Dr. Noor Zaman Khan

Ph.D. (Production), M.Tech. (Production and Industrial), B.Tech. (Mechanical)
Assistant Professor
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SHORT BIOSKETCH

Currently working as an **Assistant Professor** in the Department of Mechanical Engineering, **National Institute of Technology Srinagar**, J & K, India. I am also **In-charge Incubation** at Innovation Incubation and Entrepreneur Development (IIED) Centre, NIT Srinagar. I have done B.Tech. in Mechanical Engineering from JNTU Hyderabad in 2011. I have earned M.Tech. in Production and Industrial Engineering and Ph.D. in the area of Friction Stir Welding from Jamia Millia Islamia (A central university), New Delhi in 2013 and 2017 respectively. My major area of research includes materials processing and characterization, friction stir welding/processing, machining. I have around **Seven years** of Teaching and Research experience. I worked as Basic scientific research fellow in a project granted by University Grants Commission. I have published around **forty** research articles in International Journals and conferences along with **One book** in CRC press, **Two book** chapters and **Two patents**.

Education

- **Ph.D. in Production Engineering** (Friction stir welding) (from Jamia Millia Islamia, New Delhi - INDIA) in **2017**
- **M. Tech in Production and Industrial Engineering** (from Jamia Millia Islamia) in **2013**: CGPA-**9.28/10 (with Distinction)**
- **B.Tech. in Mechanical Engineering** (from Jawaharlal Nehru Technological University, Hyderabad, India) in **2011** with **75.39%** (Division:1st) **(with Distinction)**
- **10th and 12th** in 2005 and 2007 (Division: 1st).

Fellowship(s)/Scholarships/Award

- **GATE** Scholarship during M. Tech by AICTE.
- **BSR Fellowship award by UGC** in 2013
- **Senior BSR Fellowship award by UGC** in 2015
- **Best paper** award in International Conference ICFTMM-2020

Publication Profile:

1. SCI Journals. **17 (published), 3 (under review)**
2. SCOPUS indexed Journals: **9**
3. Scopus Indexed Conference: **10**.
4. Book(s): **01**
5. Patent(s): **02**
6. Book chapter(s): **02**

Key Research Areas:

- Friction stir welding/Processing
- Materials Processing, Welding and Machining.
- Materials characterization
- Material Science

Experience: (Around 7 years)

- Assistant Professor (Grade-II: AGP-7000) from 8 March 2021 to till date at NIT Srinagar, J&K.
- Assistant Professor (Grade-II: AGP-6000) from 22 October to 07 March 2021 at NIT Srinagar, J&K.
- Assistant Professor (Contractual) from 11 August 2017 to 17 October 2018 at Jamia Millia Islamia, New Delhi.
- Senior Basic Scientific Research Fellow from 26 September 2015 to 10 August 2017 at Jamia Millia Islamia in a project granted by University Grants Commission, Delhi.
- Basic Scientific Research Fellow from 26 September 2013 to 25 September 2015 at Jamia Millia Islamia in a project granted by University Grants Commission, Delhi.

STC/Workshops/Seminars Attended (Funding Agency)

- Workshop on Recent Trends in Welding Technology during 22-23 August 2019 at Delhi Technological University, Delhi.
- STC on Renewable Energy in Science, Engineering & Technology during 1-5 July 2019 at NIT Srinagar, J&K.
- Faculty Development Program on "Pedagogy" during 1-5 April 2019 at NIT Srinagar, J&K.
- Faculty Development Program on "Precision Manufacturing and Circular Economy" during 4-8 June 2018, Delhi Technological University, Delhi.
- Workshop on How to Write and Publish Scholarly Articles at Jamia Millia Islamia, New Delhi. **(2017)**
- Science communication workshop at Jamia Millia Islamia, New Delhi. **(2015)**

STC/Workshops/Seminars Organized

- Faculty Development Program on "Outcome Based Education" during 18-22 May 2019 as Coordinator at NIT Srinagar, J&K.
- Short Term Course on "Advanced Materials Processing and Characterization" during 22-26 July 2019 as Convener at NIT Srinagar, J&K.

