORA Method*, International Journal of Mechanical and Production Engineering, ISSN: 2320-2092, Vol. 3, No.4: 67-71, April-2015.
- 32. **Suha K. Shihab**, Zahid A. Khan and Arshad Noor Siddiquee, *RSM Based Investigations on the Effects of Cutting Parameters on Surface Integrity during Cryogenic Hard Turning of AISI 52100*, Journal of Manufacturing Science and Production, Vol.15, No.3: 309-318, September 2015.
- 33. **Suha K. Shihab**, Zahid A. Khan and Arshad Noor Siddiquee, *Investigation on the effect of machining parameters on the corner radious in pocket milling*, Global Sci-Tech, Vol.8, No.2: 61-66, 24 June 2016.
- 34. Noor Zaman Khan, **Suha K. Shihab**, Nidhi Sharma, Atif Wahid, Arshad Noor Siddiquee, Zahid A. Khan, *Investigation on the effect of WEDM process parameters on surface roughness*, Global Sci-Tech, Vol.7, No.1: 1-9, January- March 2015.
- 35. **Suha K. Shihab**, Zahid A. Khan, Aas Mohammad, Arshad Noor Siddiquee, *A Review of Turning of Hard Steels Used in Bearing and Automotive Applications*, International Journal of Production & Manufacturing Research, Vol. 2, No. 1: 24-49, 2014.
- 36. Suha K. Shihab, Zahid A. Khan, Aas Mohammad, Arshad Noor Siddiquee, RSM based study of cutting temperature during Hard Turning with Multilayer Coated Carbide Insert, Procedia Materials Science, Vol.6, pp.1233 -1242, 2014
- 37. **Suha K. Shihab**, Zahid A. Khan, Aas Mohammad, Arshad Noor Siddiquee, *Cryogenic hard turning of alloy steel with multilayer hard surface coatings (TiN/TiCN/Al₂O₃/TiN) insert using*

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- *RSM*, International Journal of Current Engineering and Technology, Special Issue-2, E-ISSN 2277 4106, P-ISSN 2347 5161, February 2014.
- 38. **Suha K. Shihab**, Zahid A. Khan, Aas Mohammad, Arshad Noor Siddiquee, *Investigations on the effect of CNC dry hard turning process parameters on surface integrity: a multi-performance characteristics optimization*, Int. J. Manuf. Sci. Prod (IJMSP), DOI 10.1515/jmsp-2013-0019, 2014.
- 39. **Suha K. Shihab**, Zahid A. Khan, Aas Mohammad, Arshad Noor Siddiquee, *Optimization of Surface Integrity in Dry Hard Turning Using RSM*, Sadhana, Vol. 39, Part 5, pp. 1035-1053, October 2014.
- 40. **Suha K. Shihab**, Zahid A. Khan, Aas Mohammad, Arshad Noor Siddiquee, *Investigation of Surface Integrity during Wet Turning of Hard Alloy Steel*, Int. J. Machining and Machinability of Materials, Vol. 16, No. 1, pp.22-37, 2014.
- 41. **Suha K. Shihab**, Zahid A . Khan, Aas mohammad, Arshad Noor Siddiquee, *Effect of Cryogenic Cooling on Surface Integrity in Turning of Hard Alloy Steel*, Indian Journal of Applied Research, Vol. 3, No. 7, ISSN 2249-555X: 3-7, July 2013.
- 42. **Suha K. Shihab**, Zahid A. Khan, Aas mohammad, Arshad Noor Siddiquee, *Effect of Cutting Parameters on Cutting Forces and MRR During Turning Hard Alloy Steel With and Without Coolant*, International Journal of Engineering and Advanced Technology (IJEAT), ISSN: 2249-8958, Vol.3, No.1:14-30, October 2013.
- 43. **Suha K. Shihab**, Zahid A. Khan, Aas mohammad, Arshad Noor Siddiquee, *Application of Response Surface Methodology for Determining Cutting Forces in Hard Turning Using Castrol Coolant*, Advanced Materials Manufacturing & Characterization, Vol. 3, No.1:27-36, 2013.
- 44. Saad Theeyab Faris, **Suha Karim Shihab**, *Study and Design the Hydrodynamic Deep Drawing Process for Blanks of Non Uniform Thickness*, Diyala Journal of Engineering Sciences, pp.40-56, Dec. 2010.
- 45. Suha K. Shihab, Finite Element Analysis of The Influence of Edge Roundness on The Stresses and Cutting Forces for Ceramic Cutting Tools, Diyala Journal of Engineering Sciences, Vol. 2, No.1: 1-12, June 2009
- 46. **Suha K. Shihab**, Ethar M. Mubarak, *Study of the Ceramic Cutting Tool Performance Using Double Rake Face*, Diyala Journal of Engineering Sciences, Vol. 1, No. 1: 1-18, 2008.
- 47. Maan Aabid Tawfiq, **Suha Kareem Shihab**, A Finite Element Analysis of Orthogonal Machining UsingDifferent Tool Edge Geometries, Eng. & Technology, Vol.25, No.4: 569-583, 2007.
- 48. **Suha K. Shihab**, *Study the Effect of Depth of Cut on the Cutting Tool by Using Finite Element Method*, Diyala Journal for Applied Research (DJAR), Vol.3, No.2, 2007.

