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#### International Researcher IDs

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#### Education Information

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- I. Doctorate, RMIT University, Aerospace Mechanical and Manufacturing Engineering, Material Science, Australia 2006 - 2009
- II. Doctorate, Gazi University, Institute of Natural Science, Department of Chemical Engineering, Turkey 2000 - 2003
- III. Postgraduate, Gazi University, Institute of Natural Sciences, Department of Chemical Engineering, Turkey 1995 - 1997
- IV. Undergraduate, Gazi University, Faculty of Engineering, Department of Chemical Engineering, Turkey 1991 - 1995

#### Foreign Languages

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- I. English, C1 Advanced
- II. German, B1 Intermediate

#### Certificates, Courses and Trainings

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- I. Education Management and Planning, RESEARCH COMMERCIALIZATION, CURTIN UNIVERSITY, 2008
- II. Education Management and Planning, LEADERSHIP AND COMMUNICATION, CURTIN UNIVERSITY, 2006
- III. Education Management and Planning, RESEARCH METHODS COURSE, RMIT UNIVERSITY, 2005
- IV. Education Management and Planning, PROJECT MANAGEMENT, CURTIN UNIVERSITY, 2005
- V. Foreign Language, ENGLISH, KANGAN BATMAN TAFE, 2004
- VI. Education Management and Planning, METAL PLATING, HENKEL, 1998

#### Dissertations

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- I. Doctorate, Optimization of Petaloid Base Dimensions and Process Operating Conditions to Minimize Environmental Stress Cracking in Injection Stretch Blow Moulded PET Bottles, RMIT University, Aerospace Mechanical and Manufacturing Engineering, Manufacturing Engineering, 2009
- II. Postgraduate, Investigation of the Telluric Effects Arising along the Cathodically Protected Natural Gas Pipeline between Karadeniz Ereğli and Duzce, Gazi University, Institute of Natural Sciences, Chemical Engineering, 1997

## Research Areas

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Geological Engineering, Mineralogy-petrography, Mineralogy and Crystallography, Chemical Engineering and Technology, Process and Reactor Design, Process Design, Basic Operations and Thermodynamics, Heat Transfer, Metallurgical and Materials Engineering, Material science and engineering, Ceramic Materials, Mechanical Properties, Corrosion and Corrosion Protection, Composites, Cement and Concrete, Polymeric Materials, Plating, Engineering and Technology

## Academic Titles / Tasks

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- I. Professor, Erciyes University, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği, 2021 - Continues
- II. Associate Professor, Erciyes University, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği, 2015 - 2021
- III. Assistant Professor, Erciyes University, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği, 2011 - 2015
- IV. Assistant Professor, Bartın University, Faculty Of Engineering, Department Of Metallurgical And Materials Engineering, 2009 - 2011
- V. Research Assistant, University of Sydney, Department Of Aerospace Mechanical And Manufacturing Engineering, Manufacturing Engineering, 2006 - 2009

## Courses

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- I. KATODİK KORUMA, Postgraduate, 2019 - 2020
- II. MALZEME TERMODİNAMİĞİ-II, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012
- III. AMBALAJ VE MALZEME BİLGİSİ, Undergraduate, 2020 - 2021
- IV. SCIENTIFIC RESEARCH METHODS AND PUBLICATION ETHICS, Postgraduate, 2020 - 2021
- V. MALZEME SEÇİM VE TASARIMI, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012
- VI. KOROZYON, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012
- VII. MALZEME TERMODİNAMİĞİ-I, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012
- VIII. BİLGİSAYAR PROGRAMLAMA, Undergraduate, 2018 - 2019
- IX. POLİMER KİMYASI, Doctorate, 2018 - 2019
- X. ÇÖZELTİ TERMODİNAMİĞİ, Undergraduate, 2016 - 2017
- XI. GELENEKSEL SERAMİKLER, Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014
- XII. TASINIM, Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012
- XIII. ELEKTROKİMYA, Doctorate, 2015 - 2016
- XIV. MALZEME BİLİMİ VE TEKNOLOJİSİ, Undergraduate, 2014 - 2015
- XV. POLİMER BİLİMİ VE TEKNOLOJİSİ, Doctorate, 2013 - 2014
- XVI. UYGULAMALI TERMODİNAMİK, Doctorate, 2014 - 2015
- XVII. POLİMER ÜRETİM SÜREÇLERİ, Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013
- XVIII. GENEL KİMYA-II, Undergraduate, 2012 - 2013
- XIX. KATI HALE GİRİŞ, Undergraduate, 2012 - 2013

## Advising Theses

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- I. Demirel B., Boratlı Antibakteriyel Sırların Hazırlanması ve Karakterizasyonu, Doctorate, E.ÇİTAK(Student),

Continues

- II. Demirel B., Tanecik Takviyeli Polimer Matrisli Kompozit Malzemelerin Fiziksel ve Mekanik Özelliklerinin Modellenmesi Ve Sonlu Elemanlar Yöntemi İle Doğrulanması, Doctorate, F.YILDIRIM(Student), Continues
- III. Demirel B., NH<sub>3</sub> Duyarlı Yarı iletken Metal Oksit Gaz Sensörü Geliştirme, Doctorate, B.PALANCIGİLLER(Student), Continues
- IV. Demirel B., Çinko Borat Katkılı PET'in Isısal Bozunma Davranışının İncelenmesi, Postgraduate, M.ÖZTÜRK(Student), Continues
- V. Demirel B., Mikro Elektronik Devrelerde Kurşunsuz Lehim Alaşımlarının Isıl ve Elektriksel Özelliklerinin Araştırılması, Doctorate, P.ATA(Student), Continues
- VI. Demirel B., Foton-Aktif Monomer İçerisinde Disperse Edilmiş Seramik, Metal Tozlarının Kullanımı İle 3D Baskısı İçin Dijital Işın Destekli (DLP) Eklemeli Üretim Tekniğinin Geliştirilmesi, Doctorate, M.SHEHADA(Student), Continues
- VII. Demirel B., Kalsiyum Boratın CaB<sub>2</sub>O<sub>4</sub> Polietilen Terafitalatın (PET) Kimyasal Bozunması Üzerine İnhibisyon Etkisi ve Kalsiyum Borat CaB<sub>2</sub>O<sub>4</sub> Katkılı PET'ten Üretilen Şişelerin Mekanik Davranışlarının İncelenmesi, Postgraduate, N.BURHAN(Student), 2021
- VIII. Demirel B., Kalsiyum Borat Ca<sub>3</sub>B<sub>2</sub>O<sub>6</sub> Katkılı PET'in Kimyasal Bozunma Davranışı ie Kalsiyum Borat/PET Kompozitten Üretilen Şişelerin Mekanik Davranışlarının İncelenmesi, Postgraduate, Ö.KOCAYAVUZ(Student), 2021
- IX. Demirel B., NiMnGa Esaslı Şekil Hafızalı Alaşımların Üretimi ve Ekstrüzyon Kontrol Parametrelerinin İncelenmesi, Doctorate, S.DAL(Student), 2021
- X. Demirel B., İletkenlerin İzolasyonunda kullanılan Halojen İçermeyen, Alev Geciktiricili Polimer Matrisli Kompozit Malzeme Üretimi, Postgraduate, S.YILDIRIM(Student), 2021
- XI. Demirel B., Tufal Katkılı PE Matrisli Kompozitlerin Tribolojik ve Mekanik Özelliklerinin İncelenmesi, Postgraduate, G.BAYRAKTAR(Student), 2020
- XII. Demirel B., Elyaf Takviyeli Kompozit Sert Poliüretan Köpüklerin Mekanik Özelliklerinin İyileştirilmesi, Postgraduate, H.ASLANTAŞ(Student), 2020
- XIII. Demirel B., Modifiye edilmiş hidroksiapatitin ısıma ve termal özelliklerinin incelenmesi, Postgraduate, E.SABAN(Student), 2019
- XIV. Demirel B., Termal Bariyer Kaplamaların Elektro Biriktirme Yöntemleriyle Üretimi ve Karakterizasyonu, Doctorate, K.OĞUZ(Student), 2018
- XV. Demirel B., PET Şişelerde Performans Artırılması Amacıyla Gerdirme Şişirme Kalıplama Proses Parametrelerinin Optimizasyonu, Postgraduate, İ.ADEVİYE(Student), 2017
- XVI. Demirel B., Nano SiO<sub>2</sub> ve Aerojel Katkılı Süper Isıl Yalıtım Özelliğine Sahip Beton Blok Üretimi, Postgraduate, İ.AL(Student), 2017
- XVII. Demirel B., Si katkılı Mg<sub>2</sub>B<sub>2</sub>O<sub>5</sub> sentezi ve PET (polietilen tereftalat) malzemesinin özellikleri üzerine etkisinin incelenmesi, Postgraduate, E.AKTÜRK(Student), 2017
- XVIII. Demirel B., Expanded polistiren sert köpük (EPS) malzemesinin kiremit olarak kullanılabilirliğinin incelenmesi, Postgraduate, N.ATAY(Student), 2011

