

Prof. SELEN BİLGE KOÇAK



Personal Information

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Ankara University, Faculty of Sciences, Chemistry Department, 06100, Tandoğan, Ankara-Turkey



International Researcher IDs

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Publons / Web Of Science ResearcherID: AAG-7846-2020

ScopusID: 55425657700

Yoksis Researcher ID: 109292

Education Information

Post Doctorate, University of California, Riverside, Department of Chemistry, United States Of America 2007 - 2008

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Kimya (Dr), Turkey 1999 - 2006

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), Turkey 1996 - 1999

Undergraduate, Ankara University, Fen Fakültesi, Kimya Bölümü, Turkey 1992 - 1996

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Fosfor İçeren ve İçermeyen Makrohalkalı Aza-taç Eterlerin ve Komplekslerinin Sentezi, Yapılarının Spektroskopik (^1H -, ^{13}C -, ^{31}P -NMR, HETCOR ve COSY) ve Kristallografik Yöntemler ile Aydınlatılması, Ankara University, Fen Bilimleri Enstitüsü, Kimya (Dr), 2005

Postgraduate, Fosfor içeren makrosiklik lariat eterlerin sentezi ve kompleksleri, Ankara University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), 1999

Research Areas

Bioinorganic Chemistry, Boron Chemistry, Inorganic Ring Compounds, Coordination Chemistry, Novel Ligands, Natural Sciences

Academic Titles / Tasks

Professor, Ankara University, Fen Fakültesi, Kimya Bölümü, 2016 - Continues
Associate Professor, Ankara University, Fen Fakültesi, Kimya Bölümü, 2011 - 2016
Assistant Professor, Ankara University, Fen Fakültesi, Kimya Bölümü, 2006 - 2011
Research Assistant, Ankara University, Fen Fakültesi, Kimya Bölümü, 1998 - 2006

Academic and Administrative Experience

Ankara University, 2012 - 2013
Ankara University, 2012 - 2013

Courses

Chemistry of Metals, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020
SPECIAL SUBJECT, Undergraduate, 2022 - 2023, 2020 - 2021
Thesis Management, Doctorate, 2021 - 2022
Special Subject, Undergraduate, 2021 - 2022
Inorganic Chemistry II, Undergraduate, 2021 - 2022
Özel Konu, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021
Specialized Field Course, Doctorate, 2021 - 2022
Inorganic Chemistry Laboratory, Undergraduate, 2021 - 2022
Boron Chemistry, Doctorate, 2022 - 2023
Boron Chemistry, Doctorate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020
Specialized Field Course, Doctorate, 2022 - 2023
General Chemistry Laboratory, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021
INORGANIC CHEMISTRY I, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019
FUNDAMENTALS OF CHEMISTRY I, Undergraduate, 2021 - 2022
INORGANIC CHEMISTRY II, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019
Chemistry Laboratory, Undergraduate, 2021 - 2022, 2020 - 2021
Özel Konu, Undergraduate, 2019 - 2020, 2018 - 2019
813598 BOR KİMYASI (FEN BİLİMLERİ ENSTİTÜSÜ), Doctorate, 2017 - 2018, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009
813645 UZMANLIK ALANI (FEN BİLİMLERİ ENSTİTÜSÜ), Postgraduate, 2017 - 2018, 2015 - 2016, 2014 - 2015, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009
KİM152 TEMEL KİMYA LABORATUVARI (FİZİK MÜHENDİSLİĞİ BÖLÜMÜ), Undergraduate, 2017 - 2018, 2014 - 2015, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2006 - 2007
CHM 125 TEMEL KİMYA LABORATUVARI (ENERJİ MÜHENDİSLİĞİ), Undergraduate, 2017 - 2018
813645 UZMANLIK ALANI (FEN BİLİMLERİ ENSTİTÜSÜ), Doctorate, 2017 - 2018
KİM123 TEMEL KİMYA LABORATUVARI (KİMYA MÜHENDİSLİĞİ BÖLÜMÜ), Undergraduate, 2017 - 2018, 2015 - 2016, 2014 - 2015, 2012 - 2013
CHM125 TEMEL KİMYA LABORATUVARI (BİYOMEDİKAL MÜHENDİSLİĞİ), Undergraduate, 2017 - 2018
KİM 113 TEMEL KİMYA I, Undergraduate, 2017 - 2018, 2016 - 2017
KİM109 TEMEL KİMYA LABORATUVARI (JEOLJİ MÜHENDİSLİĞİ BÖLÜMÜ), Undergraduate, 2017 - 2018, 2015 - 2016, 2014 - 2015, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010
KİM420 ANORGANİK KİMYA LABORATUVARI (KİMYA BÖLÜMÜ), Undergraduate, 2017 - 2018, 2014 - 2015, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2006 - 2007
KİM 114 TEMEL KİMYA II, Undergraduate, 2017 - 2018, 2016 - 2017
813645 Uzmanlık Alanı , Postgraduate, 2016 - 2017
KİM 109 Temel Kimya Laboratuvarı , Undergraduate, 2016 - 2017
KİM 420 Anorganik Kimya Laboratuvarı , Undergraduate, 2016 - 2017

