





**NAME & SURNAME:** Mohsen Reihanian

**DATE OF BIRTH:** 23-Aug-1974

 **ADDRESS, SUBURB, STATE, POSTAL CODE:** Department of Materials Science and Engineering, Faculty of Engineering, Shahid Chamran University of Ahvaz, Ahvaz, Iran, Postal code: 6135783151.

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## PROFESSIONAL PROFILE:

Associate professor of Materials Science and Engineering in Shahid Chamran University (SCU) of Ahvaz.

## EDUCATION BACKGROUND:

Visiting Research (2006-7), Osaka University, Osaka, Japan

Visiting Supervisor: Prof. Nobuhiro Tsuji

**Ph.D.:** Materials Science and Engineering (2007), Shiraz University, Shiraz, Iran

### Thesis Title:

“Producing ultrafine-grained commercially pure Al by equal channel angular pressing (ECAP)”

**M.Sc.:** Materials Science and Engineering (2000), Shiraz University, Shiraz, Iran

### Dissertation Title:

“Investigation of the factors affecting the distortion of low carbon steel sheets used in the door of Azmayesh factories refrigerators”

**B.S.:** Materials Science and Engineering (1998), Shiraz University, Shiraz, Iran

## TEACHING AND TRAINING EXPERINCE:

### B.Sc. Course:

- Mechanical Metallurgy (I&II)
- Metal Forming (I&II)
- Materials Selection
- Materials Science

### M.Sc. Course:

- Fracture Mechanics
- Dislocation Theory
- Special topics

### Ph.D. Course:

- Special Topics in Mechanical behavior of Materials

## HONOURS AND AWARDS:

- Young Researcher of the year 2008, Shahid Chamran University of Ahvaz
- Selected Researcher in the field of Engineering 2017, Shahid Chamran University of Ahvaz
- Selected Teacher in the field of Engineering 2014, Shahid Chamran University of Ahvaz

## INTERESTS AND RESEARCH FIELDS:

- Mechanical Properties of Materials
- Dislocations Theory
- Deformation and Fracture Mechanisms
- Metal Forming
- Severe Plastic Deformation

## RESEARCH ACTIVITIES:

### PUBLICATIONS:

1. AH Eftekhari, SM Sadrossadat, M Reihanian, Statistical Optimization of Electromagnetic Stirring Parameters for Semisolid AM60 Slurry Using Taguchi-Based Grey Relational Analysis, International Journal of Metalcasting, 2021, in press, <https://doi.org/10.1007/s40962-021-00586-8>.
2. AH Eftekhari, SM Sadrossadat, M Reihanian, Microstructural Investigation and High Temperature Mechanical Behavior of AXE622 Cast Mg Alloy, Metals and Materials International, 2021, in press, <https://doi.org/10.1007/s12540-021-00984-x>.
3. S Fakher, M Reihanian, SM Lari Baghal, Laleh Fatahi, Role of Cracked Interlayer on

