

## Prof. BERRİN DURAN

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAF-8088-2021

ScopusID: 22133915800

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### Education Information

Doctorate, Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Turkey 2005 - 2010

Postgraduate, Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Kimya (YI)  
(Tezli), Turkey 2001 - 2004

Undergraduate, Eskisehir Osmangazi University, Fen-Edebiyat Fakültesi, Kimya Bölümü,  
Turkey 1997 - 2001

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, N-sübstitüe anilin ve N-sübstitüe pirollerin bakır üzerinde elektropolimerizasyonları ve antikorozif  
özelliklerinin araştırılması, Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Kimya (Dr), 2010

Postgraduate, Yeni tip suda çözülebilen diplok kopolimerlerin sentezi, türevlerinin eldesi ve bu kopolimerlerin stabilizör  
etkilerinin incelenmesi, Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Kimya (YI) (Tezli), 2004

### Research Areas

Chemistry, Physical Chemistry, Electrochemistry, Conductive Polymers, Polymeric Films

### Academic Titles / Tasks

Professor, Eskisehir Osmangazi University, FEN FAKÜLTESİ, KİMYA BÖLÜMÜ, 2023 - Continues

Associate Professor, Eskisehir Osmangazi University, FEN FAKÜLTESİ, KİMYA BÖLÜMÜ, 2014 - 2023

## Courses

Chemistry, Undergraduate, 2017 - 2018  
Elektropolimerik Malzemeler I, Undergraduate, 2017 - 2018, 2016 - 2017  
Nanomalzeme Kimyası, Doctorate, 2017 - 2018  
Kimya (İnşaat Müh.), Undergraduate, 2017 - 2018  
Kimya Lab. (İnşaat Müh.), Undergraduate, 2017 - 2018  
Korozyon Kimyası, Undergraduate, 2017 - 2018, 2016 - 2017  
Polimer Sentez Yöntemleri, Postgraduate, 2017 - 2018, 2016 - 2017  
Elektropolimerik Malzemeler II, Undergraduate, 2016 - 2017  
Endüstriyel Polimerler, Undergraduate, 2016 - 2017  
Heterojen Polimerleşme Sistemleri, Postgraduate, 2016 - 2017  
Fizikokimya II, Undergraduate, 2016 - 2017  
Kimya Lab. (Kim. Müh.), Undergraduate, 2016 - 2017  
Chemistry Lab. (Makine Müh.), Undergraduate, 2016 - 2017  
Biyokimya Lab. II, Undergraduate, 2016 - 2017  
Kimya (Met.-Malz. Müh.), Undergraduate, 2016 - 2017

## Advising Theses

Duran B., Metal Oksit Katkılı Poli(metil karbazol) Filmlerin Korozyon Performanslarının Araştırılması, Postgraduate, G.GENÇ(Student), 2025  
Duran B., Pirol ve N-Substitüe Pirollerin Karbazol ile 304 Paslanmaz Çelik Üzerinde Elektropolimerizasyonları ve Antikorozif Özelliklerinin Araştırılması, Doctorate, İ.ÜNVER(Student), 2023  
Duran B., Electrochemical Synthesis of Metal Oxide Doped Poly(N-vinyl carbazole)s on Steel and Investigation of Anticorrosive Properties , Postgraduate, E.ŞİMŞEK(Student), 2023

## Jury Memberships

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Kütahya Dumlupınar Üniversitesi, January, 2024  
Post Graduate, Post Graduate, Eskişehir Osmangazi Üniversitesi, January, 2024  
Doctoral Examination, Doctoral Examination, Eskişehir Osmangazi Üniversitesi, January, 2024  
Post Graduate, Post Graduate, Eskişehir Osmangazi Üniversitesi, January, 2024  
Post Graduate, Post Graduate, Eskişehir Teknik Üniversitesi, August, 2023  
Doctoral Examination, Doctoral Examination, Kütahya Dumlupınar Üniversitesi, June, 2023  
Post Graduate, Post Graduate, Bilecik Şeyh Edebali Üniversitesi, January, 2023  
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Eskişehir Osmangazi Üniversitesi, December, 2022  
Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, Eskişehir Osmangazi Üniversitesi, September, 2017  
Doctorate, Doctorate, Eskişehir Osmangazi Üniversitesi, April, 2017  
Post Graduate, Post Graduate, Eskişehir Osmangazi Üniversitesi, July, 2016  
Doctorate, Doctorate, Eskişehir Osmangazi Üniversitesi, May, 2015

