

## **Abdullah Cahit KARAOĞLANLI**

Dr. Öğretim Üyesi

Metalurji ve Malzeme Mühendisliği

Bartın Üniversitesi

Tel.: +905354989356; E-posta: karaoğlanli@bartin.edu.tr

### **EĞİTİM BİLGİLERİ:**

Doktora: (2012) Metalurji ve Malzeme Ana Bilim Dalı, Metalurji ve Malzeme Mühendisliği Bölümü, Sakarya Üniversitesi, Sakarya, Türkiye.

Doktora: (2010-2011) Makine Mühendisliği, Yüzey Teknolojileri ve Fonksiyonel Malzemeler Enstitüsü, DAAD Alman Akademik Değişim Programı Chemnitz Üniversitesi

Yüksek Lisans: (2008) Metalurji ve Malzeme Ana Bilim Dalı, Metalurji ve Malzeme Mühendisliği Bölümü, Sakarya Üniversitesi, Sakarya, Türkiye.

Yüksek Lisans: (2006-2007) Makine Mühendisliği (Erasmus Öğrenci Değişimi Programı), Karlsruhe Üniversitesi

Lisans: (2006) Endüstri Mühendisliği, Sakarya Üniversitesi, Sakarya, Türkiye. (İkinci Anadal)

Lisans: (2005) Metalurji ve Malzeme Mühendisliği Bölümü, Sakarya Üniversitesi, Sakarya, Türkiye.

### **ÜNVAN:**

2007-2008- Ar-Ge Mühendisi, Ar-Ge Yöneticisi Makine İmalat, Demiryolları, Eskişehir Köse Kardeşler, Makine Sanayi ve Ticaret A.Ş

2008-2009- Ar-Ge Müdürü, Raylı Ulaşım, Demiryolları, Rayulaş Raylı Ulaşım Demiryolu Araçları ve Makine Sanayi Ticaret A.Ş.

2009 -2012- Arş.Gör-Arş.Gör Dr., Metalurji ve Malzeme Mühendisliği Bölümü, Bartın Üniversitesi, Bartın, Türkiye

2013 Ocak-2014- Yrd.Doç.Dr., Bölüm Başkan Yardımcısı, Metalurji ve Malzeme Mühendisliği Bölümü, Bartın Üniversitesi, Bartın, Türkiye

2014-Halen- Bölüm Başkanı, Dr.Öğr.Üyesi, Metalurji ve Malzeme Mühendisliği Bölümü, Bartın Üniversitesi, Bartın, Türkiye

2017-Halen, Dekan Yardımcısı, Mühendislik Fakültesi, Bartın Üniversitesi, Bartın, Türkiye

2017- Halen, Yürütme Kurulu Başkanı, Kamu-Sanayi-Üniversite, Bartın Sektörel Kalkınma ve İşbirliği Kurulu (BARKİK)

### **ONUR VE ÖDÜLLER:**

1. Erasmus Öğrenci Değişim Programı, Universitat Karlsruhe, Department of Mechanical Engineering, 2006 – 2007, Almanya.
2. Forschungszentrum Karlsruhe, Institute of Nanotechnology, 2007, Germany.
3. DAAD German Academic Exchange Service, Doktora Arastirma Bursu, Technische Universitat Chemnitz, Department of Surface Technology and Functional Materials, 2010-2011, Germany
4. Tübitak-2223 Genç Araştırmacı Desteği, 2012.
5. Marquis Who's Who in the World, 2013 30th Anniversary Edition.
6. TÜBİTAK Uluslararası Bilimsel Yayınları Teşvik Programı, Yayın Teşvik Ödülü.
7. Bartın Üniversitesi, Mühendislik Fakültesi Dekanlığı, Teşekkür Belgesi, 2014.

8. Batı Karadeniz Kalkınma Ajansı, 11. Kalkınma Kurulu Toplantısı ve I. İnovasyon Ödülleri Ödül Töreni, Mansiyon Ödülü, 2014.
9. Bartın Üniversitesi Rektörlüğü, Uluslararası Makaleler Sebebiyle Teşekkür Belgesi, 2015.
10. Bartın Üniversitesi Rektörlüğü, Teşekkür Belgeleri.
11. Yurt içi ve Yurt dışı uluslararası konferanslar Bilim Kurulu ve Yürütme Kurulu Üyelikleri.

