CURRICULUM VITAE

Name and surname: Farzad Shahri
Nationality: Iranian

1- Academic position:
Qualification: Assistant Professor

Ministry of Science, Research & Technology (MSRT), Iranian Research Organization for Science & Technology (IROST)
Department: Advanced Materials & Renewable Energies

2- Education:
PhD degree from Iran University of Science and Technology (IUST), 2007.
MSc degree from University of Tehran (UT), 1999.

Date of birth: 21/9/1970

3- Work experience

- 2007-2012, Assistant Professor, Department of Engineering and High Technologies, Iran University of Industries and Mines.
- Dean of education, Iran University of Industries and Mines, 2009-2012.
- 2010-now, Iranian Research Organization for Science and Technology (IROST), Department of Advanced Materials and Renewable Energy.
- Deputy in charge of Department of Advanced Materials and Renewable Energy, 2014-2018.

4- Membership at scientific committees:
- Member of Iranian Metallurgical Engineers Society.
- Member of Iranian Foundrymen's Society.
- Member of Iranian Nanotechnology Society.

5- Fields of research interests:

- Magnetism and magnetic materials, nanostructure and amorphous magnetic materials.
- Heat treatment, structural, physical and mechanical behavior of materials.
- Rapid-Solidification studies, structural evaluation and melt-treatment of alloys.
- Structural, magnetic and mechanical evaluation of Bulk Metallic Glasses.
- Rapid solidification behavior of amorphous and nanocrystalline alloys such as Al and Mg alloys, Fe and Co based alloys.
- Bio-nanosensor based on GMI effect at nanostructure and amorphous magnetic materials.

6- Publications

a) Journals Articles

1- S.G. Shabestari, F. Shahri, “Influence of modification, solidification condition and heat treatment on the microstructure and mechanical properties of A356 aluminum alloy”, Journal of Materials Science, 39, 2004, 2023-2032.

2- F. Shahri, A. Beitollahi, S.G. Shabestari, S. Kamali, “Effects of Heat-treatment on the Structure and Magnetic Properties of Al-Ge added FINEMET Alloys”, Physical Review B, 76, 2007, 024434.

3- F. Shahri, A. Beitollahi, S.G. Shabestari, M. Ghanaatshoar, M.M. Tehranchi, S.M. Mohseni, S.E. Roozmeh, N. Wanderka, F. Fiorillo, “Structural characterization and magnetoimpedance effect in amorphous and nanocrystalline AlGe-substituted FeSiBNbCu ribbons”, Journal of Magnetism and Magnetic Materials, 312, 2007, 35-42.

4- H. Sepehri Amin, R. Gholamipour, F. Shahri , A. Abdolhoseini, "Effect of Al substitution for B on magnetic and structural properties of Co-based melt spun ribbons" Journal of Magnetism and Magnetic Materials, 320, 2008, 2259-2261.

5- F. Shahri, A. Beitollahi, “Effect of Super-Heat Treatment and Quenching Wheel Speed on the Structure and Magnetic Properties of Fe-Si-B-Nb-Cu-Al-Ge Melt-Spun Ribbons”, Journal of Non-Crystalline Solids, Volume 354, Issue 14, 2008, 1487-1493.

6- A. Kevanara, R. Gholamipour, Sh. Mirdamadi, F. Shahri, T. Salavatifard, A. Abdolhoseini, "Effect of quenching wheel speed on the structure, magnetic properties and magnetoimpedance effect in $Co_{64}Fe_4Ni_2B_{19-x}Si_8Cr_3Al_x$ (X=0, 1 and 2) melt spun ribbons", Journal of Magnetism and Magnetic Materials, 322, 2010, 2680-2683.

7- M. Delavari, A. Salarvand, A. Rahi, F. Shahri, “The effect of powder metallurgy process parameters on mechanical properties of micro and nano-iron powder”, International Journal of Engineering, Science and Technology ,Vol. 3, No. 9, 2011, pp. 86-94.

8- M. Rahimnezhad-Soltani, K. Saberyan, F. Shahri, A. Simchi, "Formation mechanism of TiO_2 nanoparticles in H_2O-assisted atmospheric pressure CVS process", powder Technology, 209, 2011, 15-24.

