**ÖZGEÇMİŞ**

**Prof. Dr. Amdulla O. Mekhrabov**

1. **GENEL**

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| **DÜZENLEME TARİHİ** | 24 Aralık 2018 | | |
| **T.C. KİMLİK NO** | Azerbaycan vatandaşı, Yabancı Kimlik No: 99136032092 | | |
| **ÜNVANI ADI SOYADI** | Prof. Dr. Amdulla Mehrabov | | |
| **YAZIŞMA ADRESİ** | Metalurji ve Malzeme Müh. Bölümü, Orta Doğu Teknik Üniversitesi Üniversiteler Mahallesi, Dumlupınar Bulvarı No:1, 06800 Çankaya/Ankara | | |
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**2. EĞİTİM**

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| **ÖĞRENİM DÖNEMİ** | **DERECE (\*)** | **ÜNİVERSİTE** | **ÖĞRENİM ALANI** |
| **1989** | Bilimler Doktoru (Dr. Science) | Tbilisi Devlet Üniversitesi, Tbilisi, Gürcistan | Katı Hal Fiziği ve Malzeme Bilimi |
| **1974-1978** | Ph. D. | Lomonosov Moskova Devlet Üniversitesi, Moskova, Sovyetler Birliği | Katı Hal Fiziği |
| **1969-1974** | Lisans ve Fizik Masterası  (M. Physics) | Azerbaycan Devlet Üniversitesi, Bakü, Azerbaycan | Fizik |

**(\*)** Diploma Türü (Lisans, Y.Lisans, vb.)

**3. AKADEMİK VE MESLEKİ DENEYİM**

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| **GÖREV DÖNEMİ** | **ÜNVAN** | **BÖLÜM** | **ÜNİVERSİTE** |
| **1992-** | Misafir Prof. Dr. | Metalurji ve Malzeme Müh. Bölümü | ODTÜ, Ankara |
| **1990-1999** | Prof. Dr. | Fizik Bölümü | Azerbaycan Devlet Üniv., Bakü, Azerbaycan |
| **1983-1990** | Doç. Dr. | Fizik Bölümü | Azerbaycan Devlet Üniv., Bakü, Azerbaycan |
| **1978-1983** | Yrd. Doç. Dr. | Fizik Bölümü | Azerbaycan Devlet Üniv., Bakü, Azerbaycan |
| **1984-1985** | Post. Dr. | Malzeme Bilim ve Müh. Bölümü | Tokyo Üniversitesi, Tokyo, Japonya |
| **1991-1992** | Prof. Dr. | Kimya ve Nüklear Müh. Bölümü | Kaliforniya Üniversitesi, Santa Barbara, Amerika Birleşik Devletleri |

**4.** **Yönetilen Yüksek Lisans ve Doktora Tezleri**

**4.1. Yüksek Lisans Tezleri**

1. E. Arslan, “Modelling, Simulations, Synthesis and Structural Characterization of Ni-Fe based Nanoalloys”, (Prof. Dr. Vedat Akdeniz'le ortak, Haziran 2018’de tamamlanmıştır)

2. H. Çakmak, “Bulk Amorphous Steel as a Coating Material: Hardfacing Applications”, (Prof. Dr. Vedat Akdeniz'le ortak, Haziran 2018’de tamamlanmıştır)

3. S. Toraman, “Design and Development of Ni-based HeuslerAlloys for Magnetic Refrigeration”, (Prof. Dr. Vedat Akdeniz'le ortak, Kasım 2018’da tamamlanmıştır)

4. R. Eriş, “Design and Development of High Temperature Superalloys”, (Prof. Dr. Vedat Akdeniz'le ortak, Temmuz 2017’de tamamlanmıştır)

5. M. Karataş, “Synthsis and Characterization of Bulk Amorphous/Nanocrystalline Soft magnetic Materials” (Prof. Dr. Vedat Akdeniz'le ortak, Temmuz 2016’da tamamlanmıştır)

6. S. Mut, “Modelling and Simuation of Structure-Property Correlations for Nickel Based Nanoalloys”, (Doç. Dr. Hande Toffoli'le ortak, Haziran 2015’de tamamlanmıştır)

7. B. Yağmurlu, “Bulk Amorphous/Nanocrystalline Materials: Structural Amorphous Steels”, (Prof. Dr. Vedat Akdeniz'le ortak, Aralık 2014’de tamamlanmıştır)

8. A. Fadaie, “Production and Structural Characterization of Fe-B Nanoalloys”, (Prof. Dr. Vedat Akdeniz'le ortak, Ocak 2014’de tamamlanmıştır)

9. E. Mermer, “Synthesis and Characterization of Copper Based Bulk Amorphous Alloys”, (Prof. Dr. Vedat Akdeniz'le ortak, Temmuz 2013’de tamamlanmıştır)

10. M. Kalkanci, “Phase Transformations and Magnetic Properties of Heusler-type Multicomponent Alloys”, (Prof. Dr. Vedat Akdeniz'le ortak, Eylül 2011’de tamamlanmıştır)

11. M. Aykol, “Nano-scale Phase Separation and Glass Forming Ability of Fe-B based Metallic Glasses”, (Prof. Dr. Vedat Akdeniz'le ortak, Eylül 2008’de tamamlanmıştır)

12. C. Topbaşi, “Theoretical and Experimental Investigations on Atomic and Magnetic Ordering in Full

Heusler Alloys”, (Prof. Dr. Vedat Akdeniz'le ortak, Haziran 2008’de tamamlanmıştır)

13. S, Süer, “Investigation on Bulk Glass Forming Ability of Ti-based Multicomponent Alloys”, (Prof. Dr. Vedat Akdeniz'le ortak, Haziran 2008’de tamamlanmıştır)

14. S. Aybar, “Solidification and Crystallization Behavior of Bulk Glass Forming Alloys”, (Prof. Dr. Vedat Akdeniz'le ortak, Eylül 2007’de tamamlanmıştır)

15. C. Ayas, “Theoretical and Experimental Investigation of Bulk Glass Forming Ability in Bulk Amorphous Alloy Systems”, (Prof. Dr. Vedat Akdeniz'le ortak, Ocak 2005’de tamamlanmıştır)

16. İ. Saltoğlu, “Synthesis and Characterization of the Zr-based Bulk Amorphous Alloys”, (Prof. Dr. Vedat Akdeniz'le ortak, Ocak 2004’de tamamlanmıştır)

17. E. Erdiller, “Investigation of Solidification and Crystallization of Fe-based Bulk Amorphous Alloys”, (Prof. Dr. Vedat Akdeniz'le ortak, Ocak 2004’de tamamlanmıştır)

18. H. Arslan, “Synthesis and Characterization of the Ni-based Bulk Amorphous Alloys”, (Prof. Dr. Vedat Akdeniz'le ortak, Haziran 2004’de tamamlanmıştır)

19. S. Gürbüz, “Synthesis and Characterization of Bulk Glass-forming Iron-Boron based Alloy systems”, (Prof. Dr. Vedat Akdeniz'le ortak, Haziran 2004’de tamamlanmıştır)

20. A. Abdelal, “Synthesis and Characterization of the Ti-based Bulk Amorphous/Nanocrystalline Alloys for Engineering Applications”, (Prof. Dr. Vedat Akdeniz'le ortak, Ocak 2004’de tamamlanmıştır)

21. E. Akşit, “Structural Characterization of the Mg-Ni-X Hydrogen Storoge Alloys”, (Prof. Dr. Vedat Akdeniz'le ortak, Ağustos 2003’de tamamlanmıştır)

22. H. Melih Türkeş, “Synthesis and Characterization of Non-Ferrous based Bulk Amorphous Alloys”, (Doç. Dr. Vedat Akdeniz'le ortak, Eylül 2001’de tamamlanmıştır)