- Deformation Processing of Al/hard Chrome/Al Laminate, Metals and Materials International, 2020, in press <https://doi.org/10.1007/s12540-020-00768-9>.
4. M Reihanian, Khalil Ranjbar, S Rashno, Microstructure and Impression Creep Behavior of Al-7Si-0.3 Mg Alloy with Zr Addition, Metals and Materials International, 2020, in press, <https://doi.org/10.1007/s12540-020-00628-6>.
  5. S Rashno, M Reihanian, K Ranjbar, Effect of Rare earth Er on microstructure and creep behavior of Al-7Si-0.3Mg alloy, Metals and Materials International, 2019, In press. DOI 10.1007/s12540-019-00562-2.
  6. F Alijani, M Reihanian, Kh Gheisari, H Miyamoto, Microstructure and high-temperature deformation behavior of FeCoNiMnV high entropy alloy, Materials Chemistry and Physics, 256, 2020, 123675.
  7. S Rashno, M Reihanian, Khalil Ranjbar, Tensile and creep properties of Al-7Si-0.3 Mg alloy with Zr and Er addition, Materials Science and Technology, 36, 2020, 1603-1613.
  8. F Alijani, M Reihanian, K Gheisari, M Yuasa, H Miyamoto, Microstructural Characterization of Mechanically Alloyed FeCoNiMnV High Entropy Alloy Consolidated by Spark Plasma Sintering, Advanced Engineering Materials, Advanced Engineering Materials 22, 2020, 1901311.
  9. S Rashno, Khalil Ranjbar and M Reihanian, Impression creep characterization of cast Al-7Si-0.3Mg alloy, Materials Research Express, 6 (2019) 0865e6.
  10. N Jahani, M Reihanian and Kh Gheisari, Kinetics of recrystallization and microstructure distribution during isothermal annealing of cold rolled nickel, Materials Research Express, 6 (2019) 096504.
  11. M Reihanian, M Dashtbozorg, SM Lari Baghal, Fabrication of glass/carbon fiber reinforced Al-composites through deformation bonding, Journal of Composite Materials, 0021998319833004.
  12. E Bagherpour, N Pardis, M Reihanian, R Ebrahimi, An overview on severe plastic deformation: Research status, techniques classification, microstructure evolution and applications, The International Journal of Advanced Manufacturing Technology, 100 (2019) 1647-1694.
  13. F Alijani, M Reihanian, K Gheisari, Journal of Alloys and Compounds, Study on phase formation in magnetic FeCoNiMnV high entropy alloy produced by mechanical alloying, 773 (2019) 623-630.
  14. M Rahdari, M Reihanian, SML Baghal, Microstructural control and layer continuity in deformation bonding of metallic laminated composites, Materials Science and Engineering: A 738 (2018) 98-110.
  15. M Naseri, M Reihanian, E Borhan, EBSD characterization of nano/ultrafine structured Al/Brass composite produced by severe plastic deformation, Journal of Ultrafine Grained and Nanostructured Materials 51 (2) (2018) 123-138.
  16. M Reihanian, A Baharloo, SML Baghal, Wear-Resistant Al/SiC-Gr Hybrid Metal Matrix Composite Fabricated by Multiple Annealing and Roll Bonding, Journal of Materials Engineering and Performance 27 (12) (2018) 6676-6689.
  17. E Bagherpour, M Reihanian, N Pardis, R Ebrahimi, T Langdon, Iranian Journal of Materials Forming, Ten years of severe plastic deformation (SPD) in Iran, part I: equal-channel angular pressing (ECAP), 5 (1) (2018) 71-113.
  18. M Reihanian, E Bagherpour, N Pardis, R Ebrahimi, N Tsuji, Ten Years of Severe Plastic Deformation (SPD) in Iran, Part II: Accumulative Roll Bonding (ARB), Iranian Journal of Materials Forming 5 (2) (2018) 1-25.