9- A. Keyvanara, R. Gholamipour, S. Mirdamadi, F. Shahri, H.S. Amin, "Effect of nanocrystallization annealing on magnetic properties and magnetoimpedance of Co-based ribbons", International Journal of Modern Physics, Vol.5, 2012, 841-846.

10- M. Mahmodan, H.Akbarzadeh, F. Shahri, "Effect of Cr_3C_2 and VC on the mechanical and structural properties of sintered Wc-%10wt Co nanopowder", World Journal of Nanoscience and Engineering, 2013, 3, 35-39.

11- M. Abbasi, R. Gholamipour, F. Shahri, "Glass forming ability and mechanical properties of Nb-containing Cu-Zr-Al based balk metallic glasses", Trans. Nonferrous Met. Soc. China 23(2013) 2037−2041.

12- N. Khademian, R. Gholamipour, F. Shahri, M. Tamizifar, "Effect of vanadium substitution for zirconium on the glass forming ability and mechanical properties of a $Zr_{65}Cu_{17.5}Ni_{10}Al_{7.5}$ bulk metallic glass", Journal of Alloys and Compounds 546, 2013, 41–47.

13- V. Javaheri, F. Shahri, M. Mohammadnezhad, M. Tamizifar, M. Naseri, "The effect of Nb and Ti on structure and Mechanical prosperties of 12Ni-25Cr-0.4C austenitic heat-resistant steel after aging at 900 °C for 1000 h", Journal of Materials Engineering and Performance, Volume 23, Issue 10, 2014, 3558–3566.

14- S. Dodangeh, F. Shahri, S.M. Abbasi, "The Effects of Carbon Content on the Microstructure and 650°C Tensile Properties of Incoloy 901 Superalloy", High Temp. Mater. Proc. 2015, 34(8): 821–826.

15- M. Bayegan, R. Gholamipour, F. Shahri, "Gas induced semi-solid process effects on microstructure and mechanical properties of 319 Al alloy", International Journal of Materials Research, 106 (2015) 9; 1005–1009.

16- Ekrami, F. Shahri, A. Mirak, "Effect of Rare-Earth Elements and Quenching Wheel Speed on the Structure, Mechanical and Thermal Properties of Rapidly Solidified AZ91 Mg Melt-Spun Ribbons", Materials Science & Engineering A, Vol. 684, January 2017, PP. 586–591.

17- R. Gholamipour, A. Keyvanara, F. Shahri, Sh. Mirdamadi, "Effect of Joule-heating annealing on giant magnetoimpedance of $Co_{64}Fe_4Ni_2B_{19-x}Si_8Cr_3Al_x$ (x = 0, 1 and 2) melt-spun ribbons", Ultrafine Grained & Nanostructured Materials (UFGNSM), Vol. 50, no. 2, 2017, pp. 111-116.

18- F. Shahri, R, Gholamipour, B. Garmeh, "Effect of Al on the Structure and Magnetic Properties of Nanocrystalline FeSiBPCu Melt-Spun Ribbons", Transactions of the Indian Institute of Metals, (2018) 71(1):35–39.

19- H.R. Asgari Bidhendi, R. Gholamipour, F. Shahri, Study on crystallization of rapid solidified ribbons of $(Al_{90}Ni_8Zr_2)_{98}Mm_2$ alloy, Metallurgical Engineering, Vol. 21, No. 1, 2018, 4-9.

20- H.R. Asgari Bidhendi, R. Gholamipour, F. Shahri, “Effect of misch-metal addition on physical and mechanical properties of Al-Ni-Zr melt spun ribbons” Transactions of the Indian Institute of Metals, 72 (4), 2019, 993-999.

21- M. Mohammadaliha, F. Shahri, S.M. Boutorabi, The role of ferrotitanium as an inoculant on the microstructure and mechanical properties of low alloy steel, Journal of Testing & Evaluation, , 2019, DOI:10.1520/JTE20180838.

22- E. Maleki, F. Shahri, M. Emamy, “The Effect of Ca Addition on Microstructure and Mechanical Properties of Mg-5Zn Alloy", Metals & Materials International, 2019, 1436-1447, https://doi.org/10.1007/s12540-019-00530-w.