23. M. Emin Atalar, “Monte Carlo Study of Ni3Al Based Intermetallics”, (Eylül 1998’de tamamlanmıştır)

24. Fatma Ağdaş, “Production of Fe based alloys as reinforcement in Al matrix composites”, (Doç Dr. Vedat Akdeniz'le ortak, Şubat 1997'de tamamlanmıştır)

25. M. Arer, “Monte Carlo Study of Fe3Al Based Intermetallics”, (Y. Doç Dr. Vedat Akdeniz'le ortak, Eylül 1996'da tamamlanmıştır)

26. İ. Aktürk, “Phase Stability and Ordering Processes in Fe-Al Intermetallics”, (Haziran 1996'da tamamlanmıştır)

27. M. Özbayramoğlu, “Direct casting of Fe-Al intermetallics”, (Y. Doç Dr. Vedat Akdeniz'le ortak, Eylül 95'de tamamlanmıştır)

**4.2. Doktora Tezleri**

1. M. Yıldırım, **“**Aluminides for High-Temperature Applications”**,** Middle East Technical University, Ankara, Turkey, (Prof. Dr. M. Vedat Akdeniz’le ortak, Aralık 2014’de tamamlanmıştır)

2. N. Duman, “Magnetic Monitoring Approach to Kinetics of Phase Transformations in Multicomponent Alloy Systems”, Middle East Technical University, Ankara, Turkey, (Prof. Dr. Vedat Akdeniz'le ortak, Mart 2012’de tamamlanmıştır)

**5. Yayınlar**

**5.1. Uluslararası hakemli dergilerde yayınlanan makaleler**

1. M. Yıldırım, M.V. Akdeniz and **A.O. Mekhrabov**, *Effect of Mo addition on microstructure, ordering, and room-temperature mechanical properties of Fe−50Al,* **Trans. Nonferrous Met. Soc. China,** vol. 28, pp. 1970−1979, 2018

2. R. Eris, **A.O. Mekhrabov** and M.V. Akdeniz, *High temperature site preference and atomic short-range ordering characteristics of ternary alloying elements in γ’-Ni3Al intermetallics,* **Philosophical Magazine**, vol. 97, No. 29, pp. 2615-2631, 2017

3. Yildirim M., Akdeniz M.V. and **Mekhrabov A.O.,** *Microstructural evolution and roo temperature mechanical properties of as-cast and heat-treated Fe50Al50-nNbn alloys (n=1, 3, 5, 7, and 9 at %),* **Materials Science & Engineering A,** vol. 664A, pp. 17–25, May 2016

4. Yildirim M., Akdeniz M.V. and **Mekhrabov A.O.,** *Microstructural Investigation and Phase Relationships of Fe-Al-Hf Alloys,* **Metallurgical and Materials Transactions A,** vol. 45A, pp. 3412- 3421, July 2014

5. M. Yalcin, **A. O. Mekhrabov** and M. V. Akdeniz, *Effects of Nanoparticle Geometry and Temperature on the Structural Evolutions in FeCo Nanoalloys,* **Acta Physica Polonica A**, vol. 125, No. 2, pp. 600-602, 2014

6. A. Fadaie, M. V. Akdeniz,and **A. O. Mekhrabov**, *Synthesis and Characterization of Fe80B20 Nanoalloys Produced by Surfactant Assisted Ball Milling,* **Acta Physica Polonica A**, vol. 125, No. 2, pp. 597-599, 2014

7. N. Duman, **A.O. Mekhrabov** and M.V. Akdeniz, *Magnetic Monitoring Approach to Nanocrystallization Kinetics in Fe-based Bulk Amorphous Alloy,* **Intermetallics,** vol. 43, pp. 152- 161, December 2013

8. Yildirim M., Akdeniz M.V. and **Mekhrabov A.O.,** *Effect of Ternary Alloying Elements Additions on the Order-Disorder Transformation Temperatures of B2-Type Ordered Fe-Al-X Intermetallics,* **Metallurgical and Materials Transactions A,** vol. 43A, pp. 1809-1816, June 2012

9. N. Duman, **A.O. Mekhrabov** and M.V. Akdeniz, *Microalloying effects on the microstructure and* *kinetics of nanoscale precipitation in Ni-A-Fe alloys,* **Intermetallics,** vol. 23, pp. 217-227, April 2012

10. N. Duman, **A.O. Mekhrabov** and M.V. Akdeniz, Microstructural and magnetic characterization of iron precipitation in Ni-Fe-Al alloys, **Materials Characterization**, vol. 62, pp. 606-614, 2011

11. N. Duman, A.O. Mekhrabov and M.V. Akdeniz, Kinetics of nanoscale precipitation in Ni-Fe-Al alloys: A magnetic monitoring approach, **J. of Alloys and Compounds**, vol.509, pp. 6781-6786, 2011

12. Kucuk I., Aykol M., Uzun O., Yildirim M., Kabaer M., Duman N., Yilmaz F., Erturk K., Akdeniz M.V., and **Mekhrabov A.O**., Effect of (Mo, W) substitution for Nb on glass forming ability and magnetic properties of Fe-Co-based bulk amorphous alloys fabricated by centrifugal casting, J**. of Alloys and Compounds,** vol. 509, pp. 2334-2337, 2011

13. Aykol M., Akdeniz M.V. and **Mekhrabov A.O**., *Solidification behavior, glass forming ability and thermal characteristics of soft magnetic Fe-Co-B-Si-Nb-Cu bulk amorphous alloys,* **Intermetallics,** vol. 19, pp. 1330-1337, 2011

14. Aykol M., **Mekhrabov A.O**. and Akdeniz M.V., *A generalized polytetrahedral cluster approach to partial coordination numbers in binary metallic glasses,* **Philosophical Magazine,** vol. 91, No. 22, pp. 2985-3005, 2011

15. Aykol M., **Mekhrabov A.O.** and Akdeniz M.V., Site selection and Pseudo-Clustering Behaviors of Alloying Elements in Aluminum-Lean k-TiAl Intermetallics, **Metallurgical and Materials Transactions A,** vol. 41A, pp. 267- 274, 2010

16. Suer S., **Mekhrabov A.O**. and Akdeniz M.V., Theoretical Prediction of Bulk Glass Forming Ability (BGFA) of Ti-Cu based Multicomponent Alloys, **J. of Non-Crystalline Solids**, vol. 355, pp. 373-378, 2009

17. Aykol M., **Mekhrabov A.O.** and Akdeniz M.V., Nano-scale Phase Separation in Amorphous Fe-B Alloys: Atomic and Cluster Ordering, **Acta Materiala**, vol. 57, pp. 171-181, 2009

18. Akdeniz M.V. and **Mekhrabov A.O.**, Solidification Microstructures and Carbides Morphology in Rapidly Solidified Fe-Al-Cr-C Alloys, **Metals and Materials Internationa**l, vol. 4, No. 4, pp. 397-402, 2008

19. Akdeniz M.V. and **Mekhrabov A.O.**, Impurity-Driven Nanocrystallization of Zr-based Bulk amorphous Alloys, **J. Nanosci. Nanotechnol.**, vol.8, pp. 894-900, 2008

20. **Mekhrabov A.O.** and Akdeniz M.V., Modelling and Monte Carlo Simulation of Atomic Ordering Processes in Ni3Al Intermetallics, **Modelling Simul. Mater. Sci. Eng**,, vol. 15, pp. 1-12, 2007

21. Akdeniz M.V., **Mekhrabov A.O.** and Pehlivanoğlu M.K., Solidification Behaviour of Bulk Glass-Forming Alloy Systems, **J. of Alloys and Compounds**, vol. 386, Issues 1-2, pp. 185-191, 2005

22. **Mekhrabov A.O.** and Akdeniz M.V., Modelling the Kinetics of Atomic Ordering in High Temperature Intermetallics, **Chemical Engineering Communications**, vol. 190, Number 5-8, pp. 898-910, 2003

