

CURRICULUM VITAE

ABDOLLAH BAHADOR



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https://scholar.google.com/citations?user=_19fnUAAAAJ&hl=en

Research interests: Welding Metallurgy, Shape Memory Alloys, Metal Matrix Composites, Powder Metallurgy, Selective Laser Melting, Spark Plasma Sintering, Microstructure Characterization; SEM (BSEI, SEI, and EDX), FIB, Ion Slicer, TEM (HR-EDX), EBSD, XRD, and DSC.

EDUCATIONAL BACKGROUND

1- **Ph.D** (Mechanical Engineering), University of Technology Malaysia (Malaysia)

Apr 2014 - Apr 2018

Thesis Title: *Laser Welding of Ti-51Ni, Ti-23Nb and Ti-35Ta Shape Memory Alloys Produced by Powder Metallurgy*

2- **Research Fellow**, Osaka University, April 2017 - September 2017 (during PhD studies)

3- **Research Internship**, Osaka University, February 2016 - July 2016 (during PhD studies)

4- **MEng** (Materials Engineering), University Technology Malaysia (Malaysia)

Sep 2012 - Jan 2014

Thesis Title: *Microstructural Characterization and Mechanical Properties of Dissimilar Welding: Carbon Steel A516 GR 70 and Stainless Steel 316 L*

5- **BEng** (Materials Engineering - Industrial Metallurgy), University of Semnan (Iran)

Oct 1998 - Aug 2003

SCHOLARSHIPS AND AWARDS

1- Carl Duisburg Centern Scholarship - Germany

2- Malaysia International Student scholarship - Malaysia

3- Best student award for master studies during UTM 52nd convocation in May 2014.

4- Best student award for PhD studies during UTM 60th convocation in Apr 2018

5- Certificate of excellence for Grade A in the PhD thesis and Merit thesis award.

6- Pro-chancellor academic award for PhD studies during UTM 60th convocation in Apr 2018.

PROFESSIONAL MEMBERSHIPS

1- Japan Institute of Metals and Materials (JIM)

2- Japan Society of Powder and Powder Metallurgy (JSPM)

3- Institute of Materials Malaysia (IMM)

EDITORIAL AND REVIEWER BOARD MEMBERSHIP OF SCIENTIFIC JOURNALS

1- Crystals (MDPI): Guest Editor for Topic Editorial Member

2- Current Mechanics and Advanced Materials: Associate Editorial Board Member

3- International Journal of Materials Science and Applications: Editorial Board Member

4- Novel Research in Sciences: Editorial Board Member

5- Materials (MDPI): Reviewer Board Member

6- Coatings (MDPI): Reviewer Board Member

7- Journals of Composite Science (MDPI): Reviewer Board Member

SCIENTIFIC JOURNAL REVIEWS

1- Journal of Materials and Design

2- Journal of Materials Engineering and Performance

3- Journal of Materials Research and Technology

4- Proceedings of the Institution of Mechanical Engineers, Part C

- 5- Materials (MDPI)
- 6- Crystals (MDPI)
- 7- AIMS Materials Science
- 8- Current Chinese Engineering Science
- 9- Journal of Central South university
- 10- Journal of Mining and Metallurgy, Section B: Metallurgy

SCIENTIFIC COMMITTEE MEMBERSHIP OF INTERNATIONAL CONFERENCE

- 1- International Conference on Advanced Research in Engineering Sciences and Technology