KİM 123 Temel Kimya Laboratuvarı , Undergraduate, 2016 - 2017
813645 Uzmanlık Alanı , Doctorate, 2016 - 2017
KİM 152 Temel Kimya Laboratuvarı , Undergraduate, 2016 - 2017
Chemistry of Metals, Undergraduate, 2015 - 2016, 2014 - 2015, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009
Chemistry of Metals, Undergraduate, 2015 - 2016, 2014 - 2015, 2012 - 2013
KİM113 Temel Kimya I (Zootečni Bölümü), Undergraduate, 2015 - 2016, 2014 - 2015, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010
KİM114 Temel Kimya II (Zootečni Bölümü), Undergraduate, 2014 - 2015, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010
Özel Konu, Undergraduate, 2014 - 2015, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2006 - 2007
813598 Bor Kimyası (Fen Bilimleri Enstitüsü), Postgraduate, 2014 - 2015
KİM420 Anorganik Kimya Laboratuvarı (Kimya Bölümü, II.Eğitim), Undergraduate, 2014 - 2015
KİM101 Temel Kimya I (Jeoloji Mühendisliği) , Undergraduate, 2012 - 2013
KİM440 Özel Konu (Kimya Bölümü, II.Eğitim), Undergraduate, 2012 - 2013
KİM102 Temel Kimya II (Gıda Mühendisliği Bölümü), Undergraduate, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010
KİM101 Temel Kimya I (Gıda Mühendisliği Bölümü), Undergraduate, 2012 - 2013, 2011 - 2012, 2010 - 2011
KİM102 Temel Kimya II (Jeoloji Mühendisliği Bölümü), Undergraduate, 2012 - 2013
KİM113 Temel Kimya I (Tarla Bitkileri Bölümü), Undergraduate, 2009 - 2010
KİM424 Atomik Moleküler Spektroskopi (Kimya Bölümü), Undergraduate, 2006 - 2007