23- S.M. Fathabad, F. Shahri, R. Gholamipour, The microstructural characterization, physical and dynamic magnetic properties of $(Ni_{49}Fe_{51})_{100-x}Cr_x$ (x=0,3,7) thin sheets, Submitted at Metallurgical & Materials Transaction A, 2020, Issue 1.

b) Some Conference papers

1. Keyvanara, R. Gholamipour, S. Mirdamadi, F. Shahri, A. Mohmadi, "Giant magneto-impedance effect of melt spun $Co_{64}Fe_4Ni_2B_{19-x}Si_8Cr_3Al_x$ (X=0,1,2,3) soft magnet ribbons", International Conference on Materials for Advanced Technologies, 2009, Singapore.

2. Beitollhi, F. Shahri, S.G. Shabestari, "Effect of nanocrystallization on the microstructure, magnetic properties and magnetoimpedance effect of AlGe-substituted FeSiBNbCu ribbons", 2nd International conference on diffusion and liquids, DSL2006, 26-28 July, Portugal.

3. F. Shahri, S.E. Roozmeh, S.M. Mohseni, A. Beitollahi, S.G. Shabestri, M.M. Tehranchi, M. Ghanaatshoar, "Structural and Magnetic Properties Relationship in Amorphous and Nanocrystalline AlGe- Substituted FeSiBNbCu Ribbons", 1st Iran-Russia Joint Seminar & Workshop on Nanotechnology, 28-30 May, 2005.

4. F. Shahri, A. Beitollahi, S.G. Shabestari, "Effect of Processing Parameters and Additives on Magnetic, Microstructure and Kinetic of Nanocrystallization of Fe-Si-B-Nb-Cu (FINEMET) Alloy", Third Conference on Nanotechnology, 5-8 Feb. 2008, Shiraz University, Shiraz.

5. S. Mirzaee, A. Beitollahi, S.G. Shabestari, F. Shahri, "Effect of heat-treatment on the GMI-effect and domain structure of amorphous and nanocrystalline soft magnetic $Fe_{72}Si_{12.5}B_9Nb_3Cu_1Al_{1.5}Ge_1$ alloy", 2nd International Conference on Nanoscince and Nanotechnology, 28-30 October 2008, University of Tabriz, Tabriz, Iran.

6. V.R. Abbasian, R. Gholamipour, F. Shahri, H. Moradi, M. Karbalie Jafar, "Effect of additive and rapid solidification rate on magnetic properties of an amorphous Co-based

ribbon", 2nd International Conference on Nanoscince and Nanotechnology, 28-30 October 2008, University of Tabriz, Tabriz, Iran.

7. V.R. Abbasian, R. Gholamipour, F. Shahri, "Synthesis of Co-based amorphous ribbons", 2nd Conference on Nanostructures, Kish University, Kish Island, 11-14 March 2008, Iran.

8. M. Movahedi, F. Shahri, "Production of Nickel Aluminide and its composite with Al_2O_3 via mechanical alloying, 2nd International Conference on Ultrafine Grained and nanostructured Materials", 14-15 Nov. 2009, School of Metallurgy and Materials Engineering, College of Engineering, University of Tehran, Tehran, Iran.

9. Keyvanara, R. Gholamipour, F. Shahri, SH. Mirdamadi, H. Sepehri Amin, A. Mohamadi, "Effect of nanocrystallization annealing on magnetic properties and magnetoimpedance of Co-based ribbons", 2nd International Conference on Ultrafine Grained and nanostructured Materials, School of Metallurgy and Materials Engineering, College of Engineering, University of Tehran, Tehran, Iran, 14-15 Nov. 2009.

10. F. Shahri, S.G. Shabestari, M. Emami, “Effect of Sr and Nb on microstructure and fluidity of A356 Al alloy”, Conference of Iranian Foundrymen's Society, 2000, In Persian.

11. F. Shahri, S.G. Shabestari, M. Emami, “Effect of cooling rate, solidification behavior and heat-treatment on fracture and mechanical properties of A356 Al alloy”, Conference of Iranian Metallurgical Engineers Society,16-18 Oct., 2001, University Of Tehran, Iran, In Persian.