INTERNATIONAL JOURNAL PUBLICATIONS

1. **A. Bahador**, J. Umeda, R. Yamanoglu, A. Amrin, C. Pruncu, K. Kondoh, High strength-ductility balance of Ti–2Fe–2W alloys extruded at high-temperature. *Materials Research & Technology* (In-press).
2. R. Yamanoglu, **A. Bahador**, K. Kondoh, Fabrication methods of porous titanium implants by powder metallurgy, *Transactions of the Indian Institute of Metals* (In-press).
3. R. Yamanoglu, **A. Bahador**, K. Kondoh, S. Gumus, S. Gokce, O. Muratal, A new composite of magnesium with Mg17Al12 intermetallic particles, *Powder Metallurgy and Metal Ceramics* (In-press).
4. **A. Bahador**, J. Umeda, R. Yamanoglu, A. Amrin, K. Kondoh, Ultrafine-grain formation and improved mechanical properties of novel extruded Ti-Fe-W alloys with complete solid solution of tungsten. *Alloys and Compounds*, vol. 875, pp. 160031, (2021).
5. R. Yamanoglu, **A. Bahador**, K. Kondoh, Effect of Mo Addition on the Mechanical and Wear Behavior of Plasma Rotating Electrode Process Atomized Ti6Al4V Alloy, *Materials Engineering and Performance* (2021).
6. H. Ghandvar, A.M. Jabar, S.S. Rahimian, M. Petru, **A. Bahador**, T.A. Abu Bakar, K. Kondoh, Role B4C Addition on Microstructure, Mechanical and Wear Characteristics of Al-20%Mg2Si Metal Matrix Composite, *Applied Sciences*, vol. 11(7), pp. 3047, (2021).
7. **A. Bahador**, J. Umeda, R. Yamanoglu, T.A. Abu Bakar, K. Kondoh, Strengthening evaluation and high-temperature behavior of Ti–Fe–O–Cu–Si alloy, *Materials Science and Engineering A*, vol. 800, pp. 140324 (2021).
8. **A. Bahador**, J. Umeda, H. Ghandvar, T.A. Abu Bakar, R. Yamanoglu, A. Issariyapat, K. Kondoh, Microstructure globularization of high oxygen concentration dual-phase extruded Ti alloys via powder metallurgy route, *Materials characterization*, vol. 800, pp. 140324 (2021).
9. K. Yokota, **A. Bahador**, K. Shitara, J. Umeda, K. Kondoh, Mechanisms of Tensile Strengthening and Oxygen Solid Solution in Single β-Phase Ti-35 at.%Ta+O Alloys. *Materials Science and Engineering A*, vol. 802, pp. 140677 (2021).
10. **A. Bahador**, J. Umeda, R. Yamanoglu, H. Ghandvar, A. Issariyapat, T.A. Abu Bakar, K. Kondoh, Deformation mechanism and enhanced properties of Cu–TiB₂ composites evaluated by the in-situ tensile test and microstructure characterization, *Alloys and Compounds*, vol. 847, (2020)
11. **A. Bahador**, J. Umeda, E. Hamzah, F. Yusof, X. Li and K. Kondoh, Synergetic Strengthening Mechanisms of Copper Matrix Composites with TiO₂ Nanoparticles, *Materials Science and Engineering A*, vol. 772, pp:138797, (2020).
12. **A. Bahador**, J. Umeda, S. Tsutsumi, F. Yusof, E. Hamzah, and K. Kondoh, Asymmetric Local Strain, Microstructure and Superelasticity of Friction Stir Welded Nitinol Alloy, *Materials Science and Engineering A*, vol. 767, pp: 138344, (2019).
13. **A. Bahador**, J. Umeda, M. Mizutani, E. Hamzah, F. Yusof, and K. Kondoh, High- Brightness and High-Power Laser Welding of Powder Metallurgy Shape Memory Alloy: Welding Parameter Dependent Microstructure, *Materials Engineering and Performance*, vol. 29, pp: 987-996, (2020).
14. **A. Bahador**, S. Kariya, J. Umeda, E. Hamzah, and K. Kondoh, Tailoring Microstructure and Properties of a Superelastic Ti–Ta Alloy by Incorporating Spark Plasma Sintering with Thermomechanical Processing, *Materials Engineering and Performance*, vol. 28, pp:3012-3020 (2019).
15. **A. Bahador**, E. Hamzah, K. Kondoh, T.A. Abubakar, F. Yusof, J. Umeda, S.N. Saud and M.K. Ibrahim, Microstructure and superelastic properties of free forged Ti–Ni shape-memory alloy, *Transactions of Nonferrous Metals Society of China*, vol. 28, pp: 502-515 (2018).
16. **A. Bahador**, E. Hamzah, K. Kondoh, S. Tsutsumi, U. Junko, T.A. Abu Bakar and F. Yusof, Heat-conduction-type and keyhole-type laser welding of Ti–Ni shape-memory alloys processed by spark-plasma sintering, *Materials Transactions*, vol. 59, pp: 835-842 (2018).
17. **A. Bahador**, E. Hamzah, K. Kondoh, T.A. Abu Bakar, F. Yusof, H. Imai, S.N. Saud and M.K. Ibrahim, Effect of deformation on the microstructure, transformation temperature and superelasticity of Ti-23 at% Nb shape-memory alloys, *Materials and Design*, vol. 118, pp: 152-162 (2017).