Supervised Theses

Bilge Koçak S., o-VANİLİN GRUPLU HALKALI TRİMERİK FOSFAZEN TÜREVLERİNİN SENTEZİ, KARAKTERİZASYONU VE BİYOLOJİK ÖZELLİKLERİNİN İN VİTRO ÇALIŞMALAR İLE DEĞERLENDİRİLMESİ, Doctorate, N.SEVİN(Student), 2024
Bilge Koçak S., Yeni dinükleer ve trinükleer salen-bor komplekslerinin sentezi, karakterizasyonu, stereojenik ve antibakteriyel özelliklerinin incelenmesi ve antibakteriyel tekstil üretimi için salen-bor kompleksleri ile fonksiyonelleştirilmiş mikro-,nano-liflerin hazırlanması, Postgraduate, B.ÇAM(Student), 2024
Bilge Koçak S., Hetero halkalar içeren di- ve tri-nükleer bor-salen komplekslerinin sentezi, spektral ve kiral özelliklerinin belirlenmesi ve dna ile etkileşimlerinin araştırılması, Postgraduate, B.ÖZ(Student), 2024
Bilge Koçak S., Synthesis, Characterization, Stereogenic and Antibacterial Properties of New Macrocyclic Boronates with 4-SH Phenyl, Boraxan and Boroxin Groups, Postgraduate, B.Kusena(Student), 2023
BİLGE KOÇAK S., Syntheses of dinuclear boron complexes with seven-, eight-, nine- and eleven-membered boraxane groups, their spectroscopic properties, antimicrobial activities and effects against to dna, Postgraduate, A.KÖMEZ(Student), 2019
BİLGE KOÇAK S., Syntheses, structural characterization and biological activities of boron complexes with homotrinary boroxine groups, Postgraduate, K.KARAAĞAÇ(Student), 2019
BİLGE KOÇAK S., The syntheses of di- and trinuclear boron complexes containing N2,O2,S2-donor atoms, their spectroscopic properties, biological activities and effects against to DNA, Postgraduate, E.AYDINER(Student), 2019
BİLGE KOÇAK S., Tiramin fonksiyonlu tamamen heterohalkalı amin sübstitüe spiro-fosfazen türevlerinin sentezi, kristal yapılarının, spektroskopik özelliklerinin, antimikrobiyal aktivitelerinin ve DNA'ya etkilerinin incelenmesi, Postgraduate, S.PEKTAŞ(Student), 2015
BİLGE KOÇAK S., Heterohalkalı amin sübstitüe spiro-ansa-spiro-fosfazenlerin sentezi, spektroskopik ve kristallografik özellikleri, biyolojik aktiflikleri ve DNA'ya etkileri, Postgraduate, N.SEVİN(Student), 2013
BİLGE KOÇAK S., Sübstitüe spiro-ansa-spiro- ve spiro-bino-spiro-fosfazen türevlerinin sentezi, kristal yapılarının, spektroskopik özelliklerinin, biyolojik aktifliklerinin ve DNA'ya etkilerinin incelenmesi, Postgraduate, S.KOÇOĞLU(Student), 2012
BİLGE KOÇAK S., Bis-C-pivot makrohalkalarının sentezi, yapılarının spektroskopik ve kristallografik yöntemler ile incelenmesi ve stereojenizm, Postgraduate, H.ÜÇKARDEŞ(Student), 2010

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Syntheses, spectral and chiral properties and DNA interactions of multi-heterocyclic di- and trinuclear boron complexes**
BİLGE KOÇAK S., Kaya O., Kilic Z., ÇOBAN B., YILDIZ U., ÇOŞUT B.
NEW JOURNAL OF CHEMISTRY, vol.44, no.48, pp.20966-20981, 2020 (SCI-Expanded)
- II. **Phosphorus-nitrogen compounds- (Part 50): correlations between structural parameters for cylophosphazene derivatives containing ferrocenyl pendant arm(s)**