12. F. Javherian, A. Beitollahi, F. Shahri, H. Aliakbarzadeh, "Effect of rapid therml annealing on structure and magnetic properties of FINEMET", 5th Joint Conference of Iranian Metallurgical Engineers Society and Iranian Foundrymen's Society, 25-26 Oct. 2011, Isfahan Industrial University, Iran, In Persian.

13. Beirami, F. Shahri, R. Gholamipour, "Effect of Al on the structure and soft magnetic properties of high-B_S $(Fe_{81.3}Si_4B_{14}Cu_{0.7})_{100-X}$ Al_X alloy",5th Joint Conference of Iranian Metallurgical Engineers Society and Iranian Foundrymen's Society, 25-26 Oct. 2011, Isfahan Industrial University, Iran, In Persian.

14. H. Ramezani, S.M.A. Bootorabi, F. Shahri, Kh. Khergheandaz, "Effect of holding time of molten metal in the pouring furnace on the structure and mechanical properties of ductile iron", 5th Joint Conference of Iranian Metallurgical Engineers Society and Iranian Foundrymen's Society, 25-26 Oct. 2011, Isfahan Industrial University, Iran, In Persian.

15. M. Hosseini, R. Gholamipour, F. Shahri, "Effect of heat-treatment parameter on the nanostructure and mechanical properties of $(Cu_{50}Zr_{43}Al_7)_9Nb_3$ and $Cu_{50}Zr_{43}Al_7$ alloys", 5th Joint Conference of Iranian Metallurgical Engineers Society and Iranian Foundrymen's Society, 25-26 Oct. 2011, Isfahan Industrial University, Iran, In Persian.

16. H. Sepehri Amin, F. Shahri, R. Gholamipour, A. Abdolhoseini, "Effect of Al addition on magnetic and structural properties of amorphous Co-base melt-spun ribbons", 2nd Conference on Nanostructures, March 11-14 2008, Kish University, Kish Island, I.R. Iran.

17. H. Sepehri Amin, R. Gholamipour, F. Shahri, V.R. Abbasian, A. Mohamadi, "Effect of Al addition on magnetic and structural properties of amorphous Co-base melt-spun ribbons"1th Joint Conference of Iranian Metallurgical Engineers Society and Iranian Foundrymen's Society, 22-24 Oct. 2008, Isfahan Industrial University, Iran, In Persian.

18. D. Mohamadi, F. Shahri, R. Gholamipour, N. Khademian, E. Amiri, "Effect of V on GFA and Mechanicl properties of $Zr_{65}Cu_{17.5}Ni_{10}Al_{7.5}$ alloy", 4th Joint Conference of Iranian Metallurgical Engineers Society and Iranian Foundrymen's Society, 14-15 Nov. 2010, Iran University of Science and Technology, Iran, In Persian.

19. F. Shahri, S.E. Roozmeh, S.M. Mohseni, A. Beitollahi, S.G. Shabestari, M.M. Tehranchi, M. Ghnaatshoar, "Magnetoimpedance effect in amorphous and nanocrystalline Al-Ge subtituted FeSiBNbCu ribbons", MISM, 2005.

20. Beitollahi, F. Shahri, S.G. Shabestari, M. Ghanaatshoar, M. Tehranchi, "Structural characterization and magnetoimpedance effect in amorphous and nanocrystalline AlGe-substituted FeSiBNbCu ribbons", March 2006, 1st Nanostructure Workshop, Kish University, Iran.

21. Keyvanara, R. Gholamipour, S. Mirdamadi, F. Shahri, A. Mohamadi, "Giant magneto-impedance effect of melt spun $Co_{64}Fe_4Ni_2B_{19-x}Si_8Cr_3Al_x$ (X=0,1,2,3) soft magnet ribbons, International Conference on Materials for Advanced Technologies, 2009, Singapore.

22. F. Javaherian, A. Beitollahi, F. Shahri, "Correlation between structure, magnetic properties and MI effect of nanostructrued FINEMET ribbons", 3rd International Conference on Ultrafine Grained and Nanostructured Materials, University of Tehran, Tehran, Iran, 2-3 November, 2011.

23. M. Delavari, A. Rahi, F. Shahri", Optimizing of powder metallurgy parameters by genetic algorithm", 3rd International Conference of Manufacturing Engineering, University of Tehran, 26-28 Dec 2011, Tehran, Iran.