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Effect of Calcium Oxide on Stress Crack Resistance and Light Transmittance in PET Container for Packaging Carbonated Beverages**  
Yuvalı G., Dağışan Bulucu E., Demirel B., Yaraş A., Akkurt F., Sürdem S., Demirel B.  
ACS OMEGA, vol.1, no.1, pp.1, 2024 (SCI-Expanded)
- II. **Recycling selective laser melting alloy powder on cobalt chromium-to-ceramic bond strength**  
ALBAYRAK H., Ayata M., DEMİREL B.  
JOURNAL OF PROSTHETIC DENTISTRY, vol.130, no.5, 2023 (SCI-Expanded)
- III. **Effect of extrusion on Ni<sub>55.5</sub>Mn<sub>25</sub>Ga<sub>18.5</sub>Mo<sub>2</sub> shape memory Heusler alloy**  
Dal S., Eşkil M., Demirel B.  
Materials Today Communications, vol.34, 2023 (SCI-Expanded)

- IV. **Effect of Sb and In additives on thermal and electrical properties of Sn-9Zn-4Bi alternative lead-free solder alloy**  
Esener P. A., DEMİREL B., Aksoz S.  
MATERIALS CHEMISTRY AND PHYSICS, vol.296, 2023 (SCI-Expanded)
- V. **Thermal conversion behavior of paper mill sludge: characterization, kinetic, and thermodynamic analyses**  
Yaras A., Demirel B., Akkurt F., Arslanoglu H.  
Biomass Conversion and Biorefinery, vol.13, no.3, pp.2007-2016, 2023 (SCI-Expanded)
- VI. **Investigation of the mechanical properties of calcite reinforced polypropylene by using digimat-mean field homogenization and ansys FEM**  
Yıldırım F., Demirel B., Bulucu E.  
Materials Today Communications, vol.33, 2022 (SCI-Expanded)
- VII. **Carbonation sludge reinforced LDPE composites: flame-retardant, dynamic mechanical properties, thermal degradation behaviors**  
YARAŞ A., DEMİREL B., AKKURT F., Arslanoglu H.  
POLYMER BULLETIN, vol.79, no.8, pp.6475-6496, 2022 (SCI-Expanded)
- VIII. **Tribological, thermal, dynamic and mechanical characteristics of low density polyethylene composites with iron scale**  
Bayraktar G., Demirel B., Yaraş A., Akkurt F., Özkan D., Er Y.  
MATERIALS TODAY COMMUNICATIONS, vol.32, no.1, pp.1-12, 2022 (SCI-Expanded)
- IX. **Effects of magnesium borate on the mechanical performance, thermal and chemical degradation of polyethylene terephthalate packaging material**  
Demirel B., Kılıç E., Yaraş A., Akkurt F., Daver F., Uğur Gezer D.  
JOURNAL OF PLASTIC FILM AND SHEETING, vol.0, no.0, pp.1-19, 2022 (SCI-Expanded)
- X. **Investigation of mechanical and tribological properties of different grain size iron scale reinforced polymer composite**  
Kursuncu B., Erdogan A., Gok M. S., DEMİREL B.  
POLYMERS & POLYMER COMPOSITES, vol.29, no.9, pp.1543-1550, 2021 (SCI-Expanded)
- XI. **Chemical, thermal, and mechanical properties and ultraviolet transmittance of novel nano-hydroxyapatite/polyethylene terephthalate milk bottles**  
DEMİREL B., Inaner N. B., Gezer D. U., Daver F., Yaras A., AKKURT F.  
POLYMER ENGINEERING AND SCIENCE, vol.61, no.7, pp.2043-2054, 2021 (SCI-Expanded)
- XII. **Synthesis of Gd<sup>+3</sup> doped hydroxyapatite ceramics: optical, thermal and electrical properties**  
Demirel B., Saban E., Yaras A., Akkurt F.  
JOURNAL OF ASIAN CERAMIC SOCIETIES, vol.9, no.3, pp.865-873, 2021 (SCI-Expanded)
- XIII. **The effects of homogenization time on the crystal structure and hardness of NiMnGaMo alloy**  
Dal S., DEMİREL B., Eskil M.  
Engineering Science and Technology, an International Journal, vol.24, pp.493-502, 2021 (SCI-Expanded)
- XIV. **Mechanical and tribological properties of waste iron scale reinforced polypropylene composite**  
Erdogan A., Gok M. S., Kursuncu B., Kiraz T., DEMİREL B.  
INDUSTRIAL LUBRICATION AND TRIBOLOGY, vol.73, no.2, pp.388-395, 2021 (SCI-Expanded)
- XV. **Investigation of mechanical and thermal properties of nano SiO<sub>2</sub>/hydrophobic silica aerogel co-doped concrete with thermal insulation properties**  
Al Zaidi I. K., Demirel B., Atiş C. D., Akkurt F.  
STRUCTURAL CONCRETE, vol.21, no.3, pp.1123-1133, 2020 (SCI-Expanded)
- XVI. **Effect of different storage methods on thermal and mechanical properties of mortar containing aerogel, fly ash and nano-silica**  
Al Zaidi A. K. A., DEMİREL B., ATİŞ C. D.  
CONSTRUCTION AND BUILDING MATERIALS, vol.199, pp.501-507, 2019 (SCI-Expanded)
- XVII. **An Oxidation Study of NiCoCrAl Coatings Produced by Electrolytic co-Deposition Method**  
Oskay K. O., DEMİREL B.