18. **A. Bahador**, E. Hamzah, K. Kondoh, Y. Kawahito, U. Junko and T.A. Abu Bakar, Mechanical and superelastic properties of laser welded Ti–Ni shape-memory alloys produced by powder metallurgy, *Materials Processing and Technology*, vol. 248, pp: 198-206 (2017).
19. **A. Bahador**, S.N. Saud, E. Hamzah, T.A. Abu bakar, F. Yusof and M.K. Ibrahim, Nd:YAG laser welding of Ti-27 at.% Nb shape memory alloys, *Welding in the World*, vol. 60, Issue: 6, pp: 1133-1139, (2016).
20. **A. Bahador**, E. Hamzah, M.F. Mamat. Effect of filler metals on the mechanical properties of dissimilar welding of stainless steel 316l and carbon steel A516 Gr 70, *Jurnal Teknologi*, vol. 75:7, pp: 61-65, (2015).
21. P. Nyanor, **A. Bahador**, O El-Kady, J Umeda, MA Hassan, K Kondoh, Improved ductility of spark plasma sintered aluminium-carbon nanotube composite through the addition of titanium carbide microparticles. *Materials Science and Engineering A*, vol.795, 139950, (2020).
22. A. Issariyapat, P Visuttipitukul, T Song, **A. Bahador**, J Umeda, M Qian, K Kondoh, Tensile properties improvement by homogenized nitrogen solid solution strengthening of commercially pure titanium through powder metallurgy process, *Materials characterization*, vol.170, pp: 110700, (2020)
23. M.K Ibrahim, E Hamzah, EM Nazmin, **A. Bahador**, Parameter optimization of microwave sintering porous Ti-23% Nb shape memory alloys for biomedical applications, *Transactions of Nonferrous Metals Society of China*, vol.28, pp: 700-710, (2018).
24. M.K Ibrahim, E Hamzah, EM Nazmin, N. Iqbal, **A. Bahador**, Effect of Sn additions on the microstructure, mechanical properties, corrosion and bioactivity behaviour of biomedical Ti–Ta shape memory alloys, *Thermal Analysis and Calorimetry*, vol.131, pp: 1165-11, (2018).
25. M.K. Ibrahim, E. Hamzah, S.N. Saud. T.A. Abu Bakar, **A. Bahador**, Microwave sintering effects on the microstructure and mechanical properties of Ti–51at%Ni shape memory alloys, *International Journal of Minerals Metallurgy and Materials*, vol. 24, pp. 280–288 (2017).
26. S. N.Saud, T.A. Abu Bakar, E. Hamzah, M. K. Ibrahim, **A. Bahador**, Effect of quarterly element addition of cobalt on phase transformation characteristics of Cu-Al-Ni shape memory alloys, *Metallurgical and Materials Transactions A*, vol. 46, pp. 3528-3542, (2015).
27. S.N. Saud, E. Hamzah, T.A. Abubakar, M. K. Ibrahim, **A. Bahador**, Effect of a fourth alloying element on the microstructure and mechanical properties of Cu-Al-Ni shape memory alloys, *Materials Research*, vol. 30, pp. 2258-2269, (2015).
28. M.K. Ibrahim, E. Hamzah, S.N. Saud, E. M. Nazim, **A. Bahador**, Silver additions influence on biomedical porous Ti-Ni SMAs fabricated by microwave sintering. *Jurnal Teknologi*, vol. 80(4), pp: 97-102, (2018).
29. M.K. Ibrahim, E. Hamzah, S.N. Saud, E. N. E. Abu Bakar and **A. Bahador**, Effect of Microwave Sintering Time and Homogenization Treatment on Biomedical Ti-51% Ni SMAs, *Indian Journal of Science and Technology*, vol. 9(46), pp:1-9, (2016).