ASMAFİLİZ N., ELMAS G., OKUMUŞ A., BİLGE KOÇAK S., Kilic Z.
TURKISH JOURNAL OF CHEMISTRY, vol.44, no.3, pp.543-558, 2020 (SCI-Expanded)
- III. **Phosphorus-nitrogen compounds (Part 51): the relationship between spectroscopic and crystallographic data of mono- and di-spirocyclophosphazene derivatives with 4-fluoro/nitrophenylmethyl pendant arm/arms**
OKUMUŞ A., ELMAS G., ASMAFİLİZ N., BİLGE KOÇAK S., Kilic Z.
TURKISH JOURNAL OF CHEMISTRY, vol.44, no.3, pp.559-573, 2020 (SCI-Expanded)
- IV. **spiro-Cyclotriphosphazenes containing 4-hydroxyphenylethyl pendant arm: Syntheses, structural characterization and DNA interaction study**
Pektas S., BİLGE KOÇAK S., Bosterzi N. S., Kilic Z., Zeyrek C. T., ÇOBAN B., YILDIZ U., ÇELİK Ö.
INORGANICA CHIMICA ACTA, vol.474, pp.51-65, 2018 (SCI-Expanded)
- V. **Molecular structure and density functional modelling studies of 2-[(E)-2-(4-hydroxyphenyl)ethyliminomethyl]phenol**
Zeyrek C. T., BİLGE KOÇAK S., ÜNVER H., Pektas S., Basterzi N. S., ÇELİK Ö.
JOURNAL OF MOLECULAR STRUCTURE, vol.1100, pp.570-581, 2015 (SCI-Expanded)
- VI. **Syntheses, structural characterization and biological activities of spiro-ansa-spiro-cyclotriphosphazenes**
Basterzi N. S., BİLGE KOÇAK S., OKUMUŞ A., Kilic Z., HÖKELEK T., ÇELİK Ö., TÜRK M., Koc L. Y., AÇIK L., AYDIN B.
NEW JOURNAL OF CHEMISTRY, vol.39, no.11, pp.8825-8839, 2015 (SCI-Expanded)
- VII. **Syntheses, spectroscopic properties, crystal structures, biological activities, and DNA interactions of heterocyclic amine substituted spiro-ansa-spiro- and spiro-bino-spiro-phosphazenes**
BİLGE KOÇAK S., Kocoglu S., OKUMUŞ A., Kilic Z., Ozturk A., HÖKELEK T., Oner Y., AÇIK L.
INORGANICA CHIMICA ACTA, vol.406, pp.160-170, 2013 (SCI-Expanded)
- VIII. **Synthesis of 15-, 16-, and 17-Membered Bis-C-Pivot Macrocycles Consisting of N2O2 Donor-Type Crown Ethers and Dialkyl Phosphonates**
BİLGE KOÇAK S., Uckardes H.
HETEROATOM CHEMISTRY, vol.23, no.6, pp.583-597, 2012 (SCI-Expanded)
- IX. **Syntheses, spectroscopic properties and stereochemistry of bis-C-pivot macrocycles with two dialkyl phosphonate groups**
Bilge S., Kilic Z., Davies D. B.
Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, vol.81, no.1, pp.441-448, 2011 (SCI-Expanded)
- X. **Studies on the mechanism of phosphazene ring-opening polymerization (ROP)**
Bilge S.
Turkish Journal of Chemistry, vol.35, no.5, pp.745-756, 2011 (SCI-Expanded)
- XI. **Surface modification and characterization of phenanthroline nanofilms on carbon substrate**
ÖZTEKİN Y., YAZICIGİL Z., Solak A. O., ÜSTÜNDAĞ Z., Kilic Z., Bilge S.
Surface and Interface Analysis, vol.43, no.5, pp.923-930, 2011 (SCI-Expanded)
- XII. **Phosphorus-nitrogen compounds. Part 20: Fully substituted spiro-cyclotriphosphazenic lariat (PNP-pivot) ether derivatives**
OKUMUŞ A., Bilge S., Kilic Z., Ozturk A., HÖKELEK T., YILMAZ F.
Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, vol.76, no.3-4, pp.401-409, 2010 (SCI-Expanded)