- ACTA PHYSICA POLONICA A, vol.134, no.1, pp.186-188, 2018 (SCI-Expanded)
- XVIII. Optimization of Electrophoretic Deposition of YSZ**  
Oskay K. O., DEMİREL B.  
ACTA PHYSICA POLONICA A, vol.134, no.1, pp.182-185, 2018 (SCI-Expanded)
- XIX. Optimisation of mould surface temperature and bottle residence time in mould for the carbonated soft drink PET containers**  
DEMİREL B.  
POLYMER TESTING, vol.60, pp.220-228, 2017 (SCI-Expanded)
- XX. Effect of shot peening on the oxidation behavior of thermal barrier coatings**  
Karaoglanli A. C., Döleker K. M., Demirel B., Türk A., Varol R.  
APPLIED SURFACE SCIENCE, vol.354, pp.314-322, 2015 (SCI-Expanded)
- XXI. The Investigation and Growth Kinetics of TiC Coatings on AISI D3 Steel Produced by Thermo-Reactive Diffusion Technique**  
Kurt B., SINOPLU O., Carboga C., DEMİREL B.  
PRAKTISCHE METALLOGRAPHIE-PRACTICAL METALLOGRAPHY, vol.51, no.2, pp.95-106, 2014 (SCI-Expanded)
- XXII. Characterization and Kinetics of VC Coatings on AISI D3 Steel Performed by Thermo-Reactive Diffusion Technique**  
Kurt B., Onder E., Carboga C., DEMİREL B.  
PRAKTISCHE METALLOGRAPHIE-PRACTICAL METALLOGRAPHY, vol.51, no.1, pp.32-44, 2014 (SCI-Expanded)
- XXIII. Experimental study of preform reheat temperature in two-stage injection stretch blow molding**  
DEMİREL B., Daver F.  
POLYMER ENGINEERING AND SCIENCE, vol.53, no.4, pp.868-873, 2013 (SCI-Expanded)
- XXIV. Optimization of the composite brick composed of expanded polystyrene and pumice blocks**  
Demirel B.  
CONSTRUCTION AND BUILDING MATERIALS, vol.40, pp.306-313, 2013 (SCI-Expanded)
- XXV. Investigation of the telluric effects arising along the cathodically protected natural gas pipeline between Karadeniz Ereğli and Duzce**  
DEMİREL B., Yalcin H.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.21, no.3, pp.758-765, 2013 (SCI-Expanded)
- XXVI. Growth Kinetics of CrC Coating Layers on AISI D3 Obtained by Thermo-Reactive Diffusion Technique**  
Kurt B., Onder E., Carboga C., Demirel B., Karagoz M.  
PRAKTISCHE METALLOGRAPHIE-PRACTICAL METALLOGRAPHY, vol.50, no.11, pp.754-766, 2013 (SCI-Expanded)
- XXVII. Effects of preform deformation behavior on the properties of the poly(ethylene terephthalate) bottles**  
DEMİREL B., Daver F.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.126, no.4, pp.1300-1306, 2012 (SCI-Expanded)
- XXVIII. A simulation study of the effect of preform cooling time in injection stretch blow molding**  
Daver F., DEMİREL B.  
JOURNAL OF MATERIALS PROCESSING TECHNOLOGY, vol.212, no.11, pp.2400-2405, 2012 (SCI-Expanded)
- XXIX. An integrative simulation approach to weight reduction in Polyethylene terephthalate) bottles**  
Daver F., DEMİREL B., Sutanto J., Pang C. W.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.133, 2012 (SCI-Expanded)
- XXX. A novel UV-emitting phosphor: Li<sub>6</sub>CaB<sub>3</sub>O<sub>8.5</sub>:Pb<sup>2+</sup>**  
PEKGOZLU I., ERDOGMUS E., DEMİREL B., GOK M., KARABULUT H., BASAK A. S.  
JOURNAL OF LUMINESCENCE, vol.131, no.11, pp.2290-2293, 2011 (SCI-Expanded)
- XXXI. The Effects on the Properties of PET Bottles of Changes to Bottle-Base Geometry**  
Demirel B., Daver F.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.114, no.6, pp.3811-3818, 2009 (SCI-Expanded)
- XXXII. Optimization of Poly(ethylene terephthalate) Bottles Via Numerical Modeling: A Statistical Design of Experiment Approach**

## Articles Published in Other Journals

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- I. **Optimization of zinc borate, aluminum hydroxide and magnesium hydroxide composition in composite material used in the production of halogen-free flame retardant sheath material for electrical cables**  
Yildirim S., Eren O., Cetinkaya M. K., Gurek M., Demirel B.  
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.26, no.3, pp.1111-1119, 2023 (ESCI)
- II. **PP Fiber Reinforced Rigid Polyurethane Foam Composites: Effects of Fiber Type, Content and Length on Mechanical Performance**  
Demirel B., Aslantaş H., Akkurt F., Yaraş A., Daver F.  
Düzce Üniversitesi Bilim ve Teknoloji Dergisi, vol.11, no.3, pp.1327-1340, 2023 (Peer-Reviewed Journal)
- III. **Determination of The Best Injection Stretch Blow Molding Process Parameters in Polyethylene Terephthalate Bottle Service Performance**  
Demirel B., Akkurt F., Uysal İ. A., Şenyiğit E.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.35, no.4, pp.1297-1316, 2022 (ESCI)
- IV. **Confirmation of the experimentally measured cooling time of Polyethylene Terephthalate (PET) melt by ANSYS and FORTRAN**  
Demirel B., Danacı M., Akkurt F., Yaraş A.  
Balıkesir Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.23, no.2, pp.819-830, 2021 (Peer-Reviewed Journal)
- V. **Kalsiyum Boratlı Antibakteriyel Sırların Hazırlanması ve Antibakteriyel Özelliklerinin İncelenmesi**  
DEMİREL B., ÇITAK E., YUVALI ÇELİK G., AKKURT F.  
Nevşehir Bilim ve Teknoloji Dergisi, pp.31-38, 2020 (Peer-Reviewed Journal)
- VI. **Halojen İçermeyen, Alev Geciktirici Polimer Matrisli Kompozit Üretiminde Ekstrüder Çalışmalarının Yanma Üzerine Etkisi**  
DEMİREL B., YILDIRIM S.  
Nevşehir Bilim ve Teknoloji Dergisi, pp.90-97, 2020 (Peer-Reviewed Journal)
- VII. **Material selection on countermeasure flares systems by multi criteria decision making methods**  
Şenyiğit E., Demirel B.  
International Journal of Multidisciplinary Studies and Innovative Technologies, vol.4, no.1, pp.1-9, 2020 (Peer-Reviewed Journal)
- VIII. **THE SELECTION OF MATERIAL IN DENTAL IMPLANT WITH ENTROPY BASED SIMPLE ADDITIVE WEIGHTING AND ANALYTIC HIERARCHY PROCESS METHODS**  
ŞENYİĞİT E., DEMİREL B.  
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BİLİMLERİ DERGISI, vol.36, no.3, pp.731-740, 2018 (ESCI)
- IX. **OPTIMIZING THE COMPOSITION OF ELECTROPLATED NiCrAl COMPOSITE COATING**  
OSKAY K. O., DEMİREL B.  
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BİLİMLERİ DERGISI, vol.36, no.3, pp.795-802, 2018 (ESCI)
- X. **DETERMINATION OF THE MATERIAL FOR THE CARBONATED SOFT DRINK PACKAGING WITH MULTI-CRITERIA DECISION MAKING METHODS**  
ŞENYİĞİT E., DEMİREL B.  
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BİLİMLERİ DERGISI, vol.35, no.3, pp.471-480, 2017 (ESCI)
- XI. **Crystallization behavior of PET materials**  
Demirel B., Yaras A., Elcicek H.

## Books & Book Chapters

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- I. **KRİSTALLOGRAFİ**  
Demirel B.  
Ekin Yayınevi, Bursa, 2019
- II. **KATI HALE GİRİŞ**  
GOYMEN G., DEMİREL B.  
Gazi Kitapevi Yayınları, Ankara, 2013

## Refereed Congress / Symposium Publications in Proceedings

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- I. **Uçak Burun Tekerleği Jantı Tasarımında Kullanılacak Malzemenin Çok Kriterli Karar Verme Teknikleri ile Belirlenmesi**  
HALİMOĞLU Ö. M., ŞENYİĞİT E., DEMİREL B.  
II. INSAC Uluslararası Doğa ve Mühendislik Bilimleri Kongresi, Konya, Turkey, 21 October 2021, no.1
- II. **BWM-TOPSIS ÇOK KRİTERLİ KARAR VERME YÖNTEMİ İLE SAVUNMA SANAYİ İÇİN TANK PALETİ TASARIMINDA EN İYİ MALZEMENİN SEÇİMİ**  
Şenyiğit E., Demirel B., Gökkuş Ö.  
30 Ağustos Bilimsel Araştırmalar Kongresi, Adana, Turkey, 28 - 30 August 2020
- III. **BWM-SAW YÖNTEMİ İLE SAVUNMA SANAYİSİNDE TANK ZIRHLARI İÇİN KULLANILACAK EN İYİ MALZEMENİN SEÇİMİ**  
ŞENYİĞİT E., DEMİREL B., GÖKKUŞ Ö.  
30 Ağustos Bilimsel Araştırmalar Kongresi, 28 - 30 August 2020
- IV. **ASKERİ AMAÇLI TRENLERDE KUPLÖR MERKEZLEME PİMİ TASARIMINDA EN İYİ MALZEMENİN SEÇİMİ**  
DEMİREL B., ŞENYİĞİT E., GÖKKUŞ Ö., YURTGÜLÜ N.  
3. ULUSLARARASI BİLİM, TEKNOLOJİ VE SOSYAL BİLİMLERDE GÜNCEL GELİŞMELER SEMPOZYUMU, 19 - 20 June 2020, no.1
- V. **PREPARATION OF ANTIBACTERIAL GLAZES WITH CALCIUM BORATE AND INVESTIGATION OF IT'S ANTIBACTERIAL PROPERTIES**  
ÇITAK E., DEMİREL B., YUVALI ÇELİK G., AKKURT F.  
4. International Conference on Material Science and Technology in Kızılcahamam/ANKARA(IMSTEC 2019), 18 - 20 October 2019
- VI. **EFFECT OF EXTRUDER STUDIES ON COMBUSTION IN THE PRODUCTION OF HALOGEN-FREE, FLAME RETARDANT POLYMER MATRIX COMPOSITE PRODUCTION**  
YILDIRIM S., DEMİREL B.  
4. International Conference on Material Science and Technology in Kızılcahamam/ANKARA(IMSTEC 2019), 18 - 20 October 2019
- VII. **VARIATION OF ORDER PARAMETER WITH TEMPERATURE FOR LIQUID CRYSTALS DOPED WITH DYE AND NANOPARTICLE**  
AKKURT F., DEMİREL B.  
4. International Conference on Material Science and Technology in Kızılcahamam/ANKARA(IMSTEC 2019), 18 - 20 October 2019
- VIII. **CURRENT-VOLTAGE CHARACTERISTIC OF FULLERENE DOPED LIQUID CRYSTALS**  
AKKURT F., DEMİREL B.  
4. International Conference on Material Science and Technology in Kızılcahamam/ANKARA(IMSTEC 2019), 18 - 20

October 2019

- IX. THE SELECTION OF MATERIAL TO USE IN BALLISTIC VEST DESIGN**  
DEMİREL B., ŞENYİĞİT E., KARAKAYA C., ÖZTÜRK Ö., UMay B., ENGÜR M.  
The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology in Cappadocia/TURKEY (IMSMATEC'19), 21 - 23 June 2019
- X. THE SELECTION OF MATERIAL TO USE IN DENTAL DENTAL PROSTHESIS DESIGN**  
DEMİREL B., ŞENYİĞİT E., DEMİRKOL N., NERGİZ K., KILIÇ O. C., AKKURT F.  
The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology in Cappadocia/TURKEY (IMSMATEC'19), 21 - 23 June 2019
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DAL S., DEMİREL B., ESKİL M.  
The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology in Cappadocia/TURKEY (IMSMATEC'19), 21 - 23 June 2019
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Demirel B., Yıldırım F.  
The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology in Cappadocia/TURKEY (IMSMATEC'19), Nevşehir, Turkey, 21 - 23 June 2019
- XIII. BEST MATERIAL SELECTION FOR NOVEL AIRPLANE BATTERY BOX**  
Demirel B., Şenyiğit E., Akkurt F.  
The International Conference on Material Science, Mechanical and Automotive Engineers and Technology in Cappadocia/NEVŞEHİR (IMSMATEC'19), Nevşehir, Turkey, 21 - 23 June 2019
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The International Conference on Material Science, Mechanical and Automotive Engineers and Technology in Cappadocia/NEVŞEHİR (IMSMATEC'19), Nevşehir, Turkey, 21 - 23 June 2019
- XV. Investigation of Ballistic Behaviours of Kevlar and Boron Fiberon Helmet Design by Ansys**  
DEMİREL B., ŞENYİĞİT E., ÖZTÜRK A. C., İNANER N. B., ŞAHİN S. S., AKKURT F.  
International Symposium on Boron, 17 - 19 April 2019
- XVI. KEVLAR VE BOR ELYAF MALZEMELERİNİN KASK MODELLEMESİ İLE BALİSTİK DAVRANIŞLARININ ANSYS PROGRAMI İLE İNCELENMESİ**  
Demirel B., Şenyiğit E., Öztürk A. C., Burhan N., Şahin S. S., Akkurt F.  
Uluslararası Bor Sempozyumu (BORON2019), Nevşehir, Turkey, 17 - 19 April 2019, vol.1, no.1, pp.210-216
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ESENER P. A., DEMİREL B., AKKURT F.  
The International Conference on Material Science and Technology in Cappadocia(IMSTEC 2018), 17 September - 19 April 2018
- XVIII. BEST MATERIAL SELECTION FOR CHAFF/FLARE LUNCH SYSTEM**  
Demirel B., Şenyiğit E., Bekırcan O., Ozkan S., Baktır S.  
The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology, Nevşehir, Turkey, 10 - 12 April 2018
- XIX. Mechanical Properties of Fiber Reinforced Composite Rigid Polyurethane Foam Materials**  
ASLANTAŞ H., DEMİREL B.  
The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology, 10 - 12 April 2018
- XX. COMPARISON OF INDIVIDUAL BEHAVIORS OF HFFR AND PVC SHEET MATERIALS**  
KARLİTEPE CETINKAYA M., GUREK M., DOĞAN N., DEMİREL B.  
The International Conference on Material Science and Technology in Cappadocia(IMSTEC 2018), 17 September -



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- XXI. **SELECTION OF MATERIALS FOR BATTLE SHIP'S PROPELLER DESIGN**  
Demirel B., Şenyiğit E., Akar M., Basol S., Karabulut M. A.  
The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology in ÇEŞME, Nevşehir, Turkey, 10 - 12 April 2018
- XXII. **SHAPE MEMORY ALLOYS PRODUCTION METHODS**  
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The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology, 10 - 12 April 2018
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The International Conference on Material Science and Technology in Cappadocia(IMSTEC 2018), 17 September - 19 April 2018
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Demirel B., Akkurt F., Adeviye A.  
THE INTERNATINONAL CONFERENCE ON MATERIALS SCIENCE MECHANICAL AND AUTOMOTIVE ENGINEERINGS AND TECHNOLOGY IN ÇEŞME/İZMİR (IMSMATEC'18), İzmir, Turkey, 10 - 12 April 2018
- XXV. **BEST MATERIAL SELECTION FOR HELMET DESIGN**  
DEMİREL B., ŞENYİĞİT E., TUFAN M., AKKURT F.  
The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology, 10 April 2018
- XXVI. **IMROVING BRAKING PERFORMANCE BY USING COMPOSITE MATERIALS THAT HAVE CERAMIC MATRISES AND COOLING THIS BRAKING PARTS WITH A TURBINE COOLING SYSTEM**  
DEMİREL B., ŞENYİĞİT E., AYDIN G., DEMİR S., SEFERTAS O.  
The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology, 10 - 12 April 2018
- XXVII. **THE SELECTION OF THE BEST MATERIAL FOR PLANE WING PIN**  
ŞENYİĞİT E., DEMİREL B., CENGİZ U., OZDEMİR O., HACIPASAOĞLU F.  
The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology, 10 - 12 April 2018
- XXVIII. **THE ROLE OF DEGASSING ON CROSSLINKING BY-PRODUCTS IN XLPE INSULATED CABLES**  
MISIRLI N., GÜREK M., GÜRBÜZ M., DEMİREL B.  
IMSTEC 2018, 11 - 13 October 2018
- XXIX. **MICRO-CRACKING PROBLEM IN NiMn SHAPE MEMORY ALLOYS**  
Dal S., Demirel B.  
3rd International Conference on Material Science and Technology in Cappadocia (IMSTEC'18), September 17-19, 2018, Nevşehir, Turkey, Nevşehir, Turkey, 17 - 19 October 2018, pp.140-142
- XXX. **SYNTHESIS AND CHARACTERIZATION OF NiMn BASED SHAPE MEMORY ALLOYS**  
Eskil M., Dal S., Kurt B., Aldaş K., Demirel B.  
The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology in ÇEŞME/İZMİR (IMSMATEC'18), April 10-12 2018, Nevşehir, Turkey, 10 - 12 April 2018, pp.65-68
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Dal S., Demirel B.  
The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology in ÇEŞME/İZMİR (IMSMATEC'18), April 10-12 2018, İzmir, Turkey, 10 - 12 April 2018, pp.602
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Eskil M., Dal S., Kurt B., Aldaş K., Demirel B.  
The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology in ÇEŞME/İZMİR (IMSMATEC'18), April 10-12 2018, İzmir, Turkey, 10 - 12 April 2018, pp.31-34
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The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology in ÇEŞME, 10 - 12 April 2018

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UNSANAN N., KARACA Y., CARBOĞA C., DEMİREL B., DAGASAN BULUCU E.

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**XXXVI. SYNTHESIS AND CHARACTERIZATION OF NIMN BASED SHAPE MEMORY ALLOYS**

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The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology, İzmir, Turkey, 10 - 12 April 2018, pp.65-68

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The International Conference on Material Science and Technology in Cappadocia(IMSTEC 2017), 11 - 13 October 2017

**XXXIX. WHEEL RIM DESIGN**

DEMİREL B., AKKURT F., AYKIR F., KARA S. G., YAŞAR H. D., VATANSEVER B.

The International Conference on Material Science and Technology in Cappadocia(IMSTEC 2017), 11 - 13 October 2017

**XL. MATERIAL SELECTION TO USE IN SPOILER DESIGN BY MULTI-CRITERIA DECISION METHOD**

Demirel B., Şenyiğit E., Nursena U., Seerkan K., Fehim S., Emre Can Ş.

The International Conference on Material Science and Technology in Cappadocia(IMSTEC 2017), Nevşehir, Turkey, 11 - 13 October 2017

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DEMİREL B., ŞENYİĞİT E., KIZILTAN Ç., ÖZTÜRK M., YARIŞ E. Ş., SARIUÇAK M.

The International Conference on Material Science and Technology in Cappadocia(IMSTEC 2017), 11 - 13 October 2017, vol.1, pp.294

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DEMİREL B., ŞENYİĞİT E., YILDIRIM S., VURAL M., ÇİL O., SARIUÇAK M.

The International Conference on Material Science and Technology in Cappadocia(IMSTEC 2017), 11 - 13 October 2017

**XLIII. CATALYTIC CONVERTERS**

DEMİREL B., AKKURT F., DOĞAN M. S., ŞAFAK Y., TAN M.

The International Conference on Material Science and Technology in Cappadocia(IMSTEC 2017), 11 - 13 October 2017

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DEMİREL B., AKKURT F., BOZBIYIK G., TOSUN D., TATLI G., GÜRKÖK S.

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The International Conference on Material Science and Technology in Cappadocia(IMSTEC 2017), Nevşehir, Turkey, 11 - 13 October 2017

**XLVI. OPTIMIZATION OF HIP PROTHESIS**

Demirel B., Akkurt F., Pehlivanlı B., Erdem M., Ordek K.

The International Conference on Material Science and Technology in Cappadocia(IMSTEC 2017), Nevşehir, Turkey, 11 - 13 October 2017, pp.94

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El Zaidi I., DEMİREL B., ATİŞ C. D.

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**L. Effect of Boron Addition on Microstructure and Corrosion Properties of CrMo Steels**

ÇARBOĞA C., KURT B., DEMİREL B., SUN Y., AHLATCI H., ÇEVİK E.

3rd International IronSteel Symposium, 3 - 05 April 2017, pp.355

**LI. Effect of addition of boron on corrosion resistance of AISI 1040**

ÇARBOĞA C., KURT B., DAL S., DEMİREL B., SUN Y., AHLATCI H.

ICOCEE – CAPPADOCIA 2017, 8 - 10 May 2017

**LII. Effect of addition of boron on corrosion resistance of AISI 8620(21CrNi5)**

ÇARBOĞA C., KURT B., DAL S., DEMİREL B., SUN Y., AHLATCI H.

ICOCEE – CAPPADOCIA 2017, 8 - 10 May 2017, vol.1603

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OSKAY K. O., DEMİREL B.

APMAS 2017, 22 - 26 April 2017

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OSKAY K. O., DEMİREL B.

APMAS 2017, 22 - 26 April 2017

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DEMİREL B., Daver F., YARAS A., KILIC E.

International Conference on Material Science and Technology in Cappadocia, Nevşehir, Turkey, 6 - 08 April 2016, pp.1

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DEMİREL B.

International Conference on Material Science and Technology in Cappadocia, 6 - 08 April 2016

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International Conference on Material Science and Technology in Cappadocia, 6 - 08 April 2016

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International Conference on Material Science and Technology in Cappadocia, 6 - 08 April 2016

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KURT B., ASGAROV K., Günay B., DEMİREL B.  
International Conference on Material Science and Technology in Cappadocia (IMSTEC'16), 6 - 08 April 2016
- LX. **AISI 4140 ÇELİĞİNİN YÜZEYİNİN CRVC KAPLANANARAK KAPLAMA TABAKASI MİKROYAPISININ İNCELENMESİ**  
KURT B., Carboğa C., DEMİREL B., Umur H.  
International Conference on Material Science and Technology in Cappadocia, 6 - 08 April 2016
- LXI. **THICKNESS OPTIMIZATION OF THERMAL BARRIER COATING OF A DIESEL PISTON BY STATISTICAL TESTING DESIGN SOFTWARE ECHIP**  
DEMİREL B., Sağlam A., Hepbiçer F., Kocatürk Ö.  
International Conference on Material Science and Technology in Cappadocia, 6 - 08 April 2016
- LXII. **Sıcak Dolum için "BORPET"**  
DAYAN S., ÖZPOZAN N., DEMİREL B.  
Türkiye İnovasyon Haftası, İstanbul, Turkey, 4 - 06 December 2014
- LXIII. **Sıcak Dolum İçin Borpet**  
DAYAN S., ÖZPOZAN N., DEMİREL B.  
Türkiye İnovasyon Haftası, Turkey, 4 - 06 December 2014
- LXIV. **SICAK DOLUM ve ŞİŞELEME İÇİN "BORPET"**  
DAYAN S., DEMİREL B., ÖZPOZAN N.  
4. KİMYA ARGE PROJE PAZARI, İstanbul, Turkey, 01 November 2014
- LXV. **Effect of Shot Peening on the Oxidation Behaviour of Thermal Barrier Coatings**  
KARAOĞLANLI A. C., DEMİREL B., TÜRK A., VAROL R., DÖLEKER K. M.  
30. European Conference on Surface Science, 31 August - 05 September 2014
- LXVI. **Microstructure Investigation of High Rate Boron Added 1020 Steel Joined by Gas Metal Arc Welding Technique**  
carboga c., KURT B., DAL S., DEMİREL B.  
International Conference on Welding Technologies and Exhibition, 21 - 23 May 2014, no.1
- LXVII. **The Effect of Heat Treatment on Different Ratios Boron Added AISI 1040 Steel**  
carboğa c., KURT B., DAL S., DEMİREL B.  
The International Advances in Applied Physics and Materials Science Congress and Exhibition, 24 - 27 April 2014, no.1
- LXVIII. **Microstructure Investigation of Micro Alloy Boron Added AISI 1010 Steel Joined by Gas Metal Arc Welding Technique**  
carboga c., KURT B., DAL S., DEMİREL B.  
International Conference on Welding Technologies and Exhibition, 24 - 27 April 2014
- LXIX. **The Effect of Heat Treatment on Different Ratio Boron Added AISI 8620 21CrNi5 Cementation Steels**  
carboga c., KURT B., DAL S., DEMİREL B.  
The International Advances in Applied Physics and Materials Science Congress and Exhibition, 24 - 27 April 2014
- LXX. **An energy saving approach in the manufacture of carbonated soft drink bottles**  
DEMİREL B., Daver F.  
Evolving Energy The IEF International Energy Congress, Australia, 1 - 04 November 2012, vol.49, pp.280-286
- LXXI. **Corrosion problems and cathodic protection applications in navy industry**  
ELCICEK H., DEMİREL B., KARAOĞLANLI C.  
Conference Proceedings, 6th International Advanced Technologies Symposium, Turkey, 1 - 04 June 2011, vol.1, pp.95
- LXXII. **Simulation of stress in the base of the PET bottles under different processing conditions**  
DEMİREL B., Daver F., YARAS A.  
Conference Proceedings, 6th International Advanced Technologies Symposium, Turkey, 1 - 04 May 2011, vol.1, pp.35
- LXXIII. **Usage of composite materials in the marine and yacht industry?, Conference Proceedings**

ELCICEK H., KARAOGLANLI C., DEMİREL B.

4th Engineering and Technology symposium, Ankara, Turkey, 1 - 04 May 2011, vol.1, pp.597

**LXXIV. Light weight PET bottles: A simulation study**

Daver F., Wei P. C., DEMİREL B.

Conference Proceedings, SPE, ANTEC, 2010, United States Of America, 1 - 04 June 2010, vol.1, pp.95

**LXXV. The optimization of petaloid base dimensions and operating conditions for injection stretch blow moulded PET bottles**

DEMİREL B., Daver F., Kosior E.

Conference Proceedings, 24th Annual Meeting of the Polymer Processing Society, (PPS-24), Italy, 1 - 04 April 2008, vol.1, pp.65

**LXXVI. Petaloid bases of PET bottles: Design and process optimization against environmental stress cracking**

DEMİREL B., Daver F., Kosior E.

Conference Proceedings, SPE ANTEC, 2007, United States Of America, 1 - 04 June 2007, pp.2159

**LXXVII. OPTIMUM DESIGN OF PET BOTTLE BASES AGAINST STRESS CRACKING**

DEMİREL B., Daver F., Kosior E.

Conference Proceedings, 23rd Annual Meeting of the Polymer Processing Society, (PPS-23), Brazil, 1 - 04 May 2007, pp.27

## Supported Projects

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- I. DEMİREL B., TUBITAK Project, Terma Bariyel Kaplama Sistemi Termal Çevrim/Şok Davranışlarının İncelenmesi, 2011 - Continues
- II. DEMİREL B., DAĞAŞAN BULUCU E., YUVALI G., Project Supported by Higher Education Institutions, Kimyasal ve Termal Bozunma Dayanımı ile Mekanik Özellikleri İyileştirilmiş Antimikrobiyal Özellikli Polyethylene Terephalate PET Ambalaj Malzemesinin Geliştirilmesi, 2021 - 2024
- III. DEMİREL B., ÇİTAK E., Project Supported by Higher Education Institutions, Borath Antibakteriyel Sırların Hazırlanması ve Karakterizasyonu, 2019 - 2024
- IV. Demirel B., Esener P. A., Project Supported by Higher Education Institutions, MİKROELEKTRONİK DEVRELERDE KURŞUNSUZ LEHİM ALAŞIMLARININ ISIL VE ELEKTRİKSEL ÖZELLİKLERİNİN ARAŞTIRILMASI, 2020 - 2022
- V. Demirel B., Project Supported by Higher Education Institutions, Kalsiyum Borat (Ca<sub>3</sub>B<sub>2</sub>O<sub>6</sub>) Katkılı PET'in Kimyasal Bozunma Davranışı ile Kalsiyum Borat /PET Kompozitten Üretilen Şişelerin Mekanik Davranışlarının İncelenmesi, 2020 - 2021
- VI. Demirel B., Project Supported by Higher Education Institutions, Kalsiyum Boratın (CaB<sub>2</sub>O<sub>4</sub>) Polietilen Terafitalatın (PET) Kimyasal Bozunması Üzerine İnhibisyon Etkisi ve Kalsiyum Borat (CaB<sub>2</sub>O<sub>4</sub>) Katkılı PET'ten Üretilen Şişelerin Mekanik Davranışlarının İncelenmesi, 2020 - 2021
- VII. DEMİREL B., TUBITAK Project, Halojen İçermeyen, Alev Geciktiricili Polimer Matrisli Kompozit Üretimi ve Üretilen Kompozitin Tesisat Kablolarının Kılıflandırılmasında Kullanılması, 2020 - 2021
- VIII. Demirel B., Akkurt F., Yaraş A., BOREN, Ulusal Bor Araştırma Enstitüsü Projesi, Kalsiyum Borat'ın (CaB<sub>2</sub>O<sub>4</sub>) PET'ten Üretilen Mamul ve Yarı Mamul Malzemelerde Ortaya Çıkan Zararlı Kimyasallar Üzerine İnhibisyon Etkisinin İncelenmesi, 2020 - 2021
- IX. DEMİREL B., DAL S., Project Supported by Higher Education Institutions, NiMn BAZLI ALAŞIMLARIN ŞEKİL HAFIZA DAVRANIŞI ÜZERİNE SICAK EKSTRÜZYON VE ISIL İŞLEMİN ETKİSİ, 2019 - 2021
- X. Demirel B., KOSGEB, Adaptif Bakteri Filtrasyonlu Solunum Fonksiyon Test Filtresi Geliştirilmesi, 2019 - 2020
- XI. DEMİREL B., BAYRAKTAR G., Project Supported by Higher Education Institutions, Tufal Katkılı PE Matrisli Kompozitlerin Tribolojik Ve Mekanik Özelliklerinin İncelenmesi, 2019 - 2020
- XII. DEMİREL B., ASLANTAŞ H., Project Supported by Higher Education Institutions, Elyaf Takviyeli Kompozit Sert Poliüretan Köpüklerin Mekanik Özelliklerinin İyileştirilmesi, 2018 - 2020
- XIII. DEMİREL B., SABAN E., Project Supported by Higher Education Institutions, Modifiye Edilmiş Hidroksiapatitin Işıma

ve Termal Özelliklerinin İncelenmesi, 2018 - 2020

- XIV. Demirel B., Yargıçoğlu P., BOREN, Ulusal Bor Araştırma Enstitüsü Projesi, Ultrasonik Yöntem İle 30um Altı Çinko Borat Üretimi, 2018 - 2019
- XV. Demirel B., Gürek M., TUBITAK Project, Lazer Kaynak Yöntemi İle 0,2 mm Kalınlığında Alüminyum Bant Kaplı Paslanmaz Çelik Tüp Prototip İmalatı, 2018 - 2019
- XVI. DEMİREL B., OSKAY K. O., Project Supported by Higher Education Institutions, TERMAL BARIYER KAPLAMALARIN ELEKTRO BİRİKTİRME YÖNTEMLERİYLE ÜRETİMİ VE KARAKTERİZASYONU, 2016 - 2019
- XXVII. DEMİREL B., TUBITAK Project, Komple Elektrikli, Enerji Verimliliği Arttırılmış, Kalıp Değişirme Otomasyonlu, Robot Kolu İle Uyumlu Plastik Enjeksiyon Makinesi Tasarım Ve Prototip Üretim Projesi, 2017 - 2018
- XXVIII. DEMİREL B., KAVAK İ. A., Project Supported by Higher Education Institutions, PET Şişelerde Performans Artırılması Amacıyla Gerdirme Şişirme Kalıplama Proses Parametrelerinin Optimizasyonu, 2016 - 2018
- XIX. DEMİREL B., ATİŞ C. D., AL-ZAIDI I., Project Supported by Higher Education Institutions, Nano SiO<sub>2</sub> ve Aerojel Katkılı Süper Isıl Yalıtım Özelliğine Sahip Beton Blok Üretimi, 2016 - 2017
- XX. DEMİREL B., TUBITAK Project, Hidrolik valf millerinin aşınma ve korozyon dayanımlarının artırılmasında kullanılan sert krom kaplama prosesinin iyileştirilmesi, 2015 - 2017
- XXI. DEMİREL B., Project Supported by Higher Education Institutions, Termal şok dayanımı artırmak amacıyla inorganik ve polimer katkıli kompozit PET şişe üretimi, 2013 - 2017
- XXII. DEMİREL B., KARAOĞLANLI A., Project Supported by Higher Education Institutions, Termal bariyer kaplama sistemi(TBK) uygulamalarında, farklı termal sprey yöntemleriyle üretilen bağ kaplamaların bilyalı dövme yöntemi ile yüzey özelliklerinin geliştirilmesi ve termal çevrim/şok davranışlarının incelenmesi, 2013 - 2015
- XXIII. Demirel B., TUBITAK Project, Termal bariyer kaplama sistemi(TBK) uygulamalarında, farklı termal sprey yöntemleriyle üretilen bağ kaplamaların bilyeli dövme yöntemi ile yüzey özelliklerinin geliştirilmesi ve termal çevrim/sok davranışlarının incelenmesi, 2011 - 2014
- XXIV. DEMİREL B., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Pomza Agregalı Sandviç Hafif Yapı Elemanı Blok Ürünler, 2011 - 2012
- XXV. Demirel B., Karadağ N., Premiership, Cathodic Protection installation of Water Drainage Pipeline between Çubuk II Barajı Pursaklar for Water Recycling Unit, 1999 - 1999
- XXVI. Demirel B., Karadağ N., Project Supported by Other Private Institutions, Bozüyük Ak Enerji Cogeneration System Steel Pipeline Construction and Cathodic Protection Installation, 1997 - 1997
- XXVII. Demirel B., Karadağ N., Project Supported by Other Official Institutions, Blue Stream Samsun Ankara Natural Gas Pipeline Cathodic Protection, 1996 - 1997
- XXVIII. Demirel B., Karadağ N., Project Supported by Other Official Institutions, USA Ankara Embassy Fuel Oil Tank Cathodic Protection System Installation, 1996 - 1996
- XXIX. Demirel B., Karadağ N., Project Supported by Defense Industry, GÖLCÜK KONCA Çelik iskele Ayaklarının Aliminyum anotlar ile Katodik Koruması, 1996 - 1996
- XXX. Demirel B., Karadağ N., Project Supported by Defense Industry, NATO POL GROUP Presidency 6 Inch 106-300 km Elazığ Diyarbakır Pipeline Cathodic Protection Installation Full Project Design, Measurement, Material Selection and Supply Installation, 1995 - 1996

## Patent

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- I. Demirel B., A New Method and Device to measure mechanical properties of Thin Films , Patent, CHAPTER C Chemistry; Metallurgy, The Invention Registration Number: TR 2020 22221 B , Standard Registration, 2023
- II. Demirel B., USE OF POLYMETHYLMETACRYLATE (PMMA) TO REDUCE THE AMOUNT OF ACETALDEHIDE, CARBOXYLIC END GROUP, DIETHYLENE GLYCOL CAUSED BY INDUSTRIAL USE OF POLYETHYLENE THERAPHITALATE (PET), Patent, CHAPTER C Chemistry; Metallurgy, The Invention Registration Number: - , Standard Registration, 2022
- III. Demirel B., İnaner N. B., Kocayavuz Ö., ADDITION OF ANTIBACTERIAL PROPERTIES TO THE PACKAGINGS PRODUCED WITH PET, Patent, CHAPTER C Chemistry; Metallurgy, The Invention Recourse Number: - , Standard

Registration, 2020

- IV. Demirel B., Shehada M., A NEW ADDITIVE MANUFACTURING METHOD IMPROVEMENT FOR METAL AND CERAMIC INTEGRATED 3D PRINTING USING PHOTOPOLYMER, Patent, CHAPTER C Chemistry; Metallurgy, The Invention Recourse Number: - , Standard Registration, 2020
- V. Demirel B., Yaraş A., Aritürk M. C., STRESS INDUCED CRACKING PREVENTION OCCURRING AT THE PET BOTTLE BASE, Patent, CHAPTER C Chemistry; Metallurgy, The Invention Recourse Number: - , Standard Registration, 2020
- VI. Demirel B., Akkurt F., Yaraş A., İnaner N. B., THE USE OF HYDROXYAPATITE ADDITIVE POLYETHYLENE TEREPHTHALATE IN THE PROTECTION OF MILK AND MILK PRODUCTS AGAINST LIGHT, Patent, CHAPTER C Chemistry; Metallurgy, The Invention Recourse Number: - , Standard Registration, 2020
- VII. Demirel B., A METHOD FOR INHIBITING HARMFUL CHEMICALS FORMED IN MANUFACTURED AND SEMI-MANUFACTURED MATERIALS PRODUCED FROM PET, Patent, CHAPTER C Chemistry; Metallurgy, The Invention Recourse Number: BBF2017/037 , Standard Registration, 2018

## Activities in Scientific Journals

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- I. Bor Dergisi, Advisory Committee Member, 2017 - Continues

## Scientific Refereeing

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- I. JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, National Scientific Refreed Journal, December 2018
- II. ADVANCES IN CEMENT RESEARCH, SCI Journal, October 2018
- III. MEASUREMENT, SCI Journal, August 2018
- IV. ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, SCI Journal, May 2018
- V. JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE, SCI Journal, March 2018
- VI. MATERIALS CHEMISTRY AND PHYSICS, SCI Journal, January 2018
- VII. MATERIALS LETTERS, SCI Journal, January 2018
- VIII. ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, SCI Journal, January 2018
- IX. Cumhuriyet Science Journal, National Scientific Refreed Journal, December 2017
- X. BOR DERGİSİ, National Scientific Refreed Journal, November 2017
- XI. Sigma Journal of Engineering and Natural Sciences, Journal Indexed in ESCI, October 2017
- XII. ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, SCI Journal, September 2017
- XIII. JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE, SCI Journal, August 2017
- XIV. ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, SCI Journal, May 2017
- XV. SURFACE & COATINGS TECHNOLOGY, SCI Journal, April 2017
- XVI. ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, SCI Journal, March 2017
- XVII. JOURNAL OF TESTING AND EVALUATION, SCI Journal, February 2017
- XVIII. INTERNATIONAL JOURNAL OF METALCASTING, SCI Journal, February 2017
- XIX. JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE, SCI Journal, February 2017
- XX. ADVANCES IN CEMENT RESEARCH, SCI Journal, January 2017
- XXI. JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE, SCI Journal, January 2017
- XXII. Serhat Özyar Yılın Genç Bilim İnsanı Ödülü, Other Journals, April 2016
- XXIII. Advances in cement Research, National Scientific Refreed Journal, April 2016
- XXIV. Materials Letters, SCI Journal, April 2016
- XXV. Project Supported by Higher Education Institutions, April 2016
- XXVI. Polymer Engineering & Science, SCI Journal, March 2016
- XXVII. Materials Letters, SCI Journal, March 2016
- XXVIII. The Arabian Journal for Science and Engineering, SCI Journal, March 2016
- XXIX. The Arabian Journal for Science and Engineering, SCI Journal, February 2016

- XXX. The Arabian Journal for Science and Engineering, SCI Journal, January 2016
- XXXI. The Arabian Journal for Science and Engineering, SCI Journal, June 2015
- XXXII. The Arabian Journal for Science and Engineering, SCI Journal, May 2015
- XXXIII. Materials Chemistry and Physics, SCI Journal, April 2015
- XXXIV. Project Supported by Higher Education Institutions, February 2015
- XXXV. Project Supported by Higher Education Institutions, January 2015
- XXXVI. Mühendislik ve Teknoloji Bilimleri Dergisi, National Scientific Refreed Journal, December 2014
- XXXVII. Project Supported by Higher Education Institutions, November 2014
- XXXVIII. Polymer Engineering & Science, SCI Journal, May 2014
- XXXIX. Materials Chemistry and Physics, SCI Journal, April 2014
- XL. The Arabian Journal for Science and Engineering, SCI Journal, March 2014
- XLI. Journal of Applied Polymer Science, SCI Journal, February 2014
- XLII. Project Supported by Higher Education Institutions, October 2013
- XLIII. Journal of Chemical Engineering and Materials Science, Other Indexed Journal, October 2012
- XLIV. TUBITAK Project, November 2011
- XLV. Journal of Applied Polymer Science, SCI Journal, April 2009
- XLVI. Journal of Applied Polymer Science, SCI Journal, March 2009

## Tasks In Event Organizations

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- I. Demirel B., International Conference on Material Science and Technology in Cappadocia-IMSTEC2020, Scientific Congress, Nevşehir, Turkey, Kasım 2020
- II. Demirel B., International Conference on Material Science and Technology in Cappadocia-IMSTEC2019, Scientific Congress, Nevşehir, Turkey, Ekim 2019
- III. Demirel B., The International Conference on Materials Science, Mechanical and Automotive Engineerings and Technology (IMSMATEC'19), Scientific Congress, Nevşehir, Turkey, Haziran 2019
- IV. Demirel B., International Conference on Material Science and Technology in Cappadocia-IMSTEC2018, Scientific Congress, Nevşehir, Turkey, Eylül 2018
- V. Demirel B., The International Conference on Materials Science, Mechanical and Automotive Engineerings and Technology (IMSMATEC'18), Scientific Congress, İzmir, Turkey, Nisan 2018
- VI. Demirel B., International Conference on Material Science and Technology in Cappadocia -IMSTEC2017, Scientific Congress, Nevşehir, Turkey, Ekim 2017
- VII. Demirel B., International Conference on Material Science and Technology in Cappadocia-IMSTEC2016, Scientific Congress, Nevşehir, Turkey, Nisan 2016

## Mobility Activity

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- I. Erasmus Programme, Lecturing, West Pomeranian University of Technology, Poland, 2013 - 2013

## Metrics

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Publication: 127  
Citation (WoS): 232  
Citation (Scopus): 331  
H-Index (WoS): 9  
H-Index (Scopus): 10



## Congress and Symposium Activities

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- I. International Conference on Material Science and Technology in Cappadocia-2017, Attendee, Nevşehir, Turkey, 2017
- II. International Conference on Material Science and Technology in Cappadocia-2016, Attendee, Nevşehir, Turkey, 2016
- III. Bilim, Sanayi ve Teknoloji Bakanlığı-Teknogirişim Sermayesi Desteği Programı, Attendee, ANKARA, Turkey, 2015
- IV. Bilim, Sanayi ve Teknoloji Bakanlığı Ar-Ge Merkezi Başvurusu Hakemlik Görevi, Attendee, IZMIR, Turkey, 2014
- V. The International Advances in Applied Physics and Materials Science Congress-Exhibition, Attendee, Muğla, Turkey, 2014
- VI. TÜBİTAK-TEYDEB PRODIS Hakemliği, Attendee, IZMIR, Turkey, 2013
- VII. TUBITAK MAG - MÜHENDİSLİK ARAŞTIRMA DESTEK GRUBU Panel Üyeliği, Attendee, ANKARA, Turkey, 2012
- VIII. TÜBİTAK-TEYDEB PRODIS Hakemliği, Attendee, İstanbul, Turkey, 2012

## Scholarships

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- I. HECS Free Australian Higher Education Scholarship, University, 2005 - Continues

## Awards

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- I. Demirel B., Gökkan M., Mekanik sistemlerle Düşük Basınç Üreten Elastomerik Horumların Yorulma Ömrü Tayini İçin Sistem Geliştirilmesi, Anadolu Üniversiteler Birliği, May 2022

## Coaching Duties

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## Refereeing Duties

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## Non Academic Experience

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- I. Public Corporation, HAZİNE MÜSTEŞARLIĞI DARPHANE VE DAMGA MATBAASI GENEL MÜDÜRLÜĞÜ, KIYMETLİ MADENLER KALİTE KONTROL LAB.
- II. DARPHANE DAMGA MATBAASI GENEL MÜDÜRLÜĞÜ
- III. Business Establishment Private, PROJE VE UYGULAMA
- IV. KORTEK MÜHENDİSLİK MÜŞAVİRLİK TANITIM LTD. ŞTİ.
- V. Other Public Institution, KKK. ORD. DON. IV KADEME K.LIĞI, METAL KAPLAMA/FOSFAT KAPLAMA
- VI. MİLLİ SAVUNMA BAKANLIĞI
- VII. KORTEK MÜHENDİSLİK MÜŞAVİRLİK TANITIM LTD. ŞTİ.
- VIII. Business Establishment Private, KORTEK MÜH. MÜŞ. LTD. ŞTİ., PROJE VE UYGULAMA