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

- I. Poly(N-vinyl carbazole)-TiO<sub>2</sub> composite coating for protection of steel  
Duran B., Şimşek E.  
JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY, vol.37, no.20, pp.2781-2794, 2023 (SCI-Expanded)

- II. **Improved Corrosion Protection of Stainless Steel by Two Dimensional BN Nanomaterial Coating**  
Duran B., Pat S.  
ECS JOURNAL OF SOLID STATE SCIENCE AND TECHNOLOGY, vol.11, no.6, 2022 (SCI-Expanded)
- III. **Potentiodynamic synthesis of poly(N-vinyl carbazole) films on stainless steel to enhance corrosion resistance in sulfuric acid solution**  
Duran B.  
POLYMER-PLASTICS TECHNOLOGY AND MATERIALS, vol.61, no.16, pp.1833-1843, 2022 (SCI-Expanded)
- IV. **Arylamino Substituted Mercaptoimidazole Derivatives as New Corrosion Inhibitors for Carbon Steel in Acidic Media: Experimental and Computational Study**  
Duran B., Yurttaş L., Duran M.  
JOURNAL OF ELECTROCHEMICAL SCIENCE AND TECHNOLOGY, vol.12, no.3, pp.365-376, 2021 (SCI-Expanded)
- V. **Investigation of Supporting Electrolyte Effect on Supercapacitor Properties of Poly(Carbazole) Films**  
Duran B., Unver I. C., Bereket G.  
JOURNAL OF ELECTROCHEMICAL SCIENCE AND TECHNOLOGY, vol.11, pp.41-49, 2020 (SCI-Expanded)
- VI. **Corrosion Protection of Stainless Steel by Poly(Carbazole-co-pyrrole) Films Deposited on TiO<sub>2</sub> Sol-Gel Film**  
Unver I. C., Bereket G., Duran B.  
POLYMER-PLASTICS TECHNOLOGY AND ENGINEERING, vol.57, pp.242-250, 2018 (SCI-Expanded)
- VII. **Inhibition of steel corrosion by potentiodynamic deposition of poly(N-methyl carbazole)**  
Duran B., Unver I. C., Bereket G.  
JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY, vol.31, no.13, pp.1467-1479, 2017 (SCI-Expanded)
- VIII. **An experimental and theoretical investigation on adsorption properties of some diphenolic Schiff bases as corrosion inhibitors at acidic solution/mild steel interface**  
Yurt A., Duran B., Dal H.  
ARABIAN JOURNAL OF CHEMISTRY, vol.7, no.5, pp.732-740, 2014 (SCI-Expanded)
- IX. **Role of supporting electrolyte on the corrosion performance of poly (carbazole) films deposited on stainless steel**  
Duran B., Cakmakci I., Bereket G.  
CORROSION SCIENCE, vol.77, pp.194-201, 2013 (SCI-Expanded)
- X. **A comparative study on protective properties of electrosynthesized poly(pyrrole)/poly(N-methylpyrrole), poly(pyrrole)/poly(N-phenylpyrrole), poly(pyrrole)/poly(N-methoxyphenylpyrrole) composite coatings**  
Duran B., Bereket G.  
JOURNAL OF COATINGS TECHNOLOGY AND RESEARCH, vol.10, no.6, pp.897-907, 2013 (SCI-Expanded)
- XI. **Experimental and theoretical studies on protective properties of poly(pyrrole-co-N-methyl pyrrole) coatings on copper in chloride media**  
Cakmakci I., Duran B., Duran M., Bereket G.  
CORROSION SCIENCE, vol.69, pp.252-261, 2013 (SCI-Expanded)
- XII. **Influence of electrochemically prepared poly(pyrrole-co-N-methyl pyrrole) and poly(pyrrole)/poly(N-methyl pyrrole) composites on corrosion behavior of copper in acidic medium**  
Cakmakci I., Duran B., Bereket G.  
PROGRESS IN ORGANIC COATINGS, vol.76, no.1, pp.70-77, 2013 (SCI-Expanded)
- XIII. **Cyclic Voltammetric Synthesis of Poly(N-methyl pyrrole) on Copper and Effects of Polymerization Parameters on Corrosion Performance**  
Duran B., Bereket G.  
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.51, no.14, pp.5246-5255, 2012 (SCI-Expanded)
- XIV. **Electrochemical synthesis and characterization of poly(m-phenylenediamine) films on copper for corrosion protection**  
Duran B., Bereket G., Duran M.  
PROGRESS IN ORGANIC COATINGS, vol.73, pp.162-168, 2012 (SCI-Expanded)