23. **Mekhrabov A.O.** and Akdeniz M.V., Modelling of the Atomic Ordering Processes in Fe3Al Intermetallics by Monte Carlo Simulation Method combined with Electronic Theory of Alloys, **Metallurgical and Materials Transactions**, vol. 34A, pp. 721-735, 2003

24. **Mekhrabov A.O.**, Doruk M., Aivazov B. and Aliyev M., Microstructure and Corrosion Characteristics of Nickelless Stainless Steels, J. of Physicochemical Mechanics of Materials, Special Issue; “**Problems of Corrosion and Corrosion Protection of Materials”**, vol. 3, pp. 132-137, Lviv: Karpenko Physico-Mechanical Institute, Ukraine, 2002

25. Anık M., Doruk M. and **Mekhrabov A.O.**, On the Microstructural Characteristics of Al- Li Alloys and their Corrosion-Fatigue Behaviour, J. of Physicochemical Mechanics of Materials, Special Issue on “**Problems of Corrosion and Corrosion Protection of Structural Materials”**, vol. 1, pp. 117-122, Lviv: Karpenko Physico-Mechanical Institute, Ukraine, 2000

26. **Mekhrabov A.O.** and Akdeniz M.V., Effect of Ternary Alloying Elements additions on the Atomic Ordering Characteristics of Fe- Al Intermetallics, **Acta Mater.**, vol. 47, No. 7, pp. 2067-2075, 1999

27. **Mekhrabov A.O.**, Akdeniz M.V. and Arer M.M., Atomic Ordering Characteristics of Ni3Al Intermetallics with Substitutional Ternary Additions, **Acta Mater.** , vol.45, No. 3, pp. 1077-1083, 1997

28. Akdeniz M.V. and **Mekhrabov A.O.**, The Effect of Substıtutional Impurities on the Evolution of Fe-Al Diffusion Layer, **Acta Mater.** , vol. 46, No. 4, pp. 1185-1192, 1998

29. **Mekhrabov A.O.**, High- temperature X- ray diffraction studies of lattice dynamics in Ni3(Fe,Nb) ordered alloys, **J. of Acta Physica Polonica A**,vol. 85(3), pp. 571- 578,199

30. Akdeniz M.V., **Mekhrabov A.O**., Yılmaz T., The Role of Si addition on the interfacial interaction in Fe- Al diffusion layer, **Scripta Met. Et Mater.**, vol. 31(12), pp.1723-1728, 1994

31. **Mekhrabov A.O.**, Ressamoğlu A., and Öztürk T., A Study of Impurity Effect on Ordering Characteristics of Fe3Al Intermetallics, **J. of Alloys and Compounds**, vol.205, pp.147-156, 1994

32. **Mekhrabov A.O**., Impurity Effect of Me= Cr, Nb, or Mn Third-Component Atoms on Hyperfine Interactions in Ordered Ni3Fe Alloys, **Hyperfine Interactions**, vol. 59, pp. 337-340, 1990

33. **Mekhrabov A.O.**, Babaev Z.M., and Matysina Z.A., The Effect of third Component Impurity C on the Heat Capacity of A3B-type Ordered Alloys, **Phys. Stat. Sol.(b)**, vol. 156, pp. 419-430, 1989

34. Babaev Z.M., Menshikov A.Z., **Mekhrabov A.O.**, Valiev E.S., Atomic Ordering in the Ni3(Fe,Mn) Alloys, **Fiz. Metal. Metalloved**., vol. 64, pp.762-766, 1987

35. Matysina Z.A., **Mekhrabov A.O.**, and Babaev Z.M., The Ordering Temperatures and Ordering Parameters of Ni3Fe Alloys with Mn and Cr Impurities, **Fiz. Metal. Metalloved**., vol. 64, pp.202-205, 1987

36. Matysina Z.A., **Mekhrabov A.O.**, and et al., Inpurities in Ni3Fe Magnetic Alloys, **J. Phys. Chem. Sol.**, vol. 48, pp.419-423, 1987

37. Matysina Z.A., **Mekhrabov A.O.**, Babaev Z.M., and et al., Inpurities in Ni3Fe Alloys, **Phys. Stat. Sol.(b)**, vol. 138, pp. 399-406, 1986

38. **Mekhrabov A.O.**, Pseudopotential Calculations of the Atomic Short-Range Order Characteristics of Ni3(Fe,Me) Alloys, **Fiz. Metal. Metalloved.**, vol. 62, pp.1023-1025, 1986

39. **Mekhrabov A.O.**, Babaev Z.M., and et al., Pseudopotential Calculations of the Atomic Pair Interaction Energies and Order-Disorder Phase Transformation Temperature of Ni3(Fe,Me) Alloys, **Fiz. Metal. Metalloved.**, vol. 61, pp.1089-1093, 1986

40. **Mekhrabov A.O**., Shimotomai M., and Doyama M., Damage Recovery in Electron-Irradiated Fe-Ni-Cr Alloys, **J. Nucl. Mater**., vol. 133&134, pp. 549-552, 1985

41. **Mekhrabov A.O.,** Doyama M, Shimotomai M., Sato E and Iwata T., *The Influence of Vacancies on Radiation-Enhanced Phase Transition in Fe-Ni-Cr Alloys*, **Materials Science Forum**, vol. 15-18, pp. 1287-1292, 1987

42. **Mekhrabov A.O.,** Doyama M, Shimotomai M., Sato E and Iwata T., *Recovery of Ni3Fe and Ni3(Fe,Nb) Irradiated* *by 2 MeV electrons*, **Materials Science Forum**, vol. 15-18, pp. 1293-1298, 1987

43. Shimotomai M., **Mekhrabov A.O.**, Doyama M., and Fujisawa H., Magnetostriction in Laves Phase Compounds RE1-XPrXFe2 (RE= Ce, Sm,and Y) and their easy axes of Magnetization, **Physica**, vol. 130B, pp. 283-285, 1985

44. **Mekhrabov A.O.**, and Doyama M., Electronic Theory of Atomic Short-Range Order for Ternary Alloys using the Pseudopotential Approximation and its Comparison with Experiments, **Phys. Stat. Sol.(b)**, vol. 126, pp. 453-458, 1984

45. Katsnelson A.A., **Mekhrabov A.O**., and Silonov V.M., Electronic theory of Atomic Short-Range Order for Ternary Alloys in the Pseudopotential Approximation, **Fiz. Metal. Metalloved** , vol. 52, pp.661-662,1981

46. Katsnelson A.A., **Mekhrabov A.O.**, and Silonov V.M., Experimental and Theoretical Investigatiions of Short-Range Order in Ni-Os and Co-Os Alloys, **Fiz. Metal. Metalloved**, vol. 47, No. 5, pp.993-997, 1979

47. Katsnelson A.A., **Mekhrabov A.O**., and et al., Short-Range Order in Alloys of Ni with the Elements of group VIII in the Periodic Table of Elements, **Acta Cryst**., vol. 34A, p. 325, 1978

48. Katsnelson A.A., **Mekhrabov A.O.**, and Silonov V.M., The size Effect in Short-Range Order Electron Theory in the Approximation of the Static Concentration Waves Method, **Fiz. Metal. Metalloved** , vol. 45, No. 1, pp. 33-37,1978

49. Katsnelson A.A., **Mekhrabov A.O.**, and Silonov V.M., Calculation of the size Effect in Short-Range Order Electron Theory, **Izv. Vuz. SSSR, Fizika,** Vol. 10, pp. 103-108, 1976

50. Katsnelson A.A., **Mekhrabov A.O.**, and Silonov V.M., On the contribution of the size Effect into Energetical and Structural Ordering Parameters Calculated by the Pseudopotential Method, **Fiz. Metal. Metalloved.**, vol. 42, No. 2, pp. 278-283, 1976