Conferences Attended

- International Conference on Futuristic Trends in Materials and Manufacturing (ICFTMM-2020). Delhi Technical Campus, Greater Noida, UP, India **(2021)**
- International Conference on "New Frontiers in Engineering, Science & Technology" (NFEST-2019). NIT Kurukshetra, Haryana, India **(2019).**
- International Conference on "Contemporary Research in Mechanical Engineering with Focus on Materials and Manufacturing" (ICCRME-2018). Integral University, Lucknow, India. **(2018)**.
- National conference on Advanced Concepts in Mechanical Engineering. Ajay Kumar Garg Engineering College, Ghaziabad, U.P., India. **(2018)**
- International Conference on Ergonomics for Improved Productivity. Aligarh Muslim University, Aligarh, India. **(2017)**
- International Conference & Exhibition on Cutting Edge Technological Challenges in Mechanical Engineering. NIET, Greater Noida, U.P. (**2015)**
- International Conference on Materials and Processing Technologies. GRIET, Hyderabad, Telangana **(2014)**

Patents

- Indian Patent: **Universal Friction Stir Welding/Processing Work Fixture.** Application No 201611017741 **(2016)**
- Indian Patent: **Universal Friction Stir Welding/Processing Tool Adopter.** Application No 201911002618 **(2019)**

Book (s) published

- Friction Stir Welding: Dissimilar Aluminium Alloys (Published from **CRC Press**, Florida. ISBN: 9781138196759) **(2017)**

Book chapter (s) published

- Tariq Ahmad, Noor Zaman Khan, Babar Ahmad, Annayath Maqbool, "Recent advances in machining of composites and super alloys by using wire-EDM. A Review", Recent Advances in Manufacturing, Automation, Design and Energy Technologies, Springer Nature **(2021) (In Press)**
- 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, Springer Nature **(2021)**

Papers in SCI Journals

- Annayath Maqbool, **Noor Zaman Khan**, Arshad Noor Siddiquee, "Towards Mg based light materials of future: Properties, applications, problems and their mitigation", Journal of Manufacturing Science and Engineering **(2021)**

- Dhruv Bajaj, Arshad Noor Siddiquee, **Noor Zaman Khan**, A. K. Mukhopadhyay, Sohail M. A. Khan, Daolun Chen, Namrata Gangil. Flow, process forces and strains during Friction Stir Welding: A comprehensive First principle approach. Proc IMechE Part J: Journal of Engineering Manufacture **(2021)**

- Sameera Mufazzal, Sarfaraz Masood, **Noor Zaman Khan**, SM Muzakkir, Zahid A Khan, "Towards minimization of overall inconsistency involved in criteria weights for improved decision making" Applied Soft Computing **(2021)**

- Namrata Gangil, Sachin Maheshwari, Arshad Noor Siddiquee, **Noor Zaman Khan**, Xizhang Chen, Sergey Konovalov, "Tribological Behavior of Surface Composites Fabricated on AA7050-T7451 Alloy via Friction Stir Processing", Proc IMechE Part J: Journal of Engineering Tribology **(2021)**

- Arshad Noor Siddiquee, Sunil Pandey, Mustufa Haider Abidi, Abdulrahman Al-Ahmari, **Noor Zaman Khan** and Namrata Gangil, Microstructural characterization and in-process traverse force during friction stir welding of austenitic stainless steel. Proc IMechE Part C: J Mechanical Engineering Science **(2020).**

- Mohammad Owais Qidwai, Mohammad Muzaffarul Hasan, **Noor Zaman Khan**, Mohd Ariz, "Performance evaluation of simple radial fin design for single phase liquid flow in microchannel heat sink", Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering **(2020)**

- **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 **(2019)**

- **Noor Zaman Khan**, Dhruv Bajaj, Arshad Noor Siddiquee, Zahid A. Khan, Mustufa Haider Abidi, Usama Umer and Hisham Alkhalefah. Investigation on Effect of Strain Rate and Heat Generation on Traverse Force in FSW of Dissimilar Aerospace Grade Aluminium Alloys. Materials **(2019)**