- XV. Schiff bases as corrosion inhibitor for aluminium in HCl solution  
Safak S., Duran B., Yurt A., Turkoglu G.  
CORROSION SCIENCE, vol.54, pp.251-259, 2012 (SCI-Expanded)
- XVI. Poly(N-methyl aniline) thin films on copper: Synthesis, characterization and corrosion protection  
Duran B., Bereket G., Turhan M. C., Virtanen S.  
THIN SOLID FILMS, vol.519, no.18, pp.5868-5874, 2011 (SCI-Expanded)
- XVII. Electropolymerization, characterization and corrosion performance of poly(N-ethylaniline) on copper  
Duran B., Turhan M. C., Bereket G., Sarac A. S.  
ELECTROCHIMICA ACTA, vol.55, no.1, pp.104-112, 2009 (SCI-Expanded)
- XVIII. Anticorrosive properties of electrosynthesized poly(m-aminophenol) on copper from aqueous phenylphosphonic acid solution  
Bereket G., Duran B.  
PROGRESS IN ORGANIC COATINGS, vol.64, no.1, pp.57-66, 2009 (SCI-Expanded)
- XIX. Effect of the molecular weight and structure of some novel water-soluble triblock copolymers on the electrochemical behaviour of mild steel  
Yurt A., Büttün V., Duran B.  
MATERIALS CHEMISTRY AND PHYSICS, vol.105, no.1, pp.114-121, 2007 (SCI-Expanded)
- XX. Electropolymerization of m-aminophenol on mild steel and its corrosion protection effect  
Hur E., Bereket G., Duran B., Ozdemir D., Şahin Y.  
PROGRESS IN ORGANIC COATINGS, vol.60, no.2, pp.153-160, 2007 (SCI-Expanded)
- XXI. A study on acid-base properties and hydrogen bonding of some 2-substituted benzimidazoles in aqueous phase using semi-empirical methods  
Yarligan S., Oğretir C., Kaynak B., Esenoglu E.  
JOURNAL OF MOLECULAR STRUCTURE-THEOCHEM, vol.586, pp.9-16, 2002 (SCI-Expanded)

### Articles Published in Other Journals

- I. Polikarbazol ve ZnO katkılı polikarbazolün paslanmaz çelik yüzeyinde elektrokimyasal sentezi ve korozyon performanslarının araştırılması  
Uzun G., Duran B., Hür E.  
AVRUPA BİLİM VE TEKNOLOJİ DERGİSİ (EJOSAT), no.34, pp.446-452, 2022 (Peer-Reviewed Journal)

### Books & Book Chapters

- I. Kimya 11. sınıf  
Duran B. (Editor)  
MEB Yayınları, Ankara, 2023

### Refereed Congress / Symposium Publications in Proceedings

- I. Effect of zirconia reinforcement on the corrosion performance of poly(N-vinyl carbazole) films  
Şimşek E., Duran B.  
5th International Eurasian Conference on Biological and Chemical Sciences (5th Eurasian BioChem 2022), Ankara, Turkey, 23 - 25 November 2022, pp.1026-1033
- II. TiO<sub>2</sub> doped poly(N-vinyl carbazole) as protective coating for steel  
Duran B., Şimşek E.  
2nd International Conference and Exhibition on Corrosion and Surface Protection For Steel (CASP 2022), İstanbul,