**5.2. Uluslararası bilimsel toplantılarda sunulan ve bildiri kitabında (Proceeedins) basılan bildiriler.**

1. M. Yıldırım, M.V. Akdeniz and **A.O. Mekhrabov**, *Structural properties and room temperature mechanical properties of ultrafine eutectic Fe50Al50-nNbn alloys,* **International Conference – Intermetallics 2017**, Bad Staffelstein, Germany, pp. 128-129, 02-06 Oct., 2017

2. **A.O. Mekhrabov** and M.V. Akdeniz, *Design and Development of Novel Materials for Industrial Applications,* **International Conference on “Modern Trends in Physics”**, Conf. Proc. E-Book, Baku Univ. Publ., Baku, Azerbaijan, pp. 498-507, 20-22 April, 2017

3. R. Eris, **A.O. Mekhrabov** and M.V. Akdeniz, *Effects of Nb Element Addition on the Short Range Order Characteristics of Nickel-Based Superalloys,* **V-th International Scientific-Practical Conference on “Modern problems of Physics of Metals**, Conf. Proc. Book, Baku, Azerbaijan, pp. 48-52, 10-11 June, 2016

4. M. Yıldırım, M.V. Akdeniz and **A.O. Mekhrabov,** *Effectof Ti Addition on Cyclic Oxidation Behavior of FeAl Intermetallics*, **XIVth International Corrosion Symposium**, The Turkish Corrosion Association, Conf. Proc. Book, Bayburt, Turkey, pp. 295-304, 5-7 October, 2016

5. L. S. Mut, **A. O. Mekhrabov**, M. V. Akdeniz, M. M. Karatas, *Production and Structural Characterization of NiB Nanoalloy Synthesized by Ball Milling,* **18th International Metallurgy & Materials Congress – IMMC 2016**, **Congress Papers e-Book**, UCTE Chamber of Metallurgical&Materials Engineers, Istanbul, Turkey, pp. 309-312, 29 Sept.-01 Oct., 2016

6. M. Yıldırım, M.V. Akdeniz and **A.O. Mekhrabov**, *Effect of Ta Addition on Structural and Room Temperature Mechanical Properties of B2-Type Ordered FeAl Intermetallics,* **8th International Metallurgy & Materials Congress – IMMC 2016**, **Congress Papers e-Book**, UCTEA Chamber of Metallurgical&Materials Engineers, Istanbul, Turkey, pp. 402-405, 29 Sept.-01 Oct., 2016

7. M. M. Karatas, M.V. Akdeniz and **A.O. Mekhrabov**, *Synthesis and Characterization of Bulk Amorphous/Nanocrystalline Soft Magnetic Materials,* **18th International Metallurgy & Materials Congress – IMMC 2016**, **Congress Papers e-Book**, UCTEA Chamber of Metallurgical&Materials Engineers, Istanbul, Turkey, pp. 470-473, 29 Sept.-01 Oct., 2016

8. R. Eris, **A.O. Mekhrabov** and M.V. Akdeniz, *Effects of Cr Addition on the Atomic Ordering Properties of Ni-Based Superalloys,* **18th International Metallurgy & Materials Congress – IMMC 2016**, **Congress Papers e-Book**, UCTEA Chamber of Metallurgical&Materials Engineers, Istanbul, Turkey, pp. 689-692, 29 Sept.-01 Oct., 2016

9. S. Toraman, **A.O. Mekhrabov** and M.V. Akdeniz, *Design and Development of Ni-Based Heusler Alloys for Magnetic Refrigeration,* **18th International Metallurgy & Materials Congress – IMMC 2016**, **Congress Papers e-Book**, UCTEA Chamber of Metallurgical&Materials Engineers, Istanbul, Turkey, pp. 774-777, 29 Sept.-01 Oct., 2016

10. B. Yagmurlu, M.V. Akdeniz and **A.O. Mekhrabov**, *Synthesis of Bulk amorphous Steels Having Extreme High Hardness,* **17th International Metallurgy & Materials Congress – IMMC 2014**, **Congress Papers e-Book**, UCTEA Chamber of Metallurgical Engineers, Istanbul, Turkey, pp. 637-644, 11-13 September, 2014

11. M. Yalcin, **A.O. Mekhrabov** and M.V. Akdeniz, *Molecular Dynamic Simulation Study of Mechanical Behavior of Fe-B Amorphous Nanowires,* **17th International Metallurgy & Materials Congress – IMMC 2014**, Book of Abstracts, UCTEA Chamber of Metallurgical Engineers, Istanbul, Turkey, p. 180, 11-13 September, 2014

12. **A.O. Mekhrabov**, *Order-Disorder Transformations, Vacancy Behaviors and Damage Recovery in Electron-Irradiated Ni- and Fe-base Alloys,* **VII Eurasian Conference on “NUCLEAR SCIENCE AND ITS APPLICATION”,** Extended Abstracts, Baku, Azerbaijan, pp. 163-164, 21-24 October, 2014

13. M. Yıldırım, M.V. Akdeniz and **A.O. Mekhrabov**, *Effect of Mo Additions on Structural Properties of*

*B2-Type Ordered FeAl Intermetallics,* **16th International Metallurgy & Materials Congress – IMMC**

**2012**, **Congress Papers e-Book**, UCTEA Chamber of Metallurgical Engineers, Istanbul, Turkey, pp. 642-

650, 13-15 September, 2012

14. Yildirim M., Akdeniz M.V. and **Mekhrabov A.O.,** *Energetic and Structural Characterization of B2-*

*A2 order-disorder phase Transformation in Fe0.5(Al1-nXn)0.5 Intermetallics,* **FeAl2011, Discussion Meeting**

**on the Development of Innovative Iron Aluminium Alloys,** Extended Abstracts, pp. 75-78**,** Lanzarote

(Canary Island), Spain, 5-7 October, 2011

15. Yildirim M., Akdeniz M.V. and **Mekhrabov A.O.,** *Energetic and Structural Characterization of B2-*

*A2 order-disorder phase Transformation in Fe0.5(Al1-nXn)0.5 Intermetallics,* **FeAl2011, Discussion Meeting**

**on the Development of Innovative Iron Aluminium Alloys,** Extended Abstracts, pp. 75-78**,** Lanzarote

(Canary Island), Spain, 5-7 October, 2011

16. M. Aykol, **A.O. Mekhrabov**, M.V. Akdeniz, *Monte Carlo Modelling of Structural Defects in*

*Intermetallic Alloys*, **e-Proceedings of the 15th International Metallurgy & Materials Congress –**

**IMMC 2010**, UCTEA Chamber of Metallurgical Engineers, Istanbul, Turkey, pp. 1112-1121,

November11-13, 2010

17. M. Yıldırım, M.V. Akdeniz and **A.O. Mekhrabov**, *Synthesis of Bulk Amorphous/ Nanocrystalline Fe-*

*Co-Nd-B Magnetic Alloys,* **e-Proceedings of the 15th International Metallurgy & Materials Congress –**

**IMMC 2010**, UCTEA Chamber of Metallurgical Engineers, Istanbul, Turkey, pp. 416-422, November11-

13, 2010

18. N. Duman, **A.O. Mekhrabov** and M.V. Akdeniz, *Magnetic Properties of Ni-Fe-Al Alloys with varying*

*Fe content,* **e-Proceedings of the 15th International Metallurgy & Materials Congress – IMMC 2010**,

UCTEA Chamber of Metallurgical Engineers, Istanbul, Turkey, pp. 423-428, November 11-13, 2010

19. Yildirim M., Akdeniz M.V. and **Mekhrabov A.O.,** *Effect of Hf and Nb alloying elements additions on*

*Microstructure and Hardness of FeAl-basd Alloys,* **13-th International Materials Symposium**