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Conference Publications

1. Jabbar Gattmah, **Suha K. Shihab**, Muzher Taha Mohamed and Ali Laftah Abbas, *Effects of Increasing Mass Scaling in 3D Explicit Finite Element Analysis on the Wire Drawing Process*, 2nd International Scientific Conference of Engineering Sciences (ISCES 2020), IOP Conf. Series: Materials Science and Engineering

- 2. Khalaf Nasralla, **Suha K. Shihab**, Adel K. Mahmoud, Arshad Noor Siddiquee, Zahid A. Khan, *Prediction of machined surface temperature of Inconel 718 based on 3D-FE Simulation using ALE method*, 8th international symposim on fusion of scince and technology (ISFT-2020).
- 3. Jabbar Gattmah, Muzher Taha Mohamed and **Suha K. Shihab**, *Sheet Metal Forming Processes For Various Materials Using Finite Element Analysis*, International Conference on Advances in Mechanical and Mechatronics Engineering ICAMMEN, ANKARA, PP.369-376, November 2018
- 4. **Suha K. Shihab**, Zahid A. Khan, Aas Mohammad, Arshad Noor Siddiquee, *The Effect of Cutting Parameters on Surface Integrity during Hard Turning Using Castrol Coolant*, World Academy of Science, Engineering and Technology, Istanbul, Issue78, pp. 1703-1709, June 2013.
- 5. **Suha K. Shihab**, Zahid A. Khan, Aas Mohammad, Arshad Noor Siddiquee, *Analysis of cutting forces and material removal rate in dry hard turning using response surface methodology*, International Conference on Automation and Mechanical Systems, Faridabad, 21-22, pp.175-187, March 2013.
- 6. Jabbar Kasim Jabbar and **Suha Karim Shihab**, *Using Technique of Contact Element for Wire Drawing by Using Finite Element Method*, International Engineering Convention, Damascus, Syria, 11-14 May 2009.

Reviewers of Journal

- Indian Journal of Engineering & Materials Sciences
- Journal of Production and Manufacturing Research
- Journal of Mechanical Engineering Science
- Journal of Engineering Science & Technology
- Journal of Marine Science and Application
- Measurement
- International Journal of Automotive and Mechanical Engineering (IJAME)
- Journal of Materials Research and Technology
- SN Applied Sciences
- Int. J. of Forensic Engineering and Management (IJFEM).
- Diyala Journal of Engineering Sciences
- Computers & Operations Research
- Int. J. of Services and Operations Management.
- International Journal "ENGINEERING REVIEW"
- Materials Today: Proceedings
- Journal of the Brazilian Society of Mechanical Sciences and Engineering (BMSE)

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For more information, visit the following links:

Google Scholar Link: https://scholar.google.com/citations?user=U5I1_S0AAAAJ&hl=en

Research Gate Link: https://www.researchgate.net/profile/Suha_Shihab

Scopus Link: https://www.scopus.com/authid/detail.uri?authorId=56304119300

Publons Link: https://publons.com/dashboard/settings/profile/

ORCID ID: https://orcid.org/0000-0003-0635-9332

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