Turkey, 25 - 26 May 2022

- III. **Electrochemical synthesis, characterization and anticorrosive properties of MnO<sub>2</sub> doped poly(N-vinyl carbazole) films on steel**  
Şimşek E., Duran B.  
2nd International Congress of Engineering and Natural Sciences Studies (ICENSS 2022), Ankara, Turkey, 7 - 09 May 2022, pp.543-554
- IV. **Çelik yüzeyinde sentezlenen poli(karbazol)-MnO<sub>2</sub> kompozit filmlerinin korozyon performansları**  
Duran B.  
1st International Conference on Engineering and Applied Natural Sciences (ICEANS 2022), Konya, Turkey, 10 - 13 May 2022, pp.1161-1167
- V. **Polikarbazol ve ZnO katkılı polikarbazolün paslanmaz çelik yüzeyinde elektrokimyasal sentezi ve korozyon performanslarının araştırılması**  
Uzun G., Duran B., Hür E.  
2nd International Conference on Applied Engineering and Natural Sciences (ICAENS 2022), Konya, Turkey, 10 - 13 March 2022, pp.467-474
- VI. **Corrosion protection of steel by electrodeposited poly(N-methyl carbazole) films**  
Duran B., Çakmakçı Ünver İ., Bereket G.  
International Conference on Applications in Chemistry and Chemical Engineering (ICACCHE 2017), Sarajevo, Bosnia And Herzegovina, 11 - 15 October 2017, pp.58
- VII. **Effect of cyclic voltammetric electropolymerization parameters on corrosion performances of deposited poly(N-methyl pyrrole) films**  
Duran B., Bereket G.  
XIV.Uluslararası Korozyon Sempozyumu (KORSEM 2016), Bayburt, Turkey, 5 - 07 October 2016, pp.598
- VIII. **Corrosion protection of stainless steel by poly(carbazole-co-pyrrole) coating deposited on TiO<sub>2</sub> sol gel film**  
Ünver Çakmakçı İ., Bereket G., Duran B.  
12th International Nanoscience and Nanotechnology Conference (NANOTR-12), Kocaeli, Turkey, 3 - 05 June 2016, pp.223
- IX. **Role of supporting electrolyte on the protective performance of poly(carbazole) films deposited on stainless steel**  
Duran B., Çakmakçı İ., Bereket G.  
The European Corrosion Congress (EUROCORR 2012), İstanbul, Turkey, 9 - 13 September 2012, pp.690
- X. **Corrosion protection of copper in 0.1 M H<sub>2</sub>SO<sub>4</sub> solution by poly(pyrrole)/poly(N-methyl pyrrole), poly(pyrrole)/poly(N-phenyl pyrrole) and poly(pyrrole)/poly(N- methoxyphenyl pyrrole) bilayers**  
Duran B., Bereket G.  
9th International Electrochemistry Meeting in Turkey, İzmir, Turkey, 25 - 29 September 2011, pp.160
- XI. **Synthesis of poly(pyrrole)/poly(N-methyl aniline) and poly(pyrrole)/poly(N-methyl pyrrole) bilayer films and investigation of corrosion performances in 3.5% NaCl solution**  
Çakmakçı İ., Duran B., Bereket G.  
9th International Electrochemistry Meeting in Turkey, İzmir, Turkey, 25 - 29 September 2011, pp.172
- XII. **Poli(m-fenilendiamin) filmlerinin bakır yüzeyinde elektrokimyasal sentezi, karakterizasyonu ve antikorozif özellikleri**  
Duran B., Bereket G.  
Uluslararası Katılımlı 25. Ulusal Kimya Kongresi, Erzurum, Turkey, 27 June - 02 July 2011
- XIII. **QCM ve elektrokimyasal yöntemlerle alüminyumun asidik ortamda korozyon davranışına difenolik bir Schiff bazının etkisinin incelenmesi**  
Aykın Ö., Yurt A., Duran B.  
XII. International Corrosion Symposium (KORSEM 2010), Eskişehir, Turkey, 6 - 09 October 2010, pp.410-417
- XIV. **1,4-Bis[2-(2-hidroksibenzildenamino)fenoksi]bütanın yumuşak çelik ve alüminyumun elektrokimyasal davranışları üzerindeki etkilerinin karşılaştırılması**  
Şafak S., Duran B., Yurt A.