**(IMSP’2010)**, Conference Proceedings, pp. 628-634, Pamukkale University, Denizli, Turkey, October 13-

15, 2010

20. Duman N., **Mekhrabov A.O** and Akdeniz M.V., *Kinetics of Iron Precipitation in Ni-Fe-Al Alloys,* **13-**

**th International Materials Symposium (IMSP’2010)**, Conference Proceedings, pp. 1039-1042,

Pamukkale University, Denizli, Turkey, October 13-15, 2010

21. **Mekhrabov A.O**, Akdeniz M.V. and Topbasi C., *Atomic Ordering Processes in Magnetic Shape*

*Memory (MSM) Ni50Mn50-xGax Full Heusler Alloys*, **4th International Conference on Recent Advances in**

**Materials, Minerals & Environment and 2nd Asian Symposium on Materials & Processing**,

Conference Proceedings e-book, pp. PEM-8, 1-7, Penang, Malaysia, June 1-3, 2009

22. Yildirim M., **Mekhrabov A.O** and Akdeniz M.V., *Effect of Alloying Element Additions on Order-*

*Disorder Phase Transformation Temperatures in Fe-Al-X Intermetallics,* **14-th International Metallurgy**

**& Materials Congress**, UCTEA Chamber of Metallurgical Engineers, Proceedings e-book, pp. 34-43,

Istanbul, Turkey, October 16-18, 2008

23. Yildirim M., **Mekhrabov A.O** and Akdeniz M.V., *Modelling of Glass Forming Ability of Fe-Al based*

*Alloy System,* **14-th International Metallurgy & Materials Congress**, UCTEA Chamber of Metallurgical

Engineers, Proceedings e-book, pp.120-127, Istanbul, Turkey, October 16-18, 2008

24. Duman N., **Mekhrabov A.O** and Akdeniz M.V., *Simulation of Glass Forming Ability of Ni-Al base*

*Multicomponent Alloy System,* **14-th International Metallurgy & Materials Congress**, UCTEA Chamber

of Metallurgical Engineers, Proceedings e-book,pp. 113-119, Istanbul, Turkey, October 16-18, 2008

25. Topbasi C., **Mekhrabov A.O** and Akdeniz M.V., *Prediction of Order-Order and Order- Disorder*

*Transition Temperatures in A2BC-type Full Heusler Alloys,* **14-th International Metallurgy&Materials**

**Congress**, UCTEA Chamber of Metallurgical Engineers, Proceedings e-book, pp. 128-139, Istanbul,

Turkey, October 16-18, 2008

26. Süer S., **Mekhrabov A.O**. and Akdeniz M.V., *Modelling and Theoretical* *Simulation of Bulk Glass*

*Forming Ability for Ti-Zr based Alloys,* **International Congress on Modern Problems of Physics of**

**Metals**, Baku Steel Company, Proceedings book, pp. 18-21, Baku, Azerbaijan, October 26-27, 2006

27. Topbaşi C., **Mekhrabov A.O**. and Akdeniz M.V., *Magnetocaloric Properties of Heusler Alloys,*

**International Congress on Modern Problems of Physics of Metals**, Baku Steel Company, Proceedings

book, pp. 121-125, Baku, Azerbaijan, October 26-27, 2006

28. Aykol M., **Mekhrabov A.O**. and Akdeniz M.V., *Bulk Amorphous and Nanocrystalline Soft Magnetic*

*Alloys,* **International Congress on Modern Problems of Physics of Metals**, Baku Steel Company,

Proceedings book, pp. 179-183, Baku, Azerbaijan, October 26-27, 2006

29. Yıldırım M., **Mekhrabov A.O**. and Akdeniz M.V., *Magnetocaloric Properties of Fe-based Bulk*

*Amorphous/Nanocrystalline Alloys,* **International Congress on Modern Problems of Physics of Metals**,

Baku Steel Company, Proceedings book, pp. 187-190, Baku, Azerbaijan, October 26-27, 2006

30. Süer S., **Mekhrabov A.O**. and Akdeniz M.V., *Simulation of Bulk Glass Forming Ability of Ti-Zr based*

*Multicomponent Alloy Systems,* **13-th International Metallurgy & Materials Congress**, UCTEA

Chamber of Metallurgical Engineers, Proceedings e-book, pp.783-790, Istanbul, Turkey, November 09-12,

2006

31. Saltoglu İ., Akdeniz M.V. and **Mekhrabov A.O**., *Synthesis and Characterization of Zirconium based*

*Bulk Amorphous Alloys,* **12-th International Metallurgy & Materials Congress**, UCTEA Chamber of

Metallurgical Engineers, Proceedings e-book, pp. 1103-1109, Istanbul, Turkey, 2005

32. Saltoglu İ., **Mekhrabov A.O** and Akdeniz M.V., *Prediction of Bulk Glass Forming Ability in Zirconium*

*based Multicomponent Alloy Systems,* **12-th International Metallurgy & Materials Congress**, UCTEA

Chamber of Metallurgical Engineers, Proceedings e-book, pp. 2078-2085, Istanbul, Turkey, 2005

33. Arslan H., Akdeniz M.V.and **Mekhrabov A.O**., *Synthesis of Ni-Nb based Bulk Amorphous Alloys,* **12-**

**th International Metallurgy & Materials Congress**, UCTEA Chamber of Metallurgical Engineers,

Proceedings e-book, pp. 1879-1886, Istanbul, Turkey, 2005

34. Arslan H., **Mekhrabov A.O**. and Akdeniz M.V., *Simulation of Bulk Glass Forming Ability of Ni-Nb*

*based Binary and Ternary Alloys,* **12-th International Metallurgy & Materials Congress**, UCTEA

Chamber of Metallurgical Engineers, Proceedings e-book, pp. 2086-2093, Istanbul, Turkey, 2005

35. Gurbuz S.N., Akdeniz M.V.and **Mekhrabov A.O**., *Synthesis and Characterization of Fe-B based Bulk*

*Amorphous Alloy Systems,* **12-th International Metallurgy & Materials Congress**, UCTEA Chamber of

Metallurgical Engineers, Proceedings e-book, pp. 1887-1894, Istanbul, Turkey, 2005

36. Gurbuz S.N., **Mekhrabov A.O**. and Akdeniz M.V., *Modelling of Glass Forming Ability of Fe-B based*

*Alloy Systems,* **12-th International Metallurgy & Materials Congress**, UCTEA Chamber of

Metallurgical Engineers, Proceedings e-book, pp. 2070-2077, Istanbul, Turkey, 2005

37. Erdiller E., Akdeniz M.V.and.**Mekhrabov A.O**., *Synthesis of Fe-Mo Rich Bulk Amorphous Alloys,* **12-**

**th International Metallurgy & Materials Congress**, UCTEA Chamber of Metallurgical Engineers,

Proceedings e-book, pp. 2094-2101, Istanbul, Turkey, 2005

38. Erdiller E., **Mekhrabov A.O**. and Akdeniz M.V., *Prediction of Bulk Glass Forming Ability of Fe-Mo-*

*based Alloy Systems,* **12-th International Metallurgy & Materials Congress**, UCTEA Chamber of

Metallurgical Engineers, Proceedings e-book, pp. 1197-1204, Istanbul, Turkey, 2005

39. Ayas C., **Mekhrabov A.O**. and Akdeniz M.V., *Molecular Dynamics Simulation of Glass Forming*

*Characteristics in Aluminium,* **12-th International Metallurgy & Materials Congress**, UCTEA Chamber

of Metallurgical Engineers, Proceedings e-book, pp. 1189-1196, Istanbul, Turkey, 2005

40. **Mekhrabov A. O**. and Akdeniz M. V., *Impurity Effects on the Formation and Growth Characteristics*

*of Fe-based Diffusion Layers at the Fe/Al Interface*, **COST 535 (THALU) Working Group Meeting on**

**“The Diffusion Couple Technique”**, Proceedings E-book, MPI für Eisenforschung GmbH, Düsseldorf,

Germany, December, 40 pp pages, 2004

41. Akdeniz M.V. and **Mekhrabov A.O**., *Hydrogen Storage Studies at Middle East Technical University,*

**JRC-IE Workshop on “Mapping European Knowledge on Hydrogen Storage”**, web page:

<http://www.jrc.nl/>, European Comission, Directorate General, Joint Research Centre, Netherlands, October,

45 pp pages, 2004

42. Akdeniz M.V. and **Mekhrabov A.O**., *Structural and Energetical Characterization of Mg-Ni-X*

*Hydrogen Storage Alloys*, **JRC-IE Workshop on Safety, Efficiency and Performance of Innovative**

**Hydrogen Storage Technologies for Road Transports**, Conf. Proc., pp. 46-48, Netherlands, 2003

43. İbragimoğlu B., **Mekhrabov A.O**., Akhmedov I.M., Alibekli R. and Guseinov A., *Petrol-Hydrogen*

*Admixture as a Fuel for Internal Combustion Engine*, **VIII International Conference on Hydrogen**

**Material Science and Chemistry of Carbon Nanomaterials**, eds. D.V. Schur, S.Yu. Zaginaichenko and

T.N. Veziroglu, Conf. Proc., pp. 982-985, Sudak, Crimea, Ukraine, 2003

44. Türkeş H.M., Akdeniz M.V. and **Mekhrabov A.O**., *Direct Production of Zr-based Bulk*

*Nanocrystalline Alloys,* **11-th International Metallurgy & Materials Congress**, UCTEA Chamber of

Metallurgical Engineers, Proceedings e-book, pp. 1524-1528, Istanbul, Turkey, 5–8 June, 2002

45. Türkeş H.M., Akdeniz M.V. and **Mekhrabov A.O**., *The Influence of Oxygen on the Crystallization*

*Behaviour of Zr-based Bulk Amorphous alloys,* **11-th International Metallurgy & Materials Congress**,

UCTEA Chamber of Metallurgical Engineers, Proceedings e-book, pp. 1001-1006, Istanbul, Turkey, 5–8

June, 2002

46. Pehlivanoğlu M. K., Yazgan B., Akdeniz M.V. and **Mekhrabov A.O**., *Investigation on Solidification*

*Kinetics of Bulk Amorphous Materials by Differential Scanning Calorimetry,* **11-th International**

**Metallurgy & Materials Congress**, UCTEA Chamber of Metallurgical Engineers, Proceedings e-book,

pp. 1535-1540, Istanbul, Turkey, 5–8 June, 2002

47. Türkeş H.M., Akdeniz M.V. and **Mekhrabov A.O**., *Electronic Theory of Glass Forming Ability in*

*Metallic Glasses,* **11-th International Metallurgy & Materials Congress**, UCTEA Chamber of

Metallurgical Engineers, Proceedings e-book, p. 1838, Istanbul, Turkey, 5–8 June, 2002

48. Pokhmurska A., Pokhmurskii V., Kaminskii O. and **Mekhrabov A.O**., *Corrosion Fatigue of Carbon-*

*and Stainless Steels after Laser Hardening,* **VIIth International Corrosion Symposium**, The Corrosion

Association, Conf. Proc., pp. 17-20, İstanbul, Turkey, 2000

49. **Mekhrabov A.O**., Akdeniz M.V. and Atalar M.E., *Computer Simulation of Atomic Ordering*

*Characteristics in L12 type Ordered Superstructures*, **10-th International Metallurgy & Materials**

**Congress**, UCTEA Chamber of Metallurgical Engineers, Conf. Proc., Vol. 2, pp. 1361-1367, Istanbul,

Turkey, 2000

50. Türkeş H.M., Akdeniz M.V. and **Mekhrabov A.O**., *Structural Investigation on Bulk Glass forming*

*Zr55Al10Ni5Cu30 Alloy,* **10-th International Metallurgy & Materials Congress**, UCTEA Chamber of

Metallurgical Engineers, Conf. Proc., Vol. 3, pp. 1963-1968, Istanbul, Turkey, 2000

51. Altınoluk H.B., Dilsizoğlu B., Aydınol M.K., **Mekhrabov A.O**. and Akdeniz M.V., *The Effect of*

*Alloying Additions on Glass Forming Tendency of Fe-Zr-X Alloys*, **10-th International Metallurgy &**

**Materials Congress**, UCTEA Chamber of Metallurgical Engineers, Conf. Proc., Vol. 3, pp. 1969-1974,

Istanbul, Turkey, 2000

52. Ağdaş F. Akdeniz M.V. and **Mekhrabov A.O**., *Effect of Manganese Content on the* *Formation of*

*Intermetallic Layer at Fe-Al Interface*, **9-th International Metallurgy & Materials Congress**, UCTEA

Chamber of Metallurgical Engineers, Conf. Proc., Vol. 2., pp. 1329-1334, Istanbul, Turkey, 1997

53. Arer M.M., **Mekhrabov A.O**. and Akdeniz M.V., *Monte Carlo Study of Temperature Effect* *on Fe3Al*

*based Intermetallics*, **9-th International Metallurgy & Materials Congress**, UCTEA Chamber of

Metallurgical Engineers, Conf. Proc., Vol. 2, pp. 1365-1370, Istanbul, Turkey, 1997

54. Akdeniz M.V., **Mekhrabov A.O.** and Özbayramoğlu M., *Suction Casting of Iron Aluminides*, **The**

**4-th European Conference on Advanced Materials and Processes: EUROMAT 95**, Federation of

European Materials Societies (FEMS), Conf. Proc., Vol. 4, pp. 19-24, Venice, Italy,1995

55. Akdeniz M.V. and **Mekhrabov A.O.**, *The Effect of Mg Adddition on the Formation and Growth of*

*Iron Aluminides in Aluminized Diffusion Layer*, **The 4-th European Conference on Advanced Materials**

**and Processes: EUROMAT 95**, Federation of European Materials Societies (FEMS), Conf. Proc., Vol.

4, pp. 487-490, Venice, Italy, 1995

56. Özbayramoğlu M., Akdeniz M.V. and **Mekhrabov A.O.**, *Structural Examinations on Iron Aluminides,*

**8-th International Metallurgy & Materials Congress,** UCTEA Chamber of Metallurgical Engineers,

Conf. Proc., Vol. 1., pp. 205-210, Istanbul, Türkiye, 1995

57. Akdeniz M.V., **Mekhrabov A.O.** and Yılmaz T., *The Effect of Alloying Additions on the Growth of*

*Intermediate Phases Formed at the Fe-Al Interface during Coating,* **8-th International Metallurgy &**

**Materials Congress**, UCTEA Chamber of Metallurgical Engineers, Conf. Proc., Vol. 2., p. 1163-1168,

Istanbul, Türkiye, 1995

58. **Mekhrabov A.O.** and et al., *The Effect of Impurity Addition on B2-DO3 Transition Temperature in*

*Fe-Al Intermetallic Compounds,* **7-th International Metallurgy and Materials Congress**, Conf. Proc.,

Vol. 2, pp. 901-911, Ankara, Turkey, 1993

59. Matysina Z.A., Milyan M.I., Babaev Z.M.,and **Mekhrabov A.O.,** *Solubility of Substitutional* *Impurities*

*in the Ordered Alloys*, Proc. of **III-rd All- Soviet Union Conferences on “Physico-Chemical** **Problems**

**of High-Temperature Hydrogen Diffusivity in Metals”,** pp. 103-104, Dnepropetrovsk, Ukrainian SSR,

1983

60. Katsnelson A.A., **Mekhrabov A.O.**, and et al., *Pseudopotential* *Theory of Atomic Short-Range Order*

*and its Comparison with Experiments*, Proc. of **V-th All-Soviet Union Conferences on “Atomic Ordering**