#### **YAYINLANMIŞ KİTAPLAR ve KİTAPLARDA BÖLÜMLER:**

1. Karaoglanli, A. C., Doleker, K. M. and Ozgurluk, Y. (2017). "State of the Art Thermal Barrier Coating (TBC) Materials and TBC Failure Mechanisms." In Properties and Characterization of Modern Materials (441-452). Springer Singapore.
2. Kaplan, M., Uyaner, M., Ozgurluk, Y., Doleker, K. M. and Karaoglanli, A. C. (2019). "Evaluation of Hot Corrosion Behavior of APS and HVOF Sprayed Thermal Barrier Coatings (TBCs) Exposed to Molten  $\text{Na}_2\text{SO}_4 + \text{V}_2\text{O}_5$  Salt at 1000° C. In Engineering Design Applications." (pp. 441-459). Springer, Cham.
3. Unal, O., Karaoglanli, A. C., Ozgurluk, Y., Doleker, K. M., Maleki, E. and Varol, R. (2019). "Wear Behavior of Severe Shot Peened and Thermally Oxidized Commercially Pure Titanium." In Engineering Design Applications (pp. 461-470). Springer, Cham.,
4. Karaoglanli, A.C., Ogawa K., Turk A. and Ozdemir "Thermal Shock and Cycling Behavior of Thermal Barrier Coatings (TBCs) Used in Gas Turbines", Progress in Gas Turbine Performance Book, ISBN: 978-953-51-1166-5, 2013.
5. Çalışkan, H., Kurşuncu, B., Güven, Ş.Y., Karaoglanli, A.C., Gök, M.S., Alsaran, A., Springer Book Series On Advanced Structred Materials, Effect of boron nitride coating on wear behavior of carbide cutting tools in milling of Inconel 718" ASM: Research Monograph in the Advanced Structred Materials Series by Springer, Germany ISSN: 1869-8433, 2016.

#### **YAYINLANMIŞ MAKALELER (SCI indeks):**

1. Karaoglanli, A. C., Doleker, K. M., Demirel, B., Turk, A. and Varol, R. (2015). "Effect of shot peening on the oxidation behavior of thermal barrier coatings. " Applied Surface Science 354: 314-322.
2. Doleker, K. M. and Karaoglanli, A. C. (2017). "Comparison of oxidation behavior of shot-peened plasma spray coatings with cold gas dynamic spray coatings." Oxidation of Metals 88(1-2): 121-132.
3. Karaoglanli, A. C., Oge, M., Doleker, K. M. and Hotamis, M. (2017). "Comparison of tribological properties of HVOF sprayed coatings with different composition." Surface and Coatings Technology 318: 299-308.
4. Doleker, K. M. and Karaoglanli, A. C. (2017). "Comparison of oxidation behavior of YSZ and  $\text{Gd}_2\text{Zr}_2\text{O}_7$  thermal barrier coatings (TBCs)." Surface and Coatings Technology 318: 198-207.
5. Doleker, K. M., Ahlatci, H. and Karaoglanli, A. C. (2017). "Investigation of Isothermal Oxidation Behavior of Thermal Barrier Coatings (TBCs) Consisting of YSZ and Multilayered YSZ/  $\text{Gd}_2\text{Zr}_2\text{O}_7$  Ceramic Layers." Oxidation of Metals 88(1-2): 109-119.
6. Ozgurluk, Y., Doleker, K. M. and Karaoglanli, A. C. (2018). "Hot Corrosion Behavior of YSZ,  $\text{Gd}_2\text{Zr}_2\text{O}_7$  and YSZ/ $\text{Gd}_2\text{Zr}_2\text{O}_7$  Thermal Barrier Coatings Exposed to Molten Sulfate and Vanadate Salt." Applied Surface Science 438: 96-113.
7. Doleker, K.M., Ozgurluk, Y., Ozkan, D., Mesekiran, N. and Karaoglanli, A.C. (2018). "Comparison of Microstructures and Oxidation Behaviors of Yttria And Magnesia