24. Beirami, F. Shahri, R. Gholmipour, "Effect of Al addition on structure and magnetic propertis of high-B_S Fe-Si-B-Cu melt spun ribbon", Oral Presentation, 19th International Symposium on Metastable Amorphous and Nanostructured Materials, 18-22 June 2012, Moscow.

25. B. Garmeh, F. Shahri, R. Gholmipour, "Glass forming ability of $Fe_{83.3}(Si_{0.25}B_{0.563}P_{0.188})_{16-X}Cu_{0.7}Al_X$ melt spun ribbons and its magnetic properties", Oral presentation, 19th International Symposium on Metastable Amorphous and Nanostructured Materials, 18-22 June 2012, Moscow.

26. M. Abbasi, R. Gholamipour, F. Shahri, "Effect of Nb addition on mechanical properties of a Cu-based bulk metallic glass", Oral presentation, 19th International Symposium on Metastable Amorphous and Nanostructured Materials, 18-22 June 2012, Moscow.

27. F. Shahri, "An Overview on Development of Nanotechnology Activities in Iran", International Biennial Conference on Ultrafine Grained and Nanostructured Materials (UFGNSM 2013), Jakarta, Indonesia, Invited Speaker.

28. M. Bayegan, F. Shahri, R. Gholamipour, H. Aghakarimi, "Study of gas-induced semi-solid process on the microstructure and mechanical properties of Al A319 alloy", The 2nd International Conference and the 7th Joint Conference of Iranian metallurgical engineering society & Iranian Foundrymen's Society, 2013, Tehran, Iran.

29. M. Akbari, M. Tamizifar, F. Shahri, M. Zamani Mighan, "Effect of Heat-treatment on the structure and mechanical properties of FSX-414 superalloy", The 2nd International Conference and the 7th Joint Conference of Iranian metallurgical engineering society & Iranian Foundrymen's Society, 2013, Tehran, Iran.

30. M. Mousanataj, F. Shahri, R. Gholamipour, B. Garmeh, A. pesaran, A. Beyrami "Structure and soft magnetic properties of a new nanocrystalline soft magnetic FeSiBCuAl alloy with high Bs of 1.8T", International Biennial Conference on Ultrafine Grained and Nanostructured Materials (UFGNSM 2013).

31. F. Ali Abadi Farahani ,R. Gholamipour, F. Ghanbari and F. Shahri, "The relationship between microstructure, thermal and mechanical properties of $(Zr_{55}Cu_{30}Al_{10}Ni_5)_{100-x}Ta_x$ bulk metallic glasses", International Biennial Conference on Ultrafine Grained and Nanostructured Materials (UFGNSM 2013).

32. S.H. Allameh, E. Maleki, F. Shahri, M. Emamy, "The Effect of Extrusion Temperature on Microstructure and Tensile Properties of Mg-5Zn-xCa (x=0, 0.1, 1(wt. %)) Alloy", The 9th joint congress of Iranian metallurgical engineering society & Iranian foundrymen's society, 10-11 Nov 2015, Kerman, Iran.

33. E. Maleki, F. Shahri, M. Emamy, "Effect of calcium on grain refinement and tensile properties of as-cast and as-extruded Mg-5%Zn alloy", 5th UFGNSM2015, 11-12 Nov. 2015, Tehran, Iran.

34. M. Moosanataj malakshah, B. Garmeh, F. Shahri, R. Gholamipour, "Influence of Al on nano-structure and thermal behavior of melt-spun ribbons in two Fe-based alloying system", The 8th joint congress of Iranian metallurgical engineering society & Iranian Foundrymen's Society, 2014, Tehran, Iran.

35. S.H. Allameh, E. Maleki, F. Shahri, M. Emamy, "The Effect of Zr on Microstructure and Tensile Properties of Mg-5Zn-0.1Ca Alloy", The 9th joint congress of Iranian Metallurgical Engineering Society & Iranian Foundrymen's Society, 10-11 Nov 2015, Kerman, Iran.