**and their Influence on the Alloy Properties**”, pp. 5-11, Tomsk, USSR, 1978

**5.3. Yazılan uluslararası kitaplar veya kitaplarda bölümler**

1. Doruk M. and **Mekhrabov A. O.,** *Materials for the Future: A view from Academia*, in**Materials Science and Technology and Culture of Science in the Islamic World**, eds. M. Ergin and M. R. Zou’bi,Islamic Academy of Sciences, Amman, Jordan, pp. 137-164, 2004

2. Akdeniz M.V., **Mekhrabov A.O.** and Ağdaş F., *Microstructural Examination of Mn alloyed Fe-Al based Intermetallics*, in **Intermetallics and Superalloys**, EUROMAT-Volume 10, eds. D.G. Morris, S. Naka and P. Caron, Wiley-VCH Verlag, Weinheim, pp. 228-233, 2000

3. **Mekhrabov A.O.**, Akdeniz M.V. and Aktürk I., *The Effect of Alloying Additions on the Interfacial Interactions at the Fe-Al Interface During Coating*, in **Stability of Materials**, NATO Advanced Study Institutes (ASI), Eds. A. Gonis, P. E. A. Turchi and J. Kudrnousky, Plenum Press, New York, pp. 681-686, 1996

4. Binnatov K.G., **Mekhrabov A.O.,** and et al., *Effect of Electron and Gamma-Ray Irradiation on the* *Chemical Composition and Atomic Distribution of Copper- and Iron-based Alloys*, In: **Effects of** **Radiation On Materials**, Vol. 1, pp. 667-672, Eds. Packan N.H., Stoller R.E., and Kumar A.S., ASTM, Philadelphia, USA, 1989

5. **Mekhrabov A.O**., *The Mossbauer Spectroscopy Investigation of the Atomic Ordering Processes in* *the Ni3(Fe,Me) Ternary Alloys*, In: **Nuclear Spectroscopy and The Structure of Atomic Nucleus**, p. 542, Nauka Publ., Leningrad, USSR, 1988

6. Binnatov K.G., **Mekhrabov A.O.,**and et al., *The Influence of Electron Irradiation on the Structural* *State of Fe-Mn Alloys*, In: **Radiation-Induced Changes in Microstructure**, Eds. Garner F.A., Packan N.H., and Kumar A.S., pp. 743-747, ASTM, Philadelphia, USA, 1987

7. **Mekhrabov A.O.,** Doyama M., Shimotomai M., and Sato E., *The Investigation of Order-Disorder Phase* *Transformation in* *Ni3Fe and Ni3(Fe,Nb) Alloys by Positron Annihilation*, In: **Positron Annihilation,** Ed. Jain P.C., Singru R.M., and Goinathan K.P., pp. 602-604, World Scientific Publ. Co., Singapore, 1985

8. Matysina Z.A., Babaev Z.M.,and **Mekhrabov A.O**., *The Impurıty Effect on the Structural Ordering* *Processes of the alloys with FCC lattices*, In: **The Metastable Structure Formation Problems in the** **Alloys**, pp. 147-154, Dnepropetrovsk, Ukrainian SSR, 1983

9. Katsnelson A.A., **Mekhrabov A.O.**, and et al, *Pseudopotential Method in theory of Atomic Ordering*, In: **Solid State Physics and Chemistry**, pp. 54-65, Moscow State University Publ., Moscow, USSR, 1979

* 1. **Ulusal hakemli dergilerde yayımlanan makaleler**

1. Binnatov K.G. and **Mekhrabov A.O.,** *Mössbauer-Effect Study of Fine Atomic Structure of Fe-Ni-C Alloys*, **Turkish J. of Physics**, vol. 25, No. 2, pp. 121-127, 2001

2. Binnatov K.G., Ali-zade I.I. and **Mekhrabov A.O.**, *Effect of Nitriding on the Phase Transformations in the Fe-Mn Alloys*, **Turkish J. of Physics**, vol. 25, No. 6, pp. 537-542, 2001

3. Eyvazov B., Aliev M., **Mehrabov H.O**. and Doruk M., *The Improvement of Corrosion Resistance of High Porous Powder Metallurgy Alloys by Coating with Polymeric Materials*, **Corrosion**, J. of Turkish Corrosion Association, vol. 10, No. 1-3, p. 20-24, 1998

3. Ağdaş F., Akdeniz M.V., and **Mekhrabov A.O**., *Intermetallic Compounds and their* *General Properties*, **Metallurgy, UCTEA Chamber of Metallurgical Engn**., Ankara,Turkey, vol.20, No.104, pp. 37-41, 1996

4. Akdeniz M.V., **Mekhrabov A.O.** and Özbayramoğlu M., *Morphology of Solidification Microstructures in Fe-Al Based Intermetallic Compounds*, **Tr. J. of Medical Sciences,** Supplement, p. 165, 1995

5. **Mekhrabov A.O.**, Akdeniz M.V. and Özbayramoğlu M., *Effect of Alloying Additions on the Fracture Behaviour of the Iron Aluminides*, **Tr. J. of Medical Sciences,** Supplement, p. 169, 1995

6. **Mekhrabov A.O.** and et all., *Order- disorder phase transformation in Fe - Al type alloys with BCC structure,***Turkish J. of Physics**, vol.18, pp.444-455 ,1994

7. **Mekhrabov A.O.**, *A study of short- range order in ternary alloys in the pseudopotential approximation,* **Turkish J. of Engineering and Enviromental Sciences**, vol. 18,pp. 349- 356, 1994

**5.5. Ulusal bilimsel toplantılarda sunulan ve bildiri kitabında basılan bildiriler**

1. Aykol M., Akdeniz M.V and **Mekhrabov A.O**., *Synthesis and Characterization of Fe-B based Bulk*

*Amorphous Soft Magnetic Alloys by Conventional Casting Methods,* **2-nd National Boron Workshop**,

BOREN and ETİ MADEN, Proceedings book, pp. 433-439, Ankara, Turkey, 17-18 April, 2008 (in Turkish)

2. Aykol M., **Mekhrabov A.O.** and Akdeniz M.V., *Monte Carlo Simulation of Fe80B20 and Fe83B17 Alloys:*

*Structure of Crystalline Phases,* **2-nd National Boron Workshop**, BOREN and ETİ MADEN,

Proceedings book, pp. 549-555, Ankara, Turkey, 17-18 April, 2008 (in Turkish)

3. Doruk M., Aivazov B., **Mekhrabov A.O.** and Aliev M., *Design and Devolepment of Alloyed* *Steels used for Oil and Petrochemical Industries*, **6th Corrosion Symposium**, The Corrosion Association, Conf. Proc., pp. 66-79, İzmir, Türkiye, 1998

4. **Mekhrabov A.O**., *The Theoretical and Experimental Investigations of Atomic Ordering and its* *Effect on Physical Properties of Multicomponent Ni- and Fe-based Alloys*, In: Proc. of **Conferences on the Results of Research Projects for 1984 Year**, pp. 26-27, Azerbaijan State Univ. Publ., Baku, Azerbaijan SSR, 1986

**6. Projeler**

1. **Fe-Ni Nanoalaşımların Yapı-Özellik İlişkilerinin Modellenmesi, Mekanik Nanoalaşımlama**

**ile Üretimi ve Karakterizasyonu**, Graduate School of Natural and Applied Sciences, METU,

BAP Project, **Project No.: BAP-308-2018-2725,** 2018

2. **Yüksek Sıcaklık Ni-Al Esaslı Süperalaşımlarının Tasarımı ve Geliştirilmesi**, Graduate School

of Natural and Applied Sciences, METU, BAP Project, **Project No.: BAP-03-08-2017-006,** 2017

3. **Çok İşlevselli Süper Alaşım: Sakız Metal**, Graduate School of Natural and Applied Sciences,

METU, BAP Project, **Project No.: BAP-03-08-2017-007,** 2017

4. **Fe-Co Nanoalaşım Parçacıkların Yapısal özelliklerinin Teorik Yöntemlerle İncelenmesi**,

Graduate School of Natural and Applied Sciences, METU, BAP Project, **Project No.: BAP-03-**

**08-2015-003,** 2016

|  |
| --- |
| 5. **İri Hacimli Camsı/Nanokristal Yapı Çeliklerin Sentezlenmesi ve Karakterizasyonu**,  Graduate School of Natural and Applied Sciences, METU, BAP Project, **Project No.:**  **BAP-03-08-2013-008,** 2013-2014 |

6. **Modelling of Structure-Property Correlations, Production via Mechanical Nanoalloying and**

**Characterization of Intermetallic and Metallic Glass Nanoalloys**, COST-MP0903- TUBİTAK

project, 2010- 2014

7. **Design and Development of Co-base Multycomponent Bulk Amorphous and**

**Nanocrystalline Aloys**, Graduate School of Natural and Applied Sciences, METU, BAP

Project, **Project No.: BAP-03-08-2010-07,** 2010- 2012

8. **Linyit Esaslı Termik Santrallerde Hasar Analizi ve Malzeme İyileştirme Çalışmaları**,

State Planning Organization (DPT) Project**, BAP-03-08-DPT.2007K120220,** 2007**-** 2010

9. **Development of Magnetic Materials for Civil and Military Applications-1: Magnetic**

**Refrigerators:** State Planning Organization (DPT) Project**, BAP-03-08-DPT.2003 (06) K120920-19,** 2006**-** 2008

10. **Synthesis and Characterization of the Ti-Zr-based Multicomponent Amorphous and**

**Nanocrystalline Alloys,** Graduate School of Natural and Applied Sciences, METU, BAP Project,

**Project No.: BAP-2006-07-02-00-01,** 2006- 2007

11. **Development of Boron-based Bulk Amorphous/Nanocrystalline Materials for Applications in**

**Power Trasformer&Otomotive Electronics Industries,** National Bor Investigation Institute

(BOREN)-TUBİTAK Project, **Project No.: 105M354**,2006**-** 2008

12. **Modelling, Development and Characterization of Multicomponent Aluminides for High**

**Temperature and Structural Applications,** European Cooperation in the field of Scientific and

Technical Research-COST,TUBİTAK**, COST Action 535, MAG-COST535- 104M223,** 2005**-** 2008

13. **Development of Mathematical Models for the Description of Non-Isothermal Transformations**

**in Steels,** Turkish-Hungarian Joint Project, TUBİTAK, **MISAG-HUN2**, (2003-2005)

14. **Monte Carlo Simulation of Atomic Ordering Processes in Bulk Amorphous/Nanocrystalline**

**Alloys,** Graduate School of Natural and Applied Sciences, METU, BAP Project, **Project No.: BAP-**

* + - * 1. (May 2003- 2005)

15. **Metallic Glasses for Industrial Applications,** DPT project, **Project No.: AFP-03-08-**

**DPT.98K122560** (April 1998- June 2003)

16. **Synthesis and Characterization of the Fe-based Bulk Amorphous and Nanocrystalline**

**Magnetic Alloys,** Graduate School of Natural and Applied Sciences, METU, BAP Project, **Project**

**No.: BAP-2002-07-02-00-111** (April 2002- May 2004)

17. **Synthesis and Characterization of the Ti-based Bulk Amorphous and Nanocrystalline Alloys**

**for Enginnering Applications,** Graduate School of Natural and Applied Sciences, METU, BAP

Project, **Project No.: BAP-2002-07-02-00-45** (April 2002- May 2004)

18. **Solidification and Crystallization Kinetics of the Fe-based Bulk Amorphous and**

**Nanocrystalline Alloys,** Graduate School of Natural and Applied Sciences, METU, BAP Project,

**Project No.: BAP-2002-07-02-00-46** (April 2002- May 2004)

19. **Synthesis and Characterization of the Ni-based Bulk Amorphous Alloys,** Graduate School of

Natural and Applied Sciences, METU, BAP Project, **Project No.: BAP-2002-07-02-00-44** (April

2002- May 2004)

20. **Synthesis and Characterization of the Zr-based Bulk Amorphous Alloys,** Graduate School of

Natural and Applied Sciences, METU, BAP Project, **Project No.: BAP-2002-07-02-00-108** (April

2002- May 2004)

21. **Synthesis and Development of the Fe-based Bulk Metallic Materials,** Graduate School of Natural

and Applied Sciences, METU, AFP Project, **Project No.: AFP-99.06.02.16** (May 1999-2002)

22. **Synthesis and Characterization of Nonferrous-based Bulk Amorphous Alloys,** Graduate School

of Natural and Applied Sciences, METU, **Research Student Support Programme (AGDP)**

(September 1999-2002)

23. **Design and Development of High-Alloy Steels for Applications in Petroleum and Petrochemical**

**Industries**, Turkish-Azerbaijan Joint Research Project, **TUBİTAK-DORPOG** (1994-1998)

24. **Development of Intermetallic Reinforced Al Laminates for Structural Applications**, TUBİTAK

Project, **MİSAG-67** (1994-1996)

25. **Modeling and Estimation of Interfacial Energies in Intermetallic Reinforced Al Metal Matrix**

**Composites**, AFP Project, **Project No.: AFP-03-08-04** (1993-1994)

**7. İdari Görevler**

Bölüm Başkanlığı Azerbaycan Devlet Üniv., Bakü, Azerbaycan1990-1994

**8. Bilimsel Kuruluşlara Üyelikle**r

1. Fellow and Council Member of Islamic World Academy of Sciences (2000),
2. Member of Union of Chambers of Turkish Engineers and Architects (1998)

**9. Ödüller**

1. **All-Soviet Union Lecturing&Research Award in the United States of America**, Fulbright Scholar Program, Council for International Exchange of Scholars, University of California at Santa Barbara, Dept. of Chemical and Nuclear Engineering, Santa Barbara, USA, 1991/1992, (4 month).
2. **All-Soviet Union Viziting Researcher Award in Japan**, Japan Society of Promotion for Science (JSPS), University of Tokyo, Dept. of Materials Science and Engineering, Tokyo, Japan, 1984/1985, (1 year).
3. **“Best Scientific Work” Award of Azerbaijan Republic** among young scientist of Azerbaijan for 1981 year.

**10. Son iki yılda verdiğiniz lisans ve lisansüstü düzeydeki dersler için aşağıdaki tabloyu**

**doldurunuz.**

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| --- | --- | --- | --- | --- | --- |
| **Akademik Yıl** | **Dönem** | **Dersin Adı** | **Haftalık Saati** | | **Öğrenci Sayısı** |
| **Teorik** | **Uygulama** |
| 2017-2018 | Güz | Met E 230 "Fundamentals of Materials Science and Engineering" | 3 | 0 | 55 |
| Met E 507 "Advanced Crystallography and Diffraction" | 2 | 2 | 8 |
| İlkbahar | MetE 206 “Materials Laboratory” | 1 | 2 | 97 |
| MetE 230 ”Fundamentals of Materials Science and Engineering” | 3 | 0 | 52 |
| Met E 402 "Materials Engineering Design II" | 1 | 4 | 13 |
| MetE 540 "Phase Stability in Alloys" | 2 | 2 | 6 |
| 2016-2017 | Güz | Met E 230 "Fundamentals of Materials Science and Engineering" | 3 | 0 | 39 |
| Met E 507 "Advanced Crystallography and Diffraction" | 2 | 2 | 6 |
|  |  |  |  |
| İlkbahar | MetE 206 “Materials Laboratory”  MetE 230 ”Fundamentals of Materials Science and Engineering”  Met E 402 "Materials Engineering Design II"  MetE 540 "Phase Stability in Alloys" | 1  3  1  2 | 2  0  4  2 | 68  32  12  8 |