- XII. International Corrosion Symposium (KORSEM 2010), Eskişehir, Turkey, 6 - 09 October 2010, pp.461-468
- XV. **Bakır üzerinde poli(N-metil anilin) filmlerinin elektrokimyasal sentezi ve korozyon performansları**  
Duran B., Bereket G., Turhan C. M., Virtanen S.  
XII. International Corrosion Symposium (KORSEM 2010), Eskişehir, Turkey, 6 - 09 October 2010, pp.347-356
- XVI. **Synthesis of copolymer of pyrrole with N-methyl pyrrole and their bilayers on copper and investigation of their corrosion performances**  
Duran B., Çakmakçı İ., Bereket G.  
XII. International Corrosion Symposium (KORSEM 2010), Eskişehir, Turkey, 6 - 09 October 2010, pp.125-134
- XVII. **Electrochemical synthesis and corrosion performance of poly(pyrrole-co-N-methylpyrrole) on copper**  
Duran B., Çakmakçı İ., Bereket G.  
8th International Electrochemistry Meeting in Turkey, Antalya, Turkey, 8 - 11 October 2009, pp.87
- XVIII. **Electrodeposition of polymers including reactive amine group on mild steel and copper**  
Bereket G., Duran B., Hür E.  
5th Kurt Schwabe Symposium-From Corrosion to Semiconductors, Erlangen, Germany, 24 - 28 May 2009
- XIX. **The effect of a diphenolic Schiff base on the corrosion of aluminium**  
Duran B., Gür M., Yurt A., Urgun S.  
XI. International Corrosion Symposium (KORSEM 2008), İzmir, Turkey, 22 - 25 October 2008, pp.483-488
- XX. **Electrochemical and theoretical investigation on the corrosion of steel in acidic media**  
Yurt A., Urgun S., Duran B., Gür M.  
XI. International Corrosion Symposium (KORSEM 2008), İzmir, Turkey, 22 - 25 October 2008, pp.228-234
- XXI. **Electrosynthesis of poly(N-ethylaniline) on copper and its corrosion performance**  
Duran B., Turhan C. M., Bereket G., Saraç A. S.  
XI. International Corrosion Symposium (KORSEM 2008), İzmir, Turkey, 22 - 25 October 2008, pp.153-162
- XXII. **Effect of water-soluble triblock copolymers on the electrochemical behavior of mild steel**  
Yurt A., Bütin V., Duran B.  
XXII. Ulusal Kimya Kongresi, Gazimagusa, Cyprus (Kktc), 6 - 10 October 2008
- XXIII. **Anticorrosive properties of electrosynthesized poly(m-aminophenol) on copper from aqueous phenylphosphonic acid solution**  
Bereket G., Duran B.  
The European Corrosion Congress (EUROCORR 2008), Edinburgh, England, 7 - 11 September 2008, pp.493
- XXIV. **Electropolymerization of m-aminophenol on mild steel and its corrosion protection effect**  
Bereket G., Hür E., Duran B., Özdemir D., Şahin Y.  
The European Corrosion Congress (EUROCORR 2007), Freiburg, Germany, 9 - 13 September 2007, pp.387
- XXV. **Synthesis, selective quaternization of water-soluble copolymers based on tertiary amine methacrylates and their use in latex synthesis as a stabilizer**  
Bütün V., Duran B., Esenoğlu E., Gül G.  
Polimer İşleme ve Geri Kazanımı Sempozyumu, Mersin, Turkey, 28 - 30 April 2004, pp.58-73