- Stabilized Zirconia Thermal Barrier Coatings (TBC)." Materiali in tehnologije 52(3): 315-322.
8. Ozgurluk, Y., Doleker, K. M., Ahlatci, H. and Karaoglanli, A. C. (2018). "Investigation of hot corrosion behavior of thermal barrier coating (TBC) systems with rare earth contents." Arabian Journal of Geosciences 11(11): 267.
  9. Doleker, K. M., Ozgurluk, Y. and Karaoglanli, A. C. (2018). "Isothermal oxidation and thermal cyclic behaviors of YSZ and double-layered YSZ/La<sub>2</sub>Zr<sub>2</sub>O<sub>7</sub> thermal barrier coatings (TBCs)." Surface and Coatings Technology 351: 78-88.
  10. Doleker, K. M., Ozgurluk, Y., Parlakyigit, S., Ozkan, D., Gulmez, T. and Karaoglanli, A. C. (2018). "Oxidation Behavior of NiCr/YSZ Thermal Barrier Coatings (TBCs)." Open Chemistry (Accepted, In press).
  11. Doleker, K. M., Ozgurluk, Y., Ahlatci, H. and Karaoglanli, A. C. (2018) "Isothermal Oxidation Behavior of Gadolinium Zirconate (Gd<sub>2</sub>Zr<sub>2</sub>O<sub>7</sub>) Thermal Barrier Coatings (TBCs) produced by Electron Beam Physical Vapor Deposition (EB-PVD) technique." Open Chemistry (Accepted Manuscript, In press).
  12. Ozgurluk, Y., Doleker, K. M., Ahlatci, H., Ozkan, D. and Karaoglanli, A. C. (2018). "The Microstructural Behavior Investigation of Vermiculite-Infiltrated Electron Beam Physical Vapor Deposition Thermal Barrier Coatings." Open Chemistry (Accepted Manuscript, In press).
  13. Parlakyigit, A.S., Gulmez, T., Karaoglanli, A.C., Evaluation of Mixed Oxide Formation and Sintering Behavior in Thermal Barrier Coatings on Ni-based Superalloy, Material Science and Engineering Technology, 49 (6):822-833, 2018.
  14. Kucuk Y., Karaoglanli, A.C., Oge M., Gok, M.S., Ferrochromium slag as a protective coating material against oxidation on cast iron, International Journal of Applied Ceramic Technology, 15: 1240-1247, 2018.
  15. Ozkan D., Gok, M.S., Gokkaya, H., Karaoglanli, A.C., Investigation of the effect of cutting parameters on tool wear during the milling of carbon fiber reinforced polymers (CFRP), Materials Science, In Press, 2018.
  16. Kaplan, M., Uyaner, M., Avcu, E., Avcu, Y., Karaoglanli, A.C., Solid Particle Erosion Behavior of Thermal Barrier Coatings Produced by Atmospheric Plasma Spray Technique, Mechanics of Advanced Materials and Structures, 3 (6): 1-7, 2018.
  17. Kucuk, Y., Oge, M., Gok, M.S., Karaoglanli, A.C., A comparative analysis of dry sliding wear performance of FeCr slag coating with commercial Cr<sub>2</sub>O<sub>3</sub> and Al<sub>2</sub>O<sub>3</sub>-13TiO<sub>2</sub> coatings, Industrial Lubrication and Tribology, Major Revision, 2018.
  18. Kaplan, M., Uyaner, M., Karaoglanli, A.C., Thermal Cycling Behavior of CoNiCrAlY Bond Coated Thermal Barrier Coatings (TBCs) Produced by Atmospheric Plasma Spraying (APS), Materials and Technology, 51 (6), 897-901, 2017.
  19. Karaoglanli, A.C., Turk, A., Isothermal oxidation behavior and kinetics of thermal barrier coatings produced by cold gas dynamic spray technique, Surface and Coatings Technology, 318, 72-81, 2017.
  20. Karaoglanli, A.C., Turk, A., Ozdemir, I., Effect of sintering on mechanical properties of cold sprayed thermal barrier coatings, Surface Engineering, 32(9), 686-690, 2016.
  21. Karaoglanli, A.C., Effects of Plastic Deformation on Isothermal Oxidation Behavior of CoNiCrAlY Coatings, Science of Advanced Materials, 7, 173-177, 2015.
  22. Karaoglanli, A.C., Effect of Severe Air-Blast Shot Peening on the Wear Characteristics of CP Titanium, Materials and Technology, ISSN 1580-2949, 49 (2), 253-258, 2015.