36. M. Bardegar, F. Shahri, S.M. Abbasi, “Effect of heat-treatment on the microstructure and high temperature mechanical properties 0.1 wt.%-added of Incoloy 901 superalloy”, 10-11 Nov 2015, Kerman, Iran.

37. H. Asgari, R. Gholamipour, F. Shahri, Glassy state formation in $(Al_{90}Ni_8Zr_2)_{100-x}$ MM_x melt spun ribbons, Proceedings of Iran International Aluminum Conference, May 2016, Tehran, Iran.

38. R. Seyedi Alan, R. Gholamipour, F. Shahri, Study of centrifugal casting parameters on microstructure and mechanical properties of functionally graded Al A356- SiC composite, The 5th International Conference on Materials Engineering and Metallurgy (IMAT 2016), 8-9 Nov. 2016, Shiraz University, Iran.

39. H.R. Asgari Bidhendi, R. Gholamipour, F. Shahri, “Effect of lanthanides content on microstructure and physical properties of Al90Ni8Zr2 alloy”, The 5th International Conference on Materials Engineering and Metallurgy (IMAT 2016), 8-9 Nov. 2016, Shiraz University, Iran.

40. A. Ekrami, F. Shahri, A. Mirak, “Effect of Solidification rate at melt-spinning process on thermal and mechanical properties of Az91 RE-added alloy”, Mining Metals & Materials Conference, 15-16 Dec. 2016, Tehran, Iran.

41. N. Boroushan, F. Shahri, R. Gholamipour, “The effect of Cr and annealing temperature on the magnetic and corrosion properties of permalloy”, The 7th International Conference on Materials Engineering and Metallurgy (IMAT 2018), 9-10 Oct 2018, Tehran, Iran.

42. S.M. Fathabad, F. Shahri, R. Gholamipour, “The effect of cold rolling parameters on microstructure and soft magnetic properties of Ni-Fe thin sheets”, The 7th International Conference on Materials Engineering and Metallurgy (IMAT 2018), 9-10 Oct 2018, Tehran, Iran.

۴۳. نیره بروشان، فرزاد شهری، رضا غلامی پور، بررسی تاثیر فرآیند آنیلینگ و عنصر کروم بر خواص مغناطیس و خوردگی آلیاژ Permalloy، هفتمین کنفرانس بین المللی مهندسی مواد و متالورژی و دوازدهمین کنفرانس مشترک انجمن مهندسین متالورژی و مواد ایران و انجمن علمی ریخته گری ایران، مهر ماه ۱۳۹۷، تهران، ایران.

۴۴. سبحان محمدی فتح آباد، فرزاد شهری، رضا غلامی پور، بررسی تاثیر درصد کاهش سطح مقطع هنگام فرآیند نورد سرد بر ورق‌های نازک نرم مغناطیسی آلیاژ ۴۹نیکل-آهن، هفتمین کنفرانس بین المللی مهندسی مواد و متالورژی و دوازدهمین کنفرانس مشترک انجمن مهندسین متالورژی و مواد ایران و انجمن علمی ریخته گری ایران، مهر ماه ۱۳۹۷، تهران، ایران.

۴۵. امیرحسین کریمی پریدری، شاهین خستوان، عبدالحسین جلالی آقچای، فرزاد شهری، بررسی تجربی و المان محدود چروکیدگی و کرنش موثر در فرآیند هیدروفرمینگ لوله¬های فولاد زنگ نزن استوانه ای جهت ایجاد شکل کروی، هفتمین کنفرانس بین المللی مهندسی مواد و متالورژی و دوازدهمین کنفرانس مشترک انجمن مهندسین متالورژی و مواد ایران و انجمن علمی ریخته گری ایران، مهر ماه ۱۳۹۷، تهران، ایران.

۴۶. میلاد آرمان، فرزاد شهری، رضا غلامی پور، بررسی تاثیر نرخ انجماد بر خواص مغناطیسی آلیاژ هاسلر Ni-Mn-In، هشتمین کنفرانس بین المللی مهندسی مواد و متالورژی و سیزدهمین کنفرانس مشترک انجمن مهندسین متالورژی و مواد ایران و انجمن علمی ریخته گری ایران، مهر ماه ۱۳۹۸، تهران، ایران.