- Mohammad Owais Qidwai, Mohammad Muzaffarul Hasan, **Noor Zaman Khan**, Urfi Khan, "Optimization of heat transfer effects in radial fin microchannel heat sink", Energy Sources, Part A: Recovery, Utilization, and Environmental Effects **(2019)**

- Pankul Goel, **Noor Zaman Khan**, Zahid A. Khan, Abdulrahman Al-Ahmari, Namrata Gangil, Mustufa Haider Abidi, Arshad Noor Siddiquee. "Investigation on material mixing in dissimilar Friction stir welding of AA7475 and AISI 304 Stainless steel". Materials and Manufacturing Processes **(2018)**

- **Noor Zaman Khan**, Arshad Noor Siddiquee, Zahid A. Khan. "Proposing a new relation for selecting tool pin length in friction stir welding process". Measurement (**2018**)

- Rashid Latif, Saif Wakeel, **Noor Zaman Khan**, Arshad Noor Siddiquee, Shyam Lal Verma, Zahid Akhtar Khan. 'Surface treatments of plant fibers and their effects on mechanical properties of fiber-reinforced composites: A review'. Journal of Reinforced Plastics and Composites **(2018)**

- **Noor Zaman Khan**, Mohammed Ubaid, Arshad Noor Siddiquee, Zahid A. Khan, Abdulrahman Al-Ahmari, Xizhang Chen, Mustufa Haider Abidi. "Microstructural features of friction stir welded dissimilar Aluminum alloys AA2219-AA7475". Materials Research Express **(2018).**

- Pankul Goel, Arshad Noor Siddiquee, **Noor Zaman Khan**, Mohd Azmal Hussain, Zahid A. Khan, Mustufa Haider Abidi and Abdulrahman Al-Ahmari. "Investigation on the Effect of Tool Pin Profiles on Mechanical and Microstructural Properties of Friction Stir Butt and Scarf Welded Aluminium Alloy 6063". Metals **(2018).**

- **Noor Zaman Khan**, Zahid A. Khan, Arshad Noor Siddiquee. "FSW a clean fabrication process understood better: Analysis of defects". Transactions of Nonferrous Metals Society of China (**2017**)

- **Noor Zaman Khan**, Arshad Noor Siddiquee, Zahid A. Khan, Suha K. Shihab. "Mechanical and microstructural behavior of friction stir welded similar and dissimilar sheets of AA2219 and AA7475 aluminium alloys". Journal of Alloys and Compounds (**2017**)

- **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 (**2015**)

Papers in Scopus Indexed Journals

- Talhah Shamshad Ali Ansari, **Noor Zaman Khan**, Annayath Maqbool, Zahid A. Khan, Rajesh Attri. Ranking model for human seating comfort factors in automobiles: a best worst approach, International Journal of Services and Operations Management (**2020)**

- Rajesh Attri, Noor Zaman Khan, Arshad Noor Siddiquee, Zahid A Khan, "Analysing the barriers to successful implementation of total quality management in Indian manufacturing organisations using best-worst method" International Journal of Business Excellence, **(2021)**
- Annayath Maqbool, **Noor Zaman Khan**, "Analyzing barriers for implementation of public health and social measures to prevent the transmission of COVID-19 disease using DEMATEL method", Diabetes & Metabolic Syndrome: Clinical Research & Reviews, 14, 5, 887-892, (**2020)**

- Rajesh Attri, **Noor Zaman Khan**, Arshad Noor Siddiquee, Zahid A. Khan. "Quantifying the factors affecting the 5S implementation in manufacturing organizations using Graph theory and Matrix method". International Journal of Services and Operations Management **(2020)**

- Rajesh Attri, **Noor Zaman Khan**, Arshad Noor Siddiquee, Zahid A. Khan. ISM-MICMAC approach for evaluating the critical success factors of 5S implementation in manufacturing organizations. International Journal of Business Excellence **(2020)**

- **Noor Zaman Khan**, Talhah Shamshad Ali Ansari, Arshad Noor Siddiquee, Zahid A. Khan. "Selection of E-learning websites using a novel Proximity Indexed Value (PIV) MCDM method". Journal of Computers in Education **(2019)**

- 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 **(2018).**

- 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 (**2015**)

- **Noor Zaman Khan**, Zahid A. Khan, Arshad Noor Siddiquee, Arindam K. Chanda "Investigations on the effect of Wire EDM process parameters on surface integrity of HSLA: A multi performance characteristics optimization". Production and Manufacturing Research (**2014**).