23. Karaoglanli, A.C., Turk A., Ozdemir I., Ustel F., Comparison of oxidation and thermal shock performance of thermal barrier coatings, Materials and Manufacturing Processes, 30 (6), 717-723, 2015.
24. Unal, O., Karaoglanli, A.C., Varol R., Kobayashi, A., Microstructure Evolution and Mechanical Behaviour of Severe Shot Peened Commercially Pure Titanium, Vacuum, 110, 202-206, 2014
25. Caliskan H., Karaoglanli, A.C., Panjan P., Oxidation behavior of nanolayer AlTiN/TiN hard coating at high temperature, Acta Polonica A, 125, 456-458, 2014.
26. Parlakyigit, A.S., Karaoglanli A.C., Effects of Microstructural Transformation in TBCs Consisting of NiCrAlY Metallic Bond Coat and YSZ Ceramic Top Coat after Oxidation at 900 °C, Acta Polonica A, 125, 232-234, 2014.
27. Karaoglanli, A.C., Caliskan H., Gok M.S., Erdogan A., Turk A., A Comparative Study of the Micro Abrasion Wear Behavior of CoNiCrAlY Coatings fabricated by APS, HVOF and CGDS Techniques, Tribology Transactions, 2014; 57: 11-17.
28. Korkut, M.H., Kucuk, Y., Karaoglanli, A.C., Erdogan A., Er, Y., Gok S., Effect of abrasive grain size on wear behavior of ceramic coatings by micro-abrasion test, Materials and Technology, 2013,47:6,695-699, 2013.
29. Karaoglanli, A.C., Dikici H., Kucuk Y., Effects of Heat Treatment on Adhesion Strength of Thermal Barrier Coating Systems, Engineering Failure Analysis, 2013, 32, 16-22, 2013.
30. Caliskan H., Erdogan A., Panjan P., Gok S., Karaoglanli, A.C., Micro-abrasion wear testing of multilayer nanocomposite TiAlSiN/TiSiN/TiAlN hard coatings deposited on AISI H11 steel, Materials and Technology, 47 (2013) 5, 563–568.
31. Karaoglanli, A.C., Erdogan G., Turk A., Ozdemir I., Ustel F., Study of microstructural and oxidation behavior of YSZ and YSZ/ Al<sub>2</sub>O<sub>3</sub> TBCs with HVOF bond coatings, Materials and Technology, 46 (5), 439-444, 2012.
32. Gurbuz A, Onar N, Ozdemir I, Karaoglanli, A.C., Çelik E, Structural, Thermal and Magnetic Properties of Mn, Cu, Co and X (X=Sr and Ni) Substituted-Barrium ferrite Powders Prepared by Sol-Gel Method”, Materials and Technology, 46 (3), 305-310, 2012.
33. Karaoglanli, A.C., Altuncu ., Ozdemir I., Turk A., Ustel F., Structure and Durability Evaluation of YSZ+Al<sub>2</sub>O<sub>3</sub> Composite TBCs with APS and HVOF Bond Coats Under Thermal Cycling Conditions, Surface and Coatings Technology, 205, 369–373, 2011.

#### **YAYINLANMIŞ ULUSAL MAKALELER:**

1. Karaoglanli, A.C., Turk A, Ustel F., Cold Gas Dynamic Spray (CGDS) Technology and Applications, Academic Platform, Journal of Engineering and Science (APJES), ISSN: 2147-4575, 20-27, 2013.
2. Karaoglanli, A.C., Turk A, Ozdemir I., Investigation of Oxidation Behavior of Plasma Sprayed Ceramic Based Coatings, Afyon Kocatepe University Journal of Science and Engineering, Volume 14, 401-405, 2014.
3. Parlakyigit A.S., Karaoglanli, A.C., Gulmez T., Turk A. , Investigation of Microstructural Properties of Thermal Barrier Coating (TBC) System Consisting of YSZ Topcoat and NiCrAlY Bond Coat, Afyon Kocatepe University Journal of Science and Engineering, Volume 14, 331-334, 2014.
4. Karaoglanli, A.C., Microstructure Characteristics of Detonation Gun Spayed CoNiCrAlY Coatings, Journal of Aeronautics and Space Technologies, 9,2 , 47-53, 2016.