۴۷. سبحان محمدی فتح آباد، فرزاد شهری، آشکارسازی دیواره حوزه‌های مغناطیسی درهم‌پیچیده در تصاویر میکروسکوپ نیروی مغناطیسی (MFM)، نهمین کنفرانس بین المللی مهندسی مواد و متالورژی و چهاردهمین کنفرانس مشترک انجمن مهندسین متالورژی و مواد ایران و انجمن علمی ریخته گری ایران، آبان ۱۳۹۹.

۴۸. احمد سعادتی، رضا غلامی پور، فرزاد شهری، وابستگی ریزساختار و استحاله مغناطوساختاری به آهنگ سرمایش در آلیاژ هاسلر Mn-Ni-Co-Sn، نهمین کنفرانس بین المللی مهندسی مواد و متالورژی و چهاردهمین کنفرانس مشترک انجمن مهندسین متالورژی و مواد ایران و انجمن علمی ریخته گری ایران، آبان ۱۳۹۹.

7- Teaching activities

- Solidification and casting of amorphous and nanocrystalline materials (PhD Course) academic year (2013-2014, 2014-2015, 2015-2017, 2017-2018)
- Advanced metallurgical thermodynamic, academic year (2006 -2019), MSc course
- Forming of metals, academic year (2006-2007, 2007-2008)
- Composite materials, academic year (2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015,2015-2016), MS_C course
- Diffusion in solids, academic year (2007-2008, 2009-2010, 2011-2012, 2014-2015), MSc course.
- Selection and use of engineering materials, academic year (2006-20016).
- Phase transformation in metals and alloys (PhD and MSc Course), academic year (2007-20019),
- Advanced method for analyses of materials (PhD Course), academic year (2010-2017)
- Mechanical properties of materials, academic year (2007-2016).

8- Graduate Students supervised

8.1. MSc Students

1. Effect of heat-treatment on structure and magnetic properties of nanostructure high-B_S FeSiBCu alloy
2. Synthesis of NiAl-Al_2O_3 composite via mechanical alloying.
3. Study of H_2O effect on chemical vapor synthesis (CVS) of TiO_2 nanoparticles from $TiCl_4$.
4. Effect of Nb addition on mechanical and thermal properties of Cu-based bulk metallic glass-matrix nanocomposite.

5. The effect of Vanadium on glass forming ability and mechanical properties of $Zr_{65}Cu_{17.5}Ni_{10}Al_{7.5}$ bulk metallic glass.
6. Effect of rapid thermal annealing on structure and magnetic properties of nanostructured FINEMET ribbons.
7. Effect of Cr_3C_2 and VC on microstructure nad mechanical properties of WC-Co nanocomposite.
8. The effects of Carbon and Titanium contents on the microstructure and tensile properties of Incoloy 901 superalloy.
9. Effect of Zr on microstructure and tensile properties of Incoloy 901 superalloy.
10. The effect of pressure on microstructure and hardness of Al-Si alloys by HPDC process.
11. Effect of bifilms and sludges on machinability of AS9U3 alloy.
12. Synthesis and evaluation of structure and mechanical properties of Nickel foam produced by physical vapor deposition (PVD) and electroplating.
13. Effect of Al on the structure and soft magnetic properties of high-Bs $(Fe_{81.3}Si_4B_{14}Cu_{0.7})_{100-x}Al_x$ melt-pun ribbon.
14. The effects of W, Ti and Nb on the structure and mechanical properties of casting stainless steel.
15. Effect of Al and nanocrystallization process on the structure and magnetic properties of $Fe_{81.3}(BSi)_{18-X}Cu_{0.7}Al_X$ high-B_S melt-pun ribbon.
16. Effect of Al on the structure and soft magnetic properties of high-B_S $Fe_{83.3}(Si_4B_9P_3)_{16-X}Cu_{0.7}Al_X$ melt-pun ribbon.
17. The effect of Al on glass forming ability and mechanical properties of FeNiBNb bulk metallic glass.
18. Effect of heat-treatment on the microstructure and magnetic properties of Fe-Al soft magnet alloy.
19. The effect of inoculation on carbide formation in thin wall ductile cast iron.
20. Investigation of microstructure and mechanical properties of austempered ductile iron (ADI) suitable for locomotive wheel.
21. The effect of semi-solid casting parameters produced by mechanical stirring on the microstructure and mechanical properties of 319 Al alloys.
22. The effect of oxygen on hot workability of Ti-6Al-4V alloy.
23. Effect of pressure on solidification behavior and mechanical properties of die casting Al alloy.
24. The effect of Argon-Oxygen decarburization and desulphurization (AOD) on the structure and mechanical properties of 316L stainless steel.