Papers in Conference Proceeding (Scopus indexed)

- **Noor Zaman Khan**, Arshad Noor Siddiquee, Zahid A. Khan and Dhruv Bajaj, Mohammad Ubaid. "Understanding the dissimilar friction stir welding through force and temperature evolution". Materials Today: Proceedings **(2018).**

- **Noor Zaman Khan**, Annayath Maqbool, Tariq Ahmad, Arshad Noor Siddiquee, Zahid A Khan, "Fracture behaviour of friction stir welded dissimilar aluminium alloys", Materials Today: Proceedings **(2021)**

- Fayaz Ahmad Mir, **Noor Zaman Khan**, Saad Parvez, "Recent advances and development in joining ceramics to metals", Materials Today: Proceedings **(2021)**

- Sheikh Shahid Ul Islam, **Noor Zaman Khan**, Mohammad Mohsin Khan, "Effect of reinforcement on magnesium-based composites fabricated through stir casting: A review", Materials Today: Proceedings **(2021)**

- Mohd Rafiq Parray, **Noor Zaman Khan**, Annayath Maqbool, "Fabrication and characterization of magnesium based surface composites with hybrid reinforcements by friction stir processing: A review", Materials Today: Proceedings **(2021)**

- **Noor Zaman Khan**, Arshad Noor Siddiquee, Zahid A. Khan, Mohammad Ubaid, Dhruv Bajaj, Mohd Atif, Adnan Khan. "Microstructure evolution of Friction Stir Welded Dissimilar Aerospace Aluminium Alloys". IOP Conf. Series: Materials Science and Engineering **(2018**)

- Mohd Azmal Hussain, **Noor Zaman Khan**, Arshad Noor Siddiquee, Zahid Akhtar Khan. "Effect of Different Tool Pin Profiles on the Joint Quality of Friction Stir Welded AA 6063". Materials Today: Proceedings **(2018)**.

- Urfi Khan, **Noor Zaman Khan**, Jasdeep Gulati. "Ultrasonic Welding of Bi-Metals, Optimizing Process Parameters for Maximum Tensile-Shear Strength and Plasticity of Welds". Procedia Engineering (**2017**)

- **Noor Zaman Khan**, Zahid A. Khan, Arshad Noor Siddiquee. "Effect of shoulder diameter to pin diameter (D/d) ratio on tensile strength of friction stir welded 6063 aluminium alloy". Materials Today: Proceedings (**2015**)

- Arshad Noor Siddiquee, Sunil pandey, **Noor Zaman Khan**. "Friction Stir Welding of austenitic stainless steel: a study on microstructure and effect of parameters on tensile strength". Materials Today: Proceedings (**2015**)

Invited Lecture

- Invited lecture on “Friction Stir Processing” on 24 Jan 2019 at ABES Engineering College, Ghaziabad.
- Expert lecture on “Mechanisms for Improving Materials Strength” on 29 July 2020 at IMS Engineering College, Ghaziabad (Online)

Complimentary Professional Skill

- Highly motivated, committed person with professional attitude.
- Communication & relationship building.
- Team work.
- Eager to learn new techniques.
- Research awareness

Personal Details

Date of Birth	22-June-1990
Corresponding Address	Department of Mechanical Engineering, National Institute of Technology, Hazratbal, Srinagar, Jammu and Kashmir, 190006, India.
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Declaration

I hereby declare that the above written particulars are true to the best of my knowledge and belief

Noor Zaman Khan Date: 14-07-2021