## YAYINLANMIŞ KONFERANS MAKALELERİ:

1. Azem F.A., Grund T., Karaoglanli, A.C., Ozdemir I., Wielage B., Lampke T., Turk A., Ustel F., Thermally Grown Oxide Layers in Thermal Barrier Coatings, Accepted, 13. International Material Symposium (IMSP'2010), 13-15 October 2010-Pamukkale University – Denizli, Turkey.
2. Karaoglanli, A.C., Azem F.A., T.Grund., Ozdemir I., I. E. Araby, Lampke T., E. A. Abdel-Aal., N.El-Mahallwy., A.Turk, F.Ustel., Microstructural observation of CoNiCrAlY bond coatings and  $ZrO_2+Y_2O_3$  top coatings deposited by plasma spraying, International Conference on materials imperatives in the new millenium (MINM2010), pp.343-349, 29 Nov-2 Dec 2010, Cairo, Egypt.
3. Karaoglanli, A.C., Grund T., Azem F.A., Ozdemir I., Lampke T., K.Ogawa., Turk A., Ustel F., Study of oxidation behavior of TBCs with APS and HVOF CoNiCrAlY bond coatings, International Thermal Spray Conference 2011, pp. 942-947, 27-29. September, Hamburg, Germany.
4. Lampke T., N.El-Mahallawy, Grund T., I. El-Araby, Karaoglanli, A.C., Effect of bond coat material and heat treatment on adhesion strength and characteristics of thermal barrier coating system with CGDS, HVOF and APS techniques, International Thermal Spray Conference 2011, 27-29. September 2011, pp.956-959, Hamburg, Germany.
5. Elcicek H., Demirel B., Karaoglanli A.C., Protection applications in shipping industry for corrosion problems and cathodic protection applications, 6. International advanced technology symposium, 16-28 May 2011, Elazig, Turkey.
6. I.El-Araby, N.El-Mahallawy, Karaoglanli, A.C., T.Lampke, Grund T., I.Ozdemir., Microstructural Aspects of TBC with Al 99% Bond Coat and YSZ Top Coat Deposited By APS Technique, 1st Surface Treatment Symposium, 15-18 June 2011, Istanbul, Turkey.
7. Dikici, H., Karaoglanli, A.C., Grund, T., Lampke, T., Effects of Production Method and Heat Treatment on the Adhesion Strength and Microstructural Behavior of MCrAlY Coatings, 13. International Conference on Plasma Surface Engineering, September 10 - 14, 2012, in Garmisch-Partenkirchen, Germany.
8. Karaoglanli, A.C., Turk A., Ozdemir I., Ustel F., Oxidation Behavior of Thermal Barrier Coatings With Cold Gas Dynamic Sprayed CoNiCrAlY Bond Coats, 13. International Conference on Plasma Surface Engineering, September 10 - 14, 2012, in Garmisch-Partenkirchen, Germany.
9. Caliskan, H., Erdogan, A., Panjan, P., Gök, M.S., Karaoglanli, A.C., Micro-Abrasion Wear Testing of Multilayer Nanocomposite TiAlSiN/TiSiN/TiAlN Hard Coatings Deposited On AISI H11 Steel, 20th Jubilee Conference on Materials and Technology, 17-19 October 2012, Portoroz, in Slovenia.
10. Parlakyigit, A.S., Karaoglanli, A.C., Gulmez, T., Investigation of oxidation behavior of thermal barrier coatings consisting of plasma sprayed NiCrAlY bond coats, POLYCHAR 21, 21<sup>st</sup> World Forum on Advanced Materials, KimDaeJung Convention Centre Gwangju, Republic of Korea, March 11-15 2013.
11. Parlakyigit, A.S., Karaoglanli, A.C., Gulmez, T., Effects of Microstructural Transformation in TBCs Consisting of NiCrAlY Metallic Bond Coat and YSZ Ceramic Topcoat after Oxidation at 900 °C, 3<sup>rd</sup> International Advances in Applied Physics and Materials Science Congress, Antalya, Turkey, April 24-28, 2013.
12. Karaoglanli, A.C., Turk, A., The effect of high temperature on mechanical properties of functional graded composite coatings, 7th International Conference on Advanced