INTERNATIONAL CONFERENCE PUBLICATIONS

1. **A. Bahador**, E. Hamzah, K. Kondoh, T. Abubakar, F. Yusof, S.N. Saud, M.K. Ibrahim and M.A. Ezazi, Defocusing Effects of Laser Beam on the Weldability of Powder Metallurgy Ti-Based Shape Memory Alloys, *Procedia Engineering*, vol. 184, pp: 205-213, (2017).
2. M.K. Ibrahim, E. Hamzah, S.N. Saud, E. M. Nazim, and **A. Bahador**, Influence of Ce addition on biomedical porous Ti-51 atomic percentage (at. %) Ni shape memory alloy fabricated by microwave sintering, *AIP Conference Proceedings*, 1901 (1), 100006, (2017).
3. E. Hamzah, Z.Z. Anuar, M.K.Ibrahim, **A. Bahador**, A. Khaatak, Influence of fabrication methods on the microstructures and hardness of Ti-Ni, Ti-Nb and Ti-Ta for biomedical applications, *Materials Today*, vol. 39 (2), pp: 975-978, (2021)

INTERNATIONAL CONFERENCE PRESENTATIONS

- 1- International Conference on Metals and Alloys (CMA 2019), Beijing, (China)
- 2- International Visual-JW &WSE2019, Osaka, (Japan)
- 3- International Conference on Powder and Powder Metallurgy (JSPM2017), Kyoto University (Japan)
- 4- The Japan Institute of Metals and Materials, (JIM2017), Hokkaido University (Japan)
- 5- ACMME 2017: Asia Conference on Mechanical and Materials Engineering, Tokyo University (Japan)
- 6- AMPT 2016: Advances in Materials and Processing Technologies (Malaysia)
- 7- IMTCE 2014: 9th International Materials Technology Conference & Exhibition (Malaysia)

PROFESSIONAL CERTIFICATIONS

- 1- Certificate for radiographic testing **level III** from TUV Germany
- 2- Certificate for ultrasonic testing **level III** from TUV Germany
- 3- Certificate for visual testing **level III** from TUV Germany
- 4- Certificate for dye penetrate testing **level III** from TUV Germany

- 5- Certificate for magnetic particle testing **level III** from TUV Germany
 6- Certificate for attendance in welding quality management according to ISO 3834 (Germany)
 7- Certificate for ISO 9001-2000 internal quality auditing course (IRAN)

PROFESSIONAL WORK EXPERIENCES

1- Osaka University (Japan)

Position:	Assistant Professor
University:	Joining and Welding Research Institute, Osaka University
Inclusive Dates:	June 2018 up to now

2- Dialog Group Berhad (Malaysia)

Position:	Shop QA/QC Manager
Project Title:	Deck Extension Bayan Project
Client:	Halliburton, Petronas, Exxonmobil, Vopak.
Inclusive Dates:	March 2014 until Sep 2014

3- Khalkhaldasht (Iran)

Position:	Project QA/QC Manager
Project Title:	Yadavarn Revision Wellhead Facilities
Client:	China Petroleum & Chemical Corporation (SIPC)
Inclusive Dates:	April 2011 until September 2012

4- Oil Industries Engineering and Construction (OIEC) (Iran)

Position:	Field QA/QC Manager
Project Title:	Sirri Island Gas Gathering and NGL Recovery Project
Client:	Iranian Offshore Oil Company (IOOC)
Inclusive Dates:	July 2009 until March 2011

5- OIEC/GS CONSORTIUMS (Iran)

Position:	NDT & PWHT Superintendent
Project Title:	South Pars Gas Field Development 9&10 Project
Client:	Pars Oil & Gas Company (POGC)
Inclusive Dates:	Apr 2006 until July 2009

6- KANKAV (Iran)

Position:	Welding & NDT senior Inspector
Project Title:	Sarv, Zeytoon
Client:	Tehran Municipality
Inclusive Dates:	June 2004 to March 2006

LANGUAGE

Turkmen (Native), Persian (Native), English (Fluent), Turkish (Fluent), Japanese (Beginner)