19. M. Reihanian, S. Fayezipour, S.M. Lari Baghal, Nanostructured Al/SiC-Graphite composites produced by accumulative roll bonding(ARB): Role of graphite on microstructure, wear and tensile behavior, *Journal of Materials Engineering and Performance*, 26 (2017) 1908-1919.
20. E. Bagherpour, M. Reihanian, H. Miyamoto, Tailoring the particle distribution non-uniformity and grain refinement in nanostructured metal matrix composites fabricated by severe plastic deformation (SPD): A correlation with flow stress, *Journal of Materials Science*, 52 (2017) 3436-3446.
21. M. Naseri, M. Reihanian, E. Borhani, Effect of strain path on microstructure, deformation texture and mechanical properties of nano/ultrafine grained AA1050 processed by accumulative roll bonding (ARB), *Materials Science and Engineering A*, 673 (2016) 278-298.
22. M. Askarpour, Z. Sadeghian, M. Reihanian, Role of powder preparation route on microstructure and mechanical properties of Al-TiB<sub>2</sub> composites fabricated by accumulative roll bonding (ARB), *Materials Science and Engineering A*, 677 (2016) 400-410.
23. M. Naseri, M. Reihanian, E. Borhani, Bonding behavior during cold roll-cladding of tri-layered Al/brass/Al composite, *Journal of Manufacturing Processes* 24 (2016) 125–137.
24. M. Reihanian, S. M. Lari Baghal, F. Keshavarz Haddadian, M.H. Paydar, A Comparative Corrosion Study of Al/Al<sub>2</sub>O<sub>3</sub>-SiC Hybrid Composite Fabricated by Accumulative Roll Bonding (ARB), *Journal of Ultrafine Grained and Nanostructured Materials*, 49, ( 2016), 29-35.
25. L. Ghalandari, M. M. Mahdavian, M. Reihanian, M. Mahmoudiniya, Production of Al/Sn multilayer composite by accumulative roll bonding (ARB): A study of microstructure and mechanical properties, *Materials Science and Engineering A*, A661(2016)179–186.
26. M. Naseri, M. Reihanian, E. Borhani, A new strategy to simultaneous increase in strength and ductility of AA2024 alloy via accumulative roll bonding, *Materials Science and Engineering A*, 656(2016)12–20.
27. F. Daneshvar, M. Reihanian, Kh. Gheisari, Al-based magnetic composites produced by accumulative rollbonding (ARB), *Materials Science and Engineering B*, 206 (2016) 45–54.
28. M. Reihanian, M. Naseri, An analytical approach for necking and fracture of hard layer during accumulative roll bonding (ARB) of metallic multilayer, *Materials and Design*, 89 (2016) 1213–1222.
29. S.V. Ahmadi Ana, M. Reihanian, B. Lotfi, Accumulative roll bonding (ARB) of the composite coated strips to fabricate multi-component Al-based metal matrix composites, *Materials Science and Engineering A*, 647(2015)303–312.
30. M. Reihanian, M. Naseri and M. Jalili Shahmansouri, Effect of the particle size on the deformation and fracture behavior of Al/4vol.%Al<sub>2</sub>O<sub>3</sub> composite produced by accumulative roll bonding (ARB), *Iranian Journal of Materials Forming*, 2(2015)14-26.
31. M. Reihanian, M.Jalili Shahmansouri, M. Khorasani, High strength Al with uniformly distributed Al<sub>2</sub>O<sub>3</sub> fragments fabricated by accumulative roll bonding and plasma electrolytic oxidation, *Materials Science & Engineering A*, 640(2015)195–199.
32. S. Takhti, M. Reihanian, A. Ashrafi, Microstructure characterization and mechanical properties of gas tungsten ARC welded A 356 alloy, *Transaction of Nonferrous Metals Society of China* 25(2015) 2137-2146.
33. M. Reihanian, M.M. Mahdavian, L. Ghalandari, Fabrication of the Cu-Zn Multilayer and Cu-Zn Alloy by Accumulative Roll Bonding (ARB) with an Emphasis on the Wear