- Computational Engineering and Experimenting, ACEX 2013, Madrid, Spain, July 1-4, 2013.
13. Karaoglanli, A.C., Effects of Plastic Deformation on the Isothermal Oxidation Behavior of CoNiCrAlY Coatings, 9th Asian-European International Conference on Plasma Surface Engineering, August 25 - 30, 2013, in Jeju Island, Korea.
  14. Parlakyigit, A.S., Karaoglanli, A.C., Gulmez, T., Evaluation of Sintering and TGO Growth Behavior in Plasma Sprayed TBCs, 30. European Conference on Surface Science, 31 August-05 September, 2014, in Antalya, Turkey.
  15. Karaoglanli, A.C., Invited Speaker, Thermal Barrier Coatings (TBC) for gas turbine engine applications in aviation industry, 9th International Conference on Advanced Computational Engineering and Experimenting, ACEX 2015, Munich, Germany, 29 June-02 July, 2015.
  16. Karaoglanli, A.C., Turk A, A General Overview to Thermal Spray Coating Processes: Plasma Spray Coatings, 3th International Symposium on Innovative Technologies in Engineering and Science, 3-5 June, Valencia, Spain.
  17. Kaplan M., Karaoglanli A.C., Uyaner M., Application Of Thermal Spray Coatings Technology in Wear And Corrosion Related Damages, Metech '16, IV. International Metallurgical Engineering Conference, 3-4 November 2016, Istanbul, Turkey.
  18. Karaoglanli A.C., Termal Bariyer Kaplamaların (TBC) Hasar Mekanizmalarının İncelenmesi: Kimyasal Hasar ve CMAS Etkisi Sonucu Oluşan Hasarlar, 1<sup>th</sup> International Conference on Material Science and Technology in Cappadocia (IMSTEC 2016), 6-9 April 2016, Nevşehir, Türkiye.
  19. Ozgurluk Y., Karaoglanli A.C., Plazma Sprey Kaplama Teknolojisi ve Uygulamaları, 1<sup>th</sup> International Conference on Material Science and Technology in Cappadocia (IMSTEC 2016), 6-9 April 2016, Nevşehir, Türkiye.
  20. Doleker M., Karaoglanli A.C., HVOF Sprey Kaplama Teknolojisi: Aşınmaya Dayanıklı Kaplamalar, 1<sup>th</sup> International Conference on Material Science and Technology in Cappadocia (IMSTEC 2016), 6-9 April 2016, Nevşehir, Türkiye.
  21. Ahlatci, H., Zengin, H., Türen, Y., Sun, Y., Yildiz, M.M., Karaoglanli, A.C., Ünal, M., Effect of Sn addition on mechanical properties of AS21 magnesium alloys, The Ires - 188th International Conferences On Engineering And Natural Science (ICENS), Lisbon, Portugal, 11-12 May 2017.
  22. Zengin, H., Türen, Y., Sun, Y., Ahlatci, H., Karaoglanli, A.C., Yildiz, M.M., Improvement on corrosion resistance of AS21 magnesium alloys by Sn addition, 4th International Conference On Computational And Experimental Science and Engineering, ICCESSEN, Side-Antalya, Turkey, 4-8 October 2017.
  23. Ozkan D., Gok M.Sabri, Gokkaya H., Karaoglanli, A.C., Investigation of Surface Roughness During the Milling of Carbon Fiber Reinforced Polymers', ICAMT'17/International Conference on Advanced Materials and Manufacturing Technologies, 2017.
  24. Ozkan D., Gok M.Sabri, Gokkaya H., Karaoglanli, A.C., 'Delamination failure mechanisms that arise during the milling of Carbon Fiber Reinforced Polymers (CFRPs)', ICAMT'17/International Conference on Advanced Materials and Manufacturing Technologies, 2017.
  25. Oge, M., Yildiz, F., Parlakyigit, A.S., Gok, M.S., Karaoglanli, A.C., Investigation of Wear Behavior of NiCr Coatings Produced with Atmospheric Plasma Spraying (APS) and High Velocity Oxygen Fuel (HVOF), ICAMT'17/International Conference on Advanced Materials and Manufacturing Technologies, 2017.

