



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. H. Hamed Zargari, Sh. Zand, M. Rezayat, Dissimilar laser welding of Ti-CP4 to MP35N medium-entropy bio-alloy, *Welding in the World*, 2025.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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.
10. 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.
11. H. Hamed Zargari, S. Hossein Nedjad, Microstructure and Mechanical Properties of Mn-Containing Maraging Steels, *Journal of Materials Engineering and Performance*, 2015.
12. M. R. Movaghar, S. Hossein Nedjad, H. Hamed Zargari, M. Nili Ahmadabadi, Transformation Mechanism of Preprecipitation NiMn Nanostructures, *Metallurgical and Materials Transactions A*, 2013.