25. Effect of gas-induced semi-solid process parameters on microstructure and mechanical properties of 319 Al alloy.
26. The effect of de-aluminizing on porosity reduction in gunmetal alloy.
27. Effect of holding time of molten metal in the pouring furnace on the structure and hardness of ductile iron.
28. Effect of Sr on the formation of shrinkage porosity and mechanical properties of LM2 alloy.
29. Effect of heat-treatment on the microstructure, mechanical properties and flexibility of FSX-414 cast cobalt base super alloy.
30. Investigating of centrifugal casting parameters effect on microstructure and mechanical properties of functionally graded Al A356-SiC composite.
31. Evaluation of rare-earth elements and quenching wheel speed on the microstructure, thermal behavior and mechanical properties of rapidly solidified AZ91magnesium alloy.
32. The effect of cold rolling parameters and Cr on the microstructure and soft magnetic properties of Ni-Fe alloy.
33. Effect of multi-step annealing process and Cr on the soft magnetic properties and corrosion behavior of Ni-Fe alloy.

8.2. PhD students

1- The effect of rare-earth elements on the microstructure and mechanical properties of rapidly solidified Al-Ni melt-spun ribbons, supervised.

2- The effect of production process parameter and additives on the structure and mechanical properties of Zr-based bulk metallic glass, supervised.

3- The effects of additives and solidification rate on the magnetocaloric properties of Ni-Mn-In based heusler alloys.

4- Effect of additive and processing parameters on the magnetic properties of amorphous FeSiB prepared by PFC method.

9- Referee of international awards, projects and journals

- Referee of more than 30 international scientists from all of the world at “Karazmi International Award (KIA)”.
- Referee of more than 50 young scientists projects at “Karazmi Young Award”.
- Referee of more than 20 patent for IRIPO.

- Reviewer of Journals:
    1. Nanostructures
    2. Journal of Ultrafine Grain & Nanostructured Materials
    3. Iranian Journal of Materials Science & Technology
    4. Journal of metallurgical & Materials Engineering (in Persian)
    5. Journal of Alloys & Compounds

- Referee of more than 40 research project at Iranian Nanotechnology Innovation Council (INIC).

10- Some research and technology transfer projects

- Principal Investigator of the project "Fabrication and evaluation of soft magnetic properties of Co-based amorphous melt-spun ribbons" 2 years grant from Iranian Nanotechnology Innovation Council (INIC), 2007-2008.
- Principal investigator of the project "Designer and director of nanofabrication lab. Project", 3 years grant from Iranian Nanotechnology Innovation Council (INIC), 2008-2011.
- Principal investigator of the project "Synthesis and production of amorphous and nanostructure Co-based and Fe-based melt spun ribbons", 2 years grant from Iranian Research Organization for Science & Technology (IROST), 2012-2013.
- Principal investigator of the project "Fabrication of Ni-Fe alloys thin sheets", 2 years grant from Iran National Science Foundation (INSF), 2016-2018.
- Investigator of the project "Magnetocaloric properties of heusler alloys", 2 years grant from Iranian Research Organization for Science & Technology (IROST), 2018-2019.
- Investigator of the project "The dynamic and physical properties of rejuvenated bulk metallic glasses", 2 years grant from Iran National Science Foundation (INSF) in collaboration with Chinese Academy of Sciences (CAS), Professor Wei Hua Wang, Professor of Institute of Physics, Academician of CAS and TWAS 2018-2020.
- Principal investigator of the project "production of Co-based magnetic biosensor for cancer detection", 3 years grant from Iranian Research Organization for Science & Technology (IROST), 2017-2019.

- Principal investigator of the project “Production of wide width amorphous FeSiB ribbon for electromagnetic application”, 18 month grant from Iranian Research Organization for Science & Technology (IROST), 2021-2022.