- XIII. **Experimental and theoretical calculations on corrosion inhibition of steel in 1 M H₂SO₄ by crown type polyethers**
 Hasanov R., Bilge S., Bilgic S., Gece G., Kilic Z.
 Corrosion Science, vol.52, no.3, pp.984-990, 2010 (SCI-Expanded)
- XIV. **Phosphorus-nitrogen compounds: Part 16. Synthesis, stereogenism, anisochronism and the relationship between ³¹P NMR spectral and crystallographic data of monotopic spiro-crypta phosphazene derivatives**
 Kilic Z., OKUMUŞ A., Demiriz S., Bilge S., Ozturk A., Caylak N., HÖKELEK T.
 Journal of Inclusion Phenomena and Macrocyclic Chemistry, vol.65, no.3, pp.269-286, 2009 (SCI-Expanded)
- XV. **Intramolecular hydrogen bonding and tautomerism in Schiff bases: Part VI. Syntheses and structural investigation of salicylaldehyde and naphthaldehyde derivatives**
 Bilge S., Kilic Z., HAYVALI Z., HÖKELEK T., Safran S.
 Journal of Chemical Sciences, vol.121, no.6, pp.989-1001, 2009 (SCI-Expanded)
- XVI. **Clathrate and channel inclusion systems co-exist in the crystal structure of a bis-C-pivot macrocycle (Z' = 2)**
 Bilge S., Coles S. J., Davies D. B., Hursthouse M. B., Kilic Z., Rutherford J. S., Shaw R. A.
 CrystEngComm, vol.10, no.7, pp.873-878, 2008 (SCI-Expanded)
- XVII. **Phosphorus-nitrogen compounds. Part 13. Syntheses, crystal structures, spectroscopic, stereogenic, and anisochronic properties of novel spiro-ansa-spiro-, spiro-bino-spiro-, and spiro-crypta phosphazene derivatives**
 Bilge S., Demiriz S., Okumus A., Kilic Z.
 INORGANIC CHEMISTRY, vol.45, no.21, pp.8755-8767, 2006 (SCI-Expanded)
- XVIII. **Preparation and characterization of diethylene glycol bis(2-aminophenyl) ether-modified glassy carbon electrode**
 Isbir A. A., Solak A. O., Ustundag Z., Bilge S., Kilic Z.
 Analytica Chimica Acta, vol.573-574, pp.26-33, 2006 (SCI-Expanded)
- XIX. **Electrochemical behavior of a crown type polyether: 2,5,8-trioxa-16,20-diazatricyclo[20.4.0.0^{9,14}]-hexacosane-9,11,13,15,20,22,24,26-octaene**
 Gokmese E., Gokmese F., Solak A., Bilge S., Kilic Z.
 Electroanalysis, vol.17, no.22, pp.2026-2031, 2005 (SCI-Expanded)
- XX. **The electrochemical behavior of some podands at a benzo[c]cinnoline modified glassy carbon electrode**
 Isbir A., Solak A., Ustundag Z., Bilge S., Natsagdorj A., Kilic E., Kilic Z.
 Analytica Chimica Acta, vol.547, no.1, pp.59-63, 2005 (SCI-Expanded)
- XXI. **Phosphorus-nitrogen compounds: Novel fully substituted spiro-cyclophosphazenic lariat (PNP-pivot) ether derivatives. Structures of 4,4,6,6-tetrapyrrolidino-2,2-[3-oxa-1,5-pentane dioxy bis(2-phenylamino)]cyclo-2 lambda(5),4 lambda(5),6 lambda(5)-triphosphazene and 4,4,6,6-tetrapyrrolidino-2,2-[1,2-xylene dioxy bis(2-phenylamino)]cyclo-2 lambda(5), 4 lambda(5),6 lambda(5)-trinosphazene. Part XI**
 Bilge S., Ozguc B., Safran S., Demiriz S., Isler H., Hayvali M., Kilic Z., Hokelek T.
 JOURNAL OF MOLECULAR STRUCTURE, vol.748, no.1-3, pp.101-109, 2005 (SCI-Expanded)
- XXII. **Phosphorus-nitrogen compounds: novel spiro-cyclophosphazenic lariat (PNP-pivot) ether derivatives. Structures of 4,4,6,6-tetrachloro-2,2-[3-oxa-1,5-pentane dioxy bis(2-phenylamino)]cyclo-2 lambda(5),4 lambda(5),6 lambda(5)-triphosphazene and 4,4,6,6-tetrachloro-2,2-[1,2-xylene dioxy bis(2-phenylamino)]cyclo-2 lambda(5),4 lambda(5),6 lambda(5)-triphosphazene. Part X**
 Ozguc B., Bilge S., Caylak N., Demiriz E., Isler H., Hayvali M., Kilic Z., Hokelek T.
 JOURNAL OF MOLECULAR STRUCTURE, vol.748, no.1-3, pp.39-47, 2005 (SCI-Expanded)
- XXIII. **Phosphorus-nitrogen compounds: Novel spiro-crypta-phosphazenes. Structure of pentane-3-oxa-N,N'-bis(1,5-oxybenzyl)-spiro (propane-1',3'-diamino)-4,4,6,6-tetrachlorocyclo- 2λ 5,4λ 5, 6λ 5-triphosphazatriene. Part IX**