## Supported Projects

- Duran B., Ünver İ., Project Supported by Higher Education Institutions, Electropolymerization of Pyrrole and N-Substituted Pyrroles with Carbazole on 304 Stainless Steel and Investigation of Anticorrosive Properties, 2024 - 2025
- Duran B., Duran M., Yurtaş L., Project Supported by Higher Education Institutions, Synthesis of arylamino substituted mercapto imidazole derivatives and investigation of inhibitor effects on corrosion of low carbon steel in acidic medium, 2018 - 2020
- DURAN B., Project Supported by Higher Education Institutions, Pirol, Karbazol ve N-Sübstitüe Türevlerinin Paslanmaz Çelik Yüzeyinde Elektropolimerizasyonu ile Antikorozif ve Kapasitif Özelliklerinin Araştırılması, 2011 - 2013
- Yurt A., Dal H., Duran B., Project Supported by Higher Education Institutions, Yumuşak çelik ve alüminyumun korozyon davranışları üzerine farklı substituentler içeren Schiff bazı türevlerinin asidik ortamındaki inhibitör etkilerinin incelenmesi ve

sentezi, 2007 - 2009

Bereket G., Hür E., Duran B., Şahin Y., Project Supported by Higher Education Institutions, İletken polimerlerin çelik ve bakır üzerinde elektrokimyasal sentezi ve korozyon performanslarının incelenmesi, 2005 - 2008

Bütün V., Yurt A., Duran B., Project Supported by Higher Education Institutions, Nanoküreler :Tersiyer amin metakrilatlara dayalı yeni tip suda çözünebilen triblok kopolimerlerin sentezi karakterizasyonu ve bu kopolimerlerin SCL misel nanoküre sentezinde kullanımı, 2003 - 2006

Bütün V., Duran B., Project Supported by Higher Education Institutions, Tersiyer amin metakrilatlara dayalı suda çözünebilen diblok kopolimerlerin sentezi seçimi kuaternizasyonu ve bu kopolimerlerin stabilizör olarak lateks sentezinde kullanılması, 2002 - 2005

## Scientific Refereeing

JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY, SCI Journal, May 2017

SYNTHETIC METALS, SCI Journal, February 2011

PROGRESS IN ORGANIC COATINGS, SCI Journal, February 2010

CORROSION SCIENCE, SCI Journal, January 2010

ELECTROCHIMICA ACTA, SCI Journal, January 2010

THIN SOLID FILMS, National Scientific Refreed Journal, January 2010

## Tasks In Event Organizations

Duran B., 4th International Eurasian Conference on Biological and Chemical Sciences (4th Eurasian Biochem 2021), Scientific Congress, Ankara, Turkey, Kasım 2022

Duran B., 5th International Eurasian Conference on Biological and Chemical Sciences (5th Eurasian Biochem 2022), Scientific Congress, Ankara, Turkey, Kasım 2022

Duran B., 3rd International Eurasian Conference on Biological and Chemical Sciences (3rd Eurasian Biochem 2020), Scientific Congress, Ankara, Turkey, Mart 2020

Duran B., 2nd International Eurasian Conference on Biological and Chemical Sciences (2nd Eurasian Biochem 2019), Scientific Congress, Ankara, Turkey, Haziran 2019

Bütün V., Duran B., Uluslararası Katılımlı VII. Polimer Bilim ve Teknoloji Kongresi, Scientific Congress, Eskişehir, Turkey, Eylül 2018

Duran B., 1st International Eurasian Conference on Biological and Chemical Sciences (1st Eurasian Biochem 2018), Scientific Congress, Ankara, Turkey, Nisan 2018

Duran B., XII. Uluslararası Korozyon Sempozyumu (KORSEM'10), Scientific Congress, Eskişehir, Turkey, Ekim 2010

## Metrics

Publication: 48

Citation (WoS): 643

Citation (Scopus): 733

H-Index (WoS): 13

H-Index (Scopus): 13