- Behavior, Iranian Journal of Materials Forming, 1(2014)52-62.
34. M. Roshani, M. Reihanian, Kh. Gheisari, M.R. Saffarian, Evaluation of sensitization in gas tungsten arc welded AISI 304 stainless steel, Iranian Journal of Science and Technology, Transactions of Mechanical Engineering, 38(2014)207-215.
  35. M. Reihanian, F. Keshavarz Hadadian, M.H. Paydar, Fabrication of Al- 2Vol.% Al<sub>2</sub>O<sub>3</sub>/SiC hybrid composite via accumulative roll bonding (ARB): An investigation of the microstructure and mechanical properties, Materials Science & Engineering A, 607(2014)188-196.
  36. M. Reihanian, M.M. Mahdavian, L. Ghalandari, A. Obeidavi, Formation of a solid solution through accumulative roll bonding (ARB) and post-heat treatment of multilayered Cu/Zn/Al, Iranian Journal of Materials Forming, 1(2014)24-31.
  37. L. Ghalandari, M.M. Mahdavian, M. Reihanian, Microstructure evolution and mechanical properties of Cu/Zn multilayer processed by accumulative roll bonding (ARB), Materials Science & Engineering A, 593(2014)145–152.
  38. M.M. Mahdavian, L. Ghalandari, M. Reihanian, Accumulative roll bonding of multilayered Cu/Zn/Al: an evaluation of microstructure and mechanical properties, Materials Science & Engineering A, 579 (2013) 99-107.
  39. M. Reihanian, E. Bagherpour, M.H. Paydar, On the achievement of uniform particle distribution in metal matrix composites fabricated by accumulative roll bonding, Materials Letters, 91 (2013) 59–62.
  40. E. Bagherpour, M. Reihanian, R. Ebrahimi, Processing twining induced plasticity steel through simple shear extrusion, Materials and Design, 40 (2012) 262–267.
  41. E. Bagherpour, M. Reihanian, R. Ebrahimi, On the capability of severe plastic deformation of twining induced plasticity (TWIP) steel, Materials and Design, 36 (2012) 391–395.
  42. M. Reihanian, E. Bagherpour, M.H. Paydar, Particle distribution in metal matrix composites fabricated by accumulative roll bonding, Materials Science and Technology, 28 (2012) 103-108.
  43. M. Reihanian, K. Sherafatnia, M. Sajjadnejad, Fatigue failure analysis of holding U-bolts of a cooling fan blade, Engineering Failure Analysis, 18 (2011) 2019-2027.
  44. S. Morattab, K. Ranjbar, M. Reihanian, On the mechanical properties and microstructure of commercially pure Al fabricated by semi-constrained groove pressing, Materials Science and Engineering A, 528 (2011) 6912-6918.
  45. M. Reihanian, S.R. Asadollahpour, S. Hajarpour, Kh. Gheisari, Application of neural network and genetic algorithm to powder metallurgy of pure iron, Materials and Design, 32 (2011) 3183-3188.
  46. A. Mashreghi, L. Ghalandari, M. Reihanian, M.M. Moshksar, Processing, strength and ductility of bulk nanostructured metals produced by severe plastic deformation: An overview, Materials Science Forum, 633-634 (2010) 131-150.
  47. M. Reihanian, E. Bagherpour, M.H. Paydar, A model for volume fraction and particle size selection in tri-modal metal matrix composite, Materials Science and Engineering A, 513-514(2009)172-175.
  48. M. Reihanian, R. Ebrahimi, M.M. Moshksar, Upper-bound analysis of equal channel angular extrusion using linear and rotation velocity fields, Materials and Design, 30(2009)28-34.
  49. M.H. Paydar, M. Reihanian, E. Bagherpour, M. Sharifzade, M. Zarinejad,
  50. T.A. Dean, Equal channel angular pressing-forward extrusion (ECAP-FE) consolidation of Al particles, Materials and Design, 30(2009)429-432.

## Curriculum Vitae



51. M. Reihanian, R. Ebrahimi, M.M. Moshksar, D. Terada, N. Tsuji, Microstructure quantification and correlation with flow stress of ultrafine-grained commercially pure Al fabricated by equal channel angular pressing (ECAP), *Materials Characterization*, 59(2008)1312-1323.
52. M. Reihanian, R. Ebrahimi, N. Tsuji, M.M. Moshksar, Analysis of mechanical properties and deformation behavior of nanostructured commercially pure Al processed by equal channel angular pressing (ECAP), *Materials Science and Engineering A*, 473(2008)189-194.
53. M.H. Paydar, M. Reihanian, R. Ebrahimi, T.A. Dean, M.M. Moshksar, An upper-bound approach for equal channel angular extrusion with circular cross section, *Journal of Materials Processing Technology*, 198(2008)48-53.
54. R. Ebrahimi, M. Reihanian, M. Kanaani, M.M. Moshksar, An upper-bound analysis of tube extrusion process, *Journal of Materials Processing Technology*, 199(2008)214-220.
55. M.H. Paydar, M. Reihanian, E. Bagherpour, M. Sharifzadeh, M. Zarinejad,
56. T.A. Dean, Consolidation of Al particles through forward extrusion-equal channel angular pressing (FE-ECAP), *Materials Letters*, 62(2008)3266-3268.
57. R. Ebrahimi, M. Reihanian, M.M. Moshksar, An analytical approach for radial- forward extrusion, *Materials and Design*, 29(2008)1694-1700.

### PROFESSIONAL MEMBERSHIPS:

Editorial board membership: *Journal of Advanced Materials in Engineering (Esteghlal)*.

### LANGUAGES:

**PERSIAN: Native**

**ENGLISH: Intermediate**