Selen B., Kilic Z., Caylak N., Hokelek T.

Journal of Molecular Structure, vol.707, no.1-3, pp.139-146, 2004 (SCI-Expanded)

- XXIV. **1,3-Bis[2-(2-hydroxybenzylideneamino)phenoxy]propane**
Hokelek T., Bilge S., Demiriz S., Ozguc B., Kilic Z.
Acta Crystallographica Section C: Crystal Structure Communications, vol.60, no.11, 2004 (SCI-Expanded)
- XXV. **Phosphorus-nitrogen compounds: Novel spirocyclic phosphazene derivatives. Structure of 3,3''-propane-1,3-diylbis[4',4',6',6'- tetrachloro-3,4-dihydrospiro[1,3,2-benzoxazaphosphorine-2,2' λ 5-[4 λ 5,6 λ 5][1,3,5,2,4,6] triazatriphosphorine]]**
Bilge S., Natsagdorj A., Demiriz S., Caylak N., Kilic Z., Hokelek T.
Helvetica Chimica Acta, vol.87, no.8, pp.2088-2099, 2004 (SCI-Expanded)
- XXVI. **4,4,6,6-Tetrachloro-1',3'-[2,2'-(3-oxapentane-1,5-dioxy) dibenzyl]-2 λ 5,4 λ 5,6 λ 5-cyclotriphosphazene-2-spiro-2'-1,3,2-diazaphospholane benzene hemisolvate**
Tercan B., Hokelek T., Bilge S., Demiriz S., Kilic Z.
Acta Crystallographica Section E: Structure Reports Online, vol.60, no.8, 2004 (SCI-Expanded)
- XXVII. **4,4,6,6-Tetrachloro-2,2-(ethylene-dioxydi-o-phenylenediimino) -2 λ 5 ,4 λ 5 ,6 λ 5- cyclotriphosphazene**
Caylak N., Hokelek T., Bilge S., Ozguc B., Kilic Z.
Acta Crystallographica Section C: Crystal Structure Communications, vol.60, no.7, 2004 (SCI-Expanded)
- XXVIII. **4,4,6,6-Tetrachloro-2,2-(propylene dioxydi-o-phenylenediimino)- 2 λ 5,4 λ 5,6 λ 5- cyclotriphosphazene**
Tercan B., Hokelek T., Bilge S., Ozguc Z., Kilic Z.
Acta Crystallographica Section C: Crystal Structure Communications, vol.60, no.6, 2004 (SCI-Expanded)
- XXIX. **6',6'-Dichloro-3,3''-etheno-3,4,3'', 4''-tetrahydro-2H-1,3-benzoxazine-2-spiro-2'-(2 λ 5, 4 λ 5,6 λ 5-cyclotriphosphazene) -4'-spiro-2''-2H-1,3-benzoxazine**
Tercan B., Hokelek T., Bilge S., Natsagdorj A., Demiriz S., Kilic Z.
Acta Crystallographica Section E: Structure Reports Online, vol.60, no.5, 2004 (SCI-Expanded)
- XXX. **Complexes of Ni(II) and Pd(II) ions with 15- and 17-membered macrocycles containing O2N2- and O2N3-donors and the crystal structures of Ni(II) and Pd(II) complexes of 2,5-dioxa-13,16,19-triazatricyclo[19.4.0.06,11]-pentacosa-6,8,10,21, 23,25(1)-hexaene**
Bilge S., Kilic Z., Hokelek T., Erdogan B.
Journal of Molecular Structure, vol.691, no.1-3, pp.85-96, 2004 (SCI-Expanded)
- XXXI. **1,15-diaza-3,4:12,13-dibenzo-5,8,11-trioxacycloheptadecane hemihydrate**
Hokelek T., Bilge S., Kilic Z.
Acta Crystallographica Section E: Structure Reports Online, vol.59, no.11, 2003 (SCI-Expanded)
- XXXII. **Crystal structure of 2,5-dioxa-13,17-diazatricyclo[17.4.0.0(6),(11)]-tricoso-6,8,10,12,17,19,21,23(1)-octaene**
Hokelek T., Bilge S., Kilic Z.
ANALYTICAL SCIENCES, vol.18, no.9, pp.1065-1066, 2002 (SCI-Expanded)
- XXXIII. **C-bis-pivot podands and lariat ethers: Synthesis and spectral investigations. Structure of 15,21-bis{2-[(hydroxy)(methoxy)-phosphoryl]}-2,5,8-trioxa-16,20-diazatricyclo [20.4.0.09,14] hexacosa-9,11,13,22,24,26(1)-hexaene-water (1/2). Part I**
Bilge S., Nadzagdorj A., Akduran N., Hokelek T., Kilic Z.
Journal of Molecular Structure, vol.611, no.1-3, pp.169-178, 2002 (SCI-Expanded)
- XXXIV. **Crystal structure of 15,21-bis(diethoxyphosphinoyl)-2,5,8-trioxa-16,20-diazatricyclo- [20.4.0.09,14] hexacosa-9,11,13,22,24,26(1)-hexaene-ethylphosphonic acid-water (1/1/1)**
HÖKELEK T., Bilge S., Akduran N., Kiliç Z.
Crystal Research and Technology, vol.36, no.4-5, pp.509-515, 2001 (SCI-Expanded)
- XXXV. **Crystal structure of 3,4,6,7,15,16,17,18,19,20,21,27-Dodecahydro-2,5,8-trioxa-16,20-diazatetracyclo[20.4.1.(16,20)0.0(9,14)]heptacosa-9,11,13,22,24,26(1)-hexaene**
Hokelek T., Akduran N., Bilge S., Kilic Z.
ANALYTICAL SCIENCