

# Prof. MERAL KARAKIŞLA

## Personal Information

Office Phone: [+90 212 672 0883](tel:+902126720883) Extension: 8

Web: <https://avesis.ankara.edu.tr/karakis>

## International Researcher IDs

ScholarID: rwnqsvMAAAAJ

ORCID: 0000-0001-7036-094X

Publons / Web Of Science ResearcherID: AAW-8645-2020

ScopusID: 56024052200

Yoksis Researcher ID: 6377

## Education Information

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Kimya (Dr), Turkey 1992 - 1998

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), Turkey 1989 - 1992

Undergraduate, Ankara University, Fen Fakültesi, Kimya Bölümü, Turkey 1985 - 1989

## Foreign Languages

English, C1 Advanced

## Dissertations

Doctorate, Polimer kaplı elektrodlar üzerinde anilinin elektrokimyasal polimerizasyonu, Ankara University, Fen Bilimleri Enstitüsü, Kimya (Dr), 1998

Postgraduate, Tek katlı poli (etilen teraftalat) liflere vinil monomerlerinin aşılınması, Ankara University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), 1992

## Research Areas

Chemistry, Physical Chemistry

## Academic Titles / Tasks

Professor, Ankara University, Fen Fakültesi, Kimya Bölümü, 2009 - Continues

Associate Professor, Ankara University, Fen Fakültesi, Kimya Bölümü, 2003 - 2009

Research Assistant, Ankara University, Fen Fakültesi, Kimya Bölümü, 1989 - 2003

## Courses

KİM357 Fizikokimya Laboratuvarı, Undergraduate, 2018 - 2019

CHM215 Physical Chemistry I, Undergraduate, 2018 - 2019  
CHM245 Introduction to Polymer Chemistry, Undergraduate, 2018 - 2019  
KİM215 Fizikokimya I, Undergraduate, 2018 - 2019  
CHM101 General Chemistry I, Undergraduate, 2018 - 2019, 2016 - 2017  
KİM432 Kauçuk Kimyası ve Teknolojisi, Undergraduate, 2018 - 2019  
Polimerlerin Analizi ve Karakterizasyonu, Postgraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009  
General Chemistry I, Undergraduate, 2017 - 2018  
Physical Chemistry I, Undergraduate, 2017 - 2018  
CHM102 General Chemistry II, Undergraduate, 2017 - 2018, 2016 - 2017  
Physical Chemistry II, Undergraduate, 2017 - 2018  
FİZİKOKİMYA II, Undergraduate, 2015 - 2016, 2014 - 2015  
FİZİKOKİMYA I, Undergraduate, 2015 - 2016, 2014 - 2015  
TEMEL KİMYA, Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006, 2004 - 2005  
ELEKTROİLETKEN POLİMERLER, Postgraduate, 2015 - 2016  
KAUÇUK KİMYASI, Undergraduate, 2014 - 2015  
CHM102, Undergraduate, 2014 - 2015  
Fizikokimya-II, Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010  
Kauçuk Kimyası ve Teknolojisi, Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012  
Fizikokimya-I, Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010

## Advising Theses

KARAKIŞLA M., The preparation, characterization and investigation of some properties graft copolymer fibers with improved surface properties by grafting of glycidyl methacrylate and p-phenylenediamine onto polyacrylonitrile fibers, Postgraduate, N.SEVEN(Student), 2020  
KARAKIŞLA M., Grafting of 2-hydroxyethyl methacrylate to the acrylic fibers and investigation of the changes in the properties of fiber modified by grafting, Postgraduate, M.BARUT(Student), 2019  
KARAKIŞLA M., Polyester kumaşların indigo boyar maddeleri ile boyanabilirliğinin geliştirilmesi için poli(Vinil alkol) ve modifiye poli(Vinil alkol) polimerleri ile modifiye edilmesi, Doctorate, M.KALKAN(Student), 2017  
KARAKIŞLA M., N,n'-bis(Piridin-2-ilmetiliden)benzen-1,4-diamin schiff bazının oksidatif kondensasyon polimerizasyonu ve bazı özelliklerinin incelenmesi, Postgraduate, A.A.(Student), 2017  
KARAKIŞLA M., Talk/polimer kompozitlerinin kimyasal polimerizasyon yöntemi ile hazırlanması ve özelliklerinin incelenmesi, Doctorate, D.ANAKLI(Student), 2013  
KARAKIŞLA M., Potasyum persülfat yükseltgeni kullanılarak iletken poliakrilonitril/polipirol kompozit lif hazırlanması ve karakterizasyonu, Postgraduate, H.ACAR(Student), 2008  
KARAKIŞLA M., İletken poli(etilen teraftalat)/polipirol kompozit liflerinin kimyasal polimerizasyonla hazırlanması ve karakterizasyonu, Postgraduate, Z.AYDIN(Student), 2007  
KARAKIŞLA M., Anilin ve poliakrilonitril kullanarak kimyasal polimerizasyon yöntemi ile iletken kompozit lif hazırlanması, Postgraduate, N.TOPTAŞ(Student), 2006

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

- I. **High-Performance Li<sup>+</sup>-Doped Polyaniline/Soybean Fiber Composite Films: A Promising Electrode Material for Solid-State Supercapacitors**  
Abdulwadood A., KALKAN ERDOĞAN M., AYDOĞDU TIĞ G., KARAKIŞLA M.  
ACS Applied Energy Materials, vol.7, no.22, pp.10614-10625, 2024 (SCI-Expanded)
- II. **Exploring Waste Wool Derived-Keratin Nanofiber Architectures on Cotton Fabrics: Electrospinning**

### **Strategies for Enhanced Material Properties**

Basbug B., Beycan B., KALKAN ERDOĞAN M., KARAKIŞLA M., SAÇAK M.

ACS APPLIED POLYMER MATERIALS, vol.6, no.13, pp.7417-7429, 2024 (SCI-Expanded)

- III. **Development of a Conductive Polypyrrole and Magnetic Ferrite Particles Decorated-Polyester Nonwoven Composite as an Electromagnetic Interference Shield Material**  
Beycan B., Kalkan Erdoğan M., Karakışla M., Saçak M.  
TEKSTİL VE KONFEKSİYON, vol.34, no.2, pp.147-161, 2024 (SCI-Expanded)
- IV. **Sequential Deposition of Polyaminothiophenols and Gold Nanoparticle on Wool Fabrics: Fabric Composites as Efficient Catalysts in the Reduction of Nitroarenes**  
Başbuğ B., Kalkan Erdoğan M., Karakışla M., Saçak M.  
CHEMISTRYSELECT, vol.8, no.48, pp.1-12, 2023 (SCI-Expanded)
- V. **Easily Applicable Heterogeneous Catalyst from Sustainable Resources: Anchoring of Pd Nanoparticles onto Chemically Poly(2-amino thiophenol)-Modified Wool Fabrics**  
Basbug B., Erdogan M., KARAKIŞLA M., SAÇAK M.  
ACS APPLIED POLYMER MATERIALS, vol.4, no.10, pp.6834-6849, 2022 (SCI-Expanded)
- VI. **Successive Chemical Modification of Poly(acrylonitrile) Fibers with Glycidyl Methacrylate and Poly(p-phenylenediamine)/Ag Particles for an Efficient Antibacterial Activity**  
Eroglu N. S., Edogan M., Karakışla M., Saçak M.  
FIBERS AND POLYMERS, vol.23, no.3, pp.589-600, 2022 (SCI-Expanded)
- VII. **The hydrophilic modification of acrylic textile fibers by grafting of 2-hydroxyethyl methacrylate and investigation of the imparted properties**  
Barut M., Kalkan Erdoğan M., Karakışla M., Saçak M.  
JOURNAL OF MACROMOLECULAR SCIENCE PART A-PURE AND APPLIED CHEMISTRY, vol.59, no.1, pp.59-71, 2022 (SCI-Expanded)
- VIII. **Deposition of electrically-conductive polyaniline/ferrite nanoparticles onto the polypropylene nonwoven for the development of an electromagnetic interference shield material**  
Yörük A. E., Erdoğan M., KARAKIŞLA M., SAÇAK M.  
Journal of the Textile Institute, vol.113, no.12, pp.2660-2672, 2022 (SCI-Expanded)
- IX. **Investigation of antibacterial properties of polyacrylonitrile fibers modified by new functional groups and silver nanoparticles**  
Okay Z., Kalkan Erdoğan M., Karaca B., Karakışla M., Saçak M.  
TURKISH JOURNAL OF CHEMISTRY, vol.46, pp.1137-1151, 2022 (SCI-Expanded)
- X. **Hydrophobic modification of kaolinite by coating with the conductive polythiophene and investigation of the usability as the environmental-based sensors**  
Gunay M., KALKAN ERDOĞAN M., KARAKIŞLA M., SAÇAK M.  
CHEMICAL PAPERS, vol.75, no.1, pp.123-137, 2021 (SCI-Expanded)
- XI. **Preparation of hydrophilic woven fabrics: Surface modification of poly(ethylene terephthalate) by grafting of poly(vinyl alcohol) and poly(vinyl alcohol)-g-(N-vinyl-2-pyrrolidone)**  
Kalkan Erdoğan M., Akdemir O., Hamitbeyli A., Karakışla M.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.137, no.16, 2020 (SCI-Expanded)
- XII. **Improvement of the adhesion of conductive poly(m-toluidine) onto chemically reduced-wool fabrics**  
KALKAN ERDOĞAN M., KARAKIŞLA M., SAÇAK M.  
TURKISH JOURNAL OF CHEMISTRY, vol.44, no.3, pp.775-790, 2020 (SCI-Expanded)
- XIII. **Morphologically different silver particles decorated- conductive poly(o-anisidine)/wool fabric composites and investigation of catalytic activity in reduction of methylene blue**  
KALKAN ERDOĞAN M., KARAKIŞLA M., SAÇAK M.  
MATERIALS CHEMISTRY AND PHYSICS, vol.225, pp.72-83, 2019 (SCI-Expanded)
- XIV. **Preparation and characterization of electrically semi-conductive polyfuran-coated poly(ethylene terephthalate) fibers**  
KALKAN ERDOĞAN M., KARAKIŞLA M., SAÇAK M.  
JOURNAL OF THE TEXTILE INSTITUTE, vol.110, no.2, pp.282-288, 2019 (SCI-Expanded)

- XV. **Highly effective and recoverable Pd(II) catalyst immobilized on thermally stable Schiff base polymer containing phenol group: Production, characterization and application in Suzuki coupling reactions**  
BARAN N. Y., BARAN T., MENTEŞ A., KARAKIŞLA M., SAÇAK M.  
JOURNAL OF ORGANOMETALLIC CHEMISTRY, vol.866, pp.87-94, 2018 (SCI-Expanded)
- XVI. **Polypyrrole and silver particles coated poly(ethylene terephthalate) nonwoven composite for electromagnetic interference shielding**  
KALKAN ERDOĞAN M., KARAKIŞLA M., SAÇAK M.  
JOURNAL OF COMPOSITE MATERIALS, vol.52, no.10, pp.1353-1362, 2018 (SCI-Expanded)
- XVII. **Fabrication of poly(o-Anisidine)/Ag particles coated poly(ethylene terephthalate) nonwoven composite and investigation of antibacterial activity**  
KALKAN ERDOĞAN M., KARAKIŞLA M., SAÇAK M.  
POLYMER COMPOSITES, vol.39, 2018 (SCI-Expanded)
- XVIII. **Synthesis and characterization of conductive poly(o-anisidine)/talc composite**  
ANAKLI D., Cetinkaya S., KARAKIŞLA M., Sacak E.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.33, no.2, pp.403-412, 2018 (SCI-Expanded)
- XIX. **Synthesis, characterization, conductivity and antimicrobial study of a novel thermally stable polyphenol containing azomethine group**  
Baran N. Y., Karakışla M., Demir H. Ö., Saçak M.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1123, pp.153-161, 2016 (SCI-Expanded)
- XX. **Conductive poly(o-anisidine)/poly(ethylene terephthalate) nonwoven composite: Investigation of synthesis parameters and electromagnetic shielding effectiveness**  
Turay C. B., KALKAN ERDOĞAN M., KARAKIŞLA M., SAÇAK M.  
JOURNAL OF INDUSTRIAL TEXTILES, vol.46, no.4, pp.1104-1120, 2016 (SCI-Expanded)
- XXI. **Conductive polyaniline-polythiophene/poly(ethylene terephthalate) composite fiber: Effects of pH and washing processes on surface resistivity**  
KALKAN ERDOĞAN M., KARAKIŞLA M., SAÇAK M.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.132, no.20, 2015 (SCI-Expanded)
- XXII. **Polypyrrole/Natural Zeolite Composite Prepared by In Situ Oxidative Polymerization: Thermal and Humidity Sensing Properties**  
Selcuk S., KARAKIŞLA M., SAÇAK M.  
JOURNAL OF MACROMOLECULAR SCIENCE PART A-PURE AND APPLIED CHEMISTRY, vol.51, no.5, pp.405-411, 2014 (SCI-Expanded)
- XXIII. **Synthesis and characterization of poly(N-Ethyl aniline) / talc composite materials**  
ANAKLI D., Çetinkaya S., KARAKIŞLA M., SAÇAK M.  
Inzynieria Mineralna, vol.14, no.2, pp.115-118, 2013 (SCI-Expanded)
- XXIV. **Preparation and characterization of conductive polypyrrole/kaolinite composites**  
Acar H., KARAKIŞLA M., SAÇAK M.  
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.16, no.3, pp.845-850, 2013 (SCI-Expanded)
- XXV. **Potassium persulfate-mediated preparation of conducting polypyrrole/polyacrylonitrile composite fibers: Humidity and temperature-sensing properties**  
Acar H., KARAKIŞLA M., SAÇAK M.  
Journal of Applied Polymer Science, vol.125, no.5, pp.3977-3985, 2012 (SCI-Expanded)
- XXVI. **Electrorheological properties of polyaniline/K-feldspar conducting composite**  
EROL Ö., KARAKIŞLA M., Unal H. I., SAÇAK M.  
Journal of Composite Materials, vol.46, no.11, pp.1295-1304, 2012 (SCI-Expanded)
- XXVII. **Preparation of poly(o-toluidine)/polyacrylonitrile composite fibres using CrO<sub>3</sub>**  
Üçhöyük C., KARAKIŞLA M., SAÇAK M.  
Indian Journal of Fibre and Textile Research, vol.37, no.2, pp.120-126, 2012 (SCI-Expanded)
- XXVIII. **Preparation, Characterization and Electromagnetic Shielding Effectiveness of Conductive Polythiophene/Poly(ethylene terephthalate) Composite Fibers**

KALKAN ERDOĞAN M., KARAKIŞLA M., SAÇAK M.

JOURNAL OF MACROMOLECULAR SCIENCE PART A-PURE AND APPLIED CHEMISTRY, vol.49, no.6, pp.473-482, 2012 (SCI-Expanded)

- XXIX. **Preparation and characterization of conducting poly(ethylene terephthalate)/polypyrrole composite fibers**  
AYDIN A., KARAKIŞLA M., SAÇAK M.  
Journal of Thermoplastic Composite Materials, vol.23, no.6, pp.895-910, 2010 (SCI-Expanded)
- XXX. **Conducting polyaniline/kaolinite composite: Synthesis, characterization and temperature sensing properties**  
Duran N. G., KARAKIŞLA M., Aksu L., SAÇAK M.  
Materials Chemistry and Physics, vol.118, no.1, pp.93-98, 2009 (SCI-Expanded)
- XXXI. **Conductive polyaniline/polyacrylonitrile composite fibers: Effect of synthesis parameters on polyaniline content and electrical surface resistivity**  
Toptaş N., KARAKIŞLA M., SAÇAK M.  
Polymer Composites, vol.30, no.11, pp.1618-1624, 2009 (SCI-Expanded)
- XXXII. **Polyaniline grafted polyacrylonitrile conductive composite fibers for reversible immobilization of enzymes: Stability and catalytic properties of invertase**  
BAYRAMOĞLU G., KARAKIŞLA M., Altıntaş B., Metin A. U., SAÇAK M., Arica M. Y.  
Process Biochemistry, vol.44, no.8, pp.880-885, 2009 (SCI-Expanded)
- XXXIII. **Synthesis of Poly(o-toluidine) in DMF/Water Mixture Using Benzoyl Peroxide**  
Mucuk Z., Karakışla M., Saçak M.  
INTERNATIONAL JOURNAL OF POLYMER ANALYSIS AND CHARACTERIZATION, vol.14, no.5, pp.403-417, 2009 (SCI-Expanded)
- XXXIV. **The preparation and characterization of conductive poly(ethylene terephthalate)/polyaniline composite fibers using benzoyl peroxide**  
Cetin E., KARAKIŞLA M., SAÇAK M.  
FIBERS AND POLYMERS, vol.9, no.3, pp.255-262, 2008 (SCI-Expanded)
- XXXV. **Preparation of methacrylamide grafted and dye-ligand immobilized PET fibers: Studies of adsorption and purification of lysozyme**  
KARAKIŞLA M., Bayramoglu G., Arica M. Y.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.108, no.5, pp.3313-3323, 2008 (SCI-Expanded)
- XXXVI. **Preparation of poly(ethylene terephthalate)-g-methacrylamide copolymers initiated by azobisisobutyronitrile: Characterization and investigation of some properties**  
Alakara S., KARAKIŞLA M., SAÇAK M.  
JOURNAL OF MACROMOLECULAR SCIENCE PART A-PURE AND APPLIED CHEMISTRY, vol.45, no.4, pp.276-280, 2008 (SCI-Expanded)
- XXXVII. **Conductive potassium feldspar/polyaniline composites prepared by in situ chemical polymerization**  
Cetinkaya S., KARAKIŞLA M., Oezer A., SAÇAK M.  
SYNTHETIC METALS, vol.157, no.18-20, pp.702-707, 2007 (SCI-Expanded)
- XXXVIII. **Graft copolymerization of an itaconic acid/acrylamide monomer mixture onto poly(ethylene terephthalate) fibers with benzoyl peroxide**  
Coskun R., Sacak M., Karakışla M.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.97, no.5, pp.1795-1803, 2005 (SCI-Expanded)
- XXXIX. **Graft polymerization of methacrylamide onto poly(ethylene terephthalate) fibers with benzoyl peroxide as initiator and their characterization**  
Ogun N., Karakışla M., Aksu L., Sacak M.  
MACROMOLECULAR CHEMISTRY AND PHYSICS, vol.205, no.15, pp.1995-2001, 2004 (SCI-Expanded)
- XL. **The chemical synthesis of conductive polyaniline doped with dicarboxylic acids**  
Erdem E., Karakışla M., Sacak M.  
EUROPEAN POLYMER JOURNAL, vol.40, no.4, pp.785-791, 2004 (SCI-Expanded)
- XLI. **The adsorption of Cu(II) ion from aqueous solution upon acrylic acid grafted poly(ethylene**

## **terephthalate) fibers**

Karakisla M.

JOURNAL OF APPLIED POLYMER SCIENCE, vol.87, no.8, pp.1216-1220, 2003 (SCI-Expanded)

- XLII. **Conductive composite films prepared using undoped polyaniline and poly(methyl methacrylate)**  
Karakisla M., Erdem E., Sacak M.  
POLYMER JOURNAL, vol.35, no.11, pp.879-883, 2003 (SCI-Expanded)
- XLIII. **Polypyrrole/polyaniline conductive films obtained electrochemically on polycarbonate-coated platinum electrodes**  
Karakisla M., Aksu L., Sacak M.  
POLYMER INTERNATIONAL, vol.51, no.12, pp.1371-1377, 2002 (SCI-Expanded)
- XLIV. **The chemical synthesis of conductive polyaniline by using benzoyl peroxide**  
Karakisla M., Sacak M.  
JOURNAL OF MACROMOLECULAR SCIENCE-PURE AND APPLIED CHEMISTRY, vol.A39, no.11, pp.1349-1359, 2002 (SCI-Expanded)
- XLV. **The preparation of polyaniline/polypyrrole conductive polymer films on polycarbonate-coated Pt electrodes**  
Karakisla M., Sacak M.  
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.38, no.1, pp.51-59, 2000 (SCI-Expanded)
- XLVI. **Grafting of ethyl acrylate onto monofilament polyester fibers using benzoyl peroxide**  
Karakisla M., Sacak M.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.70, no.9, pp.1701-1705, 1998 (SCI-Expanded)
- XLVII. **316 Steel electrode coated with polycarbonate for electropolymerization of aniline**  
SAÇAK M., KARAKIŞLA M., Akbulut U.  
Journal of Applied Polymer Science, vol.65, no.6, pp.1103-1111, 1997 (SCI-Expanded)
- XLVIII. **A 316 steel electrode coated with polycarbonate for electropolymerization of aniline**  
Sacak M., Karakisla M., Akbulut U.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.65, no.6, pp.1103-1111, 1997 (SCI-Expanded)
- XLIX. **Synthesis and characterization of malonic acid-doped polyaniline**  
Karakisla M., Sacak M., Erdem E., Akbulut U.  
JOURNAL OF APPLIED ELECTROCHEMISTRY, vol.27, no.3, pp.309-316, 1997 (SCI-Expanded)
- L. **Synthesis and properties of oxalic acid-doped polyaniline**  
Erdem E., Sacak M., Karakisla M.  
POLYMER INTERNATIONAL, vol.39, no.2, pp.153-159, 1996 (SCI-Expanded)
- LI. **Conductive polyaniline poly(methyl methacrylate) films obtained by electropolymerization**  
Karakisla M., Sacak M., Akbulut U.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.59, no.9, pp.1347-1354, 1996 (SCI-Expanded)

## **Articles Published in Other Journals**

- I. **Design of Silk Fabric Surface with Enhanced Antiseptic Properties through Graft Modification and Iodophor Integration**  
Dinçer S., Kalkan Erdoğan M., Omeroglou E., Kiran F., Karakışla M., Saçak M.  
Macromolecular Chemistry and Physics, vol.225, no.13, pp.1-17, 2024 (Peer-Reviewed Journal)
- II. **Preparation of a Clay Composite Containing Poly(o-toluidine) and Halloysite, and Examining of Its Performance as a Humidity Sensor**  
Kalkan Erdoğan M., Karakışla M.  
Düzce Üniversitesi Bilim ve Teknoloji Dergisi, vol.9, no.2, pp.521-534, 2021 (Peer-Reviewed Journal)
- III. **Simultaneous deposition of poly(O-anisidine) and noble ag particles on wool fabric and the evaluation of its performance as a catalyst in dye reduction**  
KALKAN ERDOĞAN M., KARAKIŞLA M.

Journal of the Turkish Chemical Society, Section A: Chemistry, vol.6, no.2, pp.225-236, 2019 (Scopus)

**IV. Synthesis and characterization of poly(o-toluidine)/kaolinite conductive composites for humidity and temperature sensing**

BORAN F., Cetinkaya S., KARAKIŞLA M., SAÇAK M.

PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.24, no.7, pp.1278-1283, 2018 (ESCI)

**V. Geliştirilmiş elektrik iletkenliğine sahip POT/Na-Feldspat iletken kompozitlerinin sentezlenmesi ve karakterizasyonu**

BORAN F., ÇETİNKAYA S., ANAKLI D., ŞAHİN M., SAÇAK M.

Dicle Üniversitesi Mühendislik Fakültesi Mühendislik Dergisi, vol.8, no.4, pp.901-910, 2017 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

**I. Gluten Türevi Proteinlerle Emülsifiye Edilmiş Su Bazlı Poliüretan Liflerin Sentezi ve Karakterizasyonu: Çevre Dostu Malzemelere Yeni Bir Yaklaşım**

Beycan B., Kalkan Erdoğan M., Karakişla M., Saçak M.

IX. Polymer Science and Technology Congress with International Participation, Ankara, Turkey, 16 - 18 September 2024, pp.405

**II. İpek Dokuma Yüzey Özelliklerinin Kimyasal Modifikasyon ile Geliştirilmesi**

Dinçer S., Kalkan Erdoğan M., Karakişla M., Saçak M.

IX. Polymer Science and Technology Congress with International Participation, Ankara, Turkey, 16 - 18 September 2024, pp.387

**III. Advancing Surface Engineering: Developing a Biocompatible Electrospun Cellulose Fabric for Nanofibrous Web Design**

Başbuğ B., Kalkan Erdoğan M., Karakişla M., Saçak M.

IX. Polymer Science and Technology Congress with International Participation, Ankara, Turkey, 16 - 18 September 2024, pp.398

**IV. Electrochemical Behaviour of Conductive Composite Film Doped with Plant-Derived Protein Fibers**

Abdulwadood A., Aydoğdu Tiğ G., Kalkan Erdoğan M., Karakişla M., Saçak M.

IX. Polymer Science and Technology Congress with International Participation, Ankara, Turkey, 16 - 18 September 2024, pp.388

**V. Chemically Attractive Surface Modification of Cotton Fabrics via Electrospinning Technique Using Sustainable Wool Keratin-based Biopolymeric Blends**

Başbuğ B., KALKAN ERDOĞAN M., KARAKIŞLA M., SAÇAK M.

50th World Polymer Congress IUPAC MACRO 2024, Coventry, England, 1 - 04 July 2024

**VI. Cotton Reimagined: Surface Functionalization of Cotton Fabric Using Waterborne Polyurethane/Poly(2-ethyl 2-oxazoline) Blends for Biomedical Textiles**

Beycan B., KALKAN ERDOĞAN M., KARAKIŞLA M., SAÇAK M.

The 50th World Polymer Conference IUPAC Macro 2024, Coventry, England, 1 - 04 July 2024

**VII. Surface Functionalization of Cotton Fabrics with Modified Bamboo Cellulose-Based Biopolymers Through Electrospinning Technique**

Başbuğ B., Kalkan Erdoğan M., Yurdakök Dikmen B., Yangın S., Kıymacı M. E., Karakişla M., Saçak M.

50th World Polymer Congress IUPAC MACRO 2024, Coventry, England, 1 - 04 July 2024, pp.73

**VIII. Preparation and Characterization of Biocompatible Materials From Keratin-based Nanofibers by Electro-Spinning Method**

Başbuğ B., Kalkan Erdoğan M., Karakişla M., Saçak M.

5. Euroasia Biochemical Approaches and Technologies, Antalya, Turkey, 2 - 05 November 2023

**IX. Revolutionizing Textile Properties: A Study on the Electrospinning of Biocompatible Polymer Blend onto Cotton Fabric**

Beycan B., Kalkan Erdođan M., Karakışla M., Saçak M.

5. Euroasia Biochemical Approaches and Technologies, Antalya, Turkey, 2 - 05 November 2023

- X. **Development of an Easily Applicable Heterogeneous Catalyst by Anchoring Palladium and Gold Nanoparticles onto Chemically-Modified Wool Fabrics**  
KALKAN ERDOĐAN M., Bařbuđ B., KARAKIŐLA M., SAÇAK M.  
NanoTR-16, Ankara, Turkey, 5 - 08 September 2022
- XI. **Synthesis of conductive poly(o-ethoxyaniline)/talc composite and investigation of its properties**  
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