



Habib Hamed Zargari

Assistant Professor

College: Faculty of Material Engineering

Laboratory of Advanced Welding and Joining

Research Interests

- [Numerical Simulation of Arc Welding](#)
- [Wire Arc Additive Manufacturing \(WAAM\)](#)
- **Materials Science in Manufacturing**

Education

Degree	Graduated in	Major	University
BSc	2009	Materials Engineering	Sahand University of Technology
MSc	2011	Materials Characterization	Sahand University of Technology
Ph.D	2020	Materials and Manufacturing Science	Osaka University (JWRI)

Course Topics

MSc & PhD

- Advanced Welding Technology
- Soldering and Brazing
- Welding Inspection
- Physics of Welding
- Computational Modeling of Welding Processes

BSc

- Computer Programming

- **Principle of Material Science and Engineering**
- Laboratory of Welding
- Laboratory of Heat Treatment
- Solidification and Casting Laboratory

Papers in Journals

1. A. Abdali, S. Hossein Nedjad, H. Hamed Zargari, A. Saboori, M. Yildiz, Predictive tools for the cooling rate-dependent microstructure evolution of AISI 316L stainless steel in additive manufacturing, *Journal of Materials Research and Technology*, 2024.
2. A. Siyahtiri, S. Hossein Nedjad, H. Hamed Zargari, Kazuhiro Ito, Medium-carbon dual-phase steels with spheroidized ferrite matrix, *Journal of Materials Research and Technology*, 2024.
3. H. Hamed Zargari, Vahid Ziae Laleh, Wire Arc Additive Manufactured Radial Thin Wall: Fabrication Strategy, Macroscopic Defect Control, Microstructure, and Mechanical Properties, *Journal of Materials Engineering and Performance*, 2024.
4. M. Malekinia, H. Hamed Zargari, Kazuhiro Ito, S. Hossein Nedjad, Flux Enhancement with Titanium or Vanadium Oxides Addition for Superior Submerged Arc Welding of HSLA Steel Plates, *Journal of Advanced Joining Processes*, 2024.
5. H. Hamed Zargari, K. ITO, A. Sharma, Effect of workpiece vibration frequency on heat distribution and material flow in the molten pool in tandem-pulsed gas metal arc welding, *The International Journal of Advanced Manufacturing Technology*, 2023.
6. H. Hamed Zargari, K. ITO, Y. Mikami, A. Sharma, A unique CEL numerical method on material flow in a molten pool of workpiece vibration assisted welding, *JOURNAL OF THE JAPAN WELDING SOCIETY*, 2020.
7. H. Hamed Zargari, K. ITO, T. Miwa, P. Kumar Parchuri, H. Yamamoto, A. Sharma, Metallurgical characterization of penetration shape change in workpiece vibration-assisted tandem-pulsed gas metal arc welding, *Materials*, 2020.
8. H. Hamed Zargari, K. ITO, M. Kumar, A. Sharma, Visualizing the vibration effect on the tandem-pulsed gas metal arc welding in the presence of surface tension active elements, *International Journal of Heat and Mass Transfer*, 2020.
9. Y. Karimi, S. Hossein Nedjad, H. Shirazi, M. Nili Ahmadabadi, H. Hamed Zargari, K. ITO, Cold rolling and intercritical annealing of C-Mn steel sheets with different initial microstructures, *Materials Science and Engineering: A*, 2018.
10. H. Hamed Zargari, S. Hossein Nedjad, Microstructure and Mechanical Properties of Mn-Containing Maraging Steels, *Journal of Materials Engineering and Performance*, 2015.
11. M. R. Movaghar, S. Hossein Nedjad, H. Hamed Zargari, M. Nili Ahmadabadi, Transformation Mechanism of Preprecipitation NiMn Nanostructures, *Metallurgical and Materials Transactions A*, 2013.