26. Doleker K.M., Ozgurluk Y., Ahlatci, H., Karaoglanli A.C., Lifetime Prediction of Thermal Barrier Coatings (TBCs), 1st International Symposium on Light Alloys and Composite Materials (ISLAC'18) March 22-24, 2018 Karabuk, Turkey.
27. Ozgurluk Y., Doleker K.M., Ahlatci, H., Karaoglanli A.C., The effect of volcanic ash based damages on thermal barrier coatings during the service conditions, 1st International Symposium on Light Alloys and Composite Materials (ISLAC'18) March 22-24, 2018 Karabuk, Turkey.
28. Ozkan D., Gok S., Gokkaya H., Karaoglanli A.C., The effects of machining parameters on delamination failure in milling of multidirectional CFRP laminate with uncoated carbide cutting tools, 5<sup>th</sup> International Conference on Computational and Experimental Science and Engineering (ICCESEN 2018), 12-16 October, Antalya, Turkey.
29. Doleker K.M., Ozgurluk Y., Ahlatci, H., Karaoglanli A.C., Investigation of Isothermal Oxidation and Thermally Grown Oxide Layer in Thermal Barrier Coatings (TBCs) with HVOF Sprayed Nickel-Chromium Bond Coats, 5<sup>th</sup> International Conference on Computational and Experimental Science and Engineering (ICCESEN 2018), 12-16 October, Antalya, Turkey.
30. Oge M., Celik B., Ozkan D., Gok S., Karaoglanli A.C., An Overview of Utilization of Blast Furnace and Steelmaking Slag in Various Applications, International Conference on Modern Trends in Manufacturing Technologies and Equipment 2018 (ICMTME 2018), September 10-14 2018, Russia.
31. Ozkan D., Gok S., Oge M., Karaoglanli A.C., Milling Behavior Analysis of Carbon Fiber-Reinforced Polymer (CFRP) Composites, International Conference on Modern Trends in Manufacturing Technologies and Equipment 2018 (ICMTME 2018), September 10-14 2018, Russia.

#### **ARAŞTIRMA PROJELERİ:**

1. Proje Koordinatörü, CNC ve Kaynak Simülatörlü İleri Eğitim Tekniklerinin Geliştirilmesi ve Dezavantajlı Grupların İş Piyasasına Kazandırılması BAKKA (Batı Karadeniz Kalkınma Ajansı-Bütçe: 239.215 TL), 2018-2019.
2. Proje Yürütücüsü, Gaz Türbinleri İçin Yenilikçi Kaplama Teknolojileri Kullanılarak Yeni Tip Termal Bariyer Kaplama (TBC) Malzemelerinin Geliştirilmesi, İzotermal ve Termal Çevrim Oksidasyon Davranışlarının İncelenmesi TÜBİTAK, MAG, 113R049, 2014-2016.
3. Proje Yürütücüsü, Termal Bariyer Kaplamaların Yüksek Sıcaklık Davranışları Üzerine CaO-MgO-Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> (CMAS) Etkisinin Araştırılması, BAP, 2017-Devam ediyor.
4. Proje Yürütücüsü, 2013-BAP, HVOF yöntemi ile üretilen farklı bileşimlerde kaplamaların yüzey özelliklerinin incelenmesi, 01.10.2013- 01.10.2014,
5. Proje Yürütücüsü, Plastik deformasyon etkisinin termal bariyer kaplamalardaki oksidasyon koşulları altında TGO büyüme davranışı üzerine etkisinin incelenmesi BAP-2013,, 2013-2014.
6. Proje Yürütücüsü, BAP-2011-010 No'lu, APS, HVOF ve Soğuk Sprey Yöntemleriyle Üretilen Termal Bariyer Kaplamaların(TBK), Oksidasyon Davranışlarının İncelenmesi, Bilimsel Araştırma Projesi, 2011-2012.
7. Araştırmacı, TÜBİTAK 1507 Kodlu,7081023 nolu Kobi Ar-Ge Projesinde "500 Ton Kapasiteli Lokomotif ve Vagon Tekerleği Sıkı Geçirme ve Sökme Hidrolik Pres Geliştirilmesi", 2009-2010.

8. Arařtırmacı, Termal Bariyer Kaplama Sistemi (TBK) Uygulamalarında, Farklı Termal Sprey Yöntemleriyle Üretilen Baę Kaplamaların Bilyalı Dövme Yöntemi İle Yüzey Özelliklerinin Geliştirilmesi Ve Termal Çevrim/Şok Davranışlarının İncelenmesi, TÜBİTAK, 111M265, 2011-2013.
9. Arařtırmacı, Endüstriyel atıkların RWAT (Rubber Wheel Abrasion Test) yöntemi kullanılarak aşındırma özelliklerinin araştırılması BAP-2014-FEN-A-002, 2014-2016.
10. Danışman, Atık FeCr Cüruf Tozunun Termal Sprey Yöntemi İle Kaplanarak Aşınma Ve Oksidasyon Davranışlarının Oksit İçerikli Ticari Kaplamalarla Karşılaştırılması TÜBİTAK, MAG-113M178, 2013-2015.
11. Danışman, TÜBİTAK 2209 Kodlu, Üniversite Öğrencileri Yurt İçi Araştırma Projeleri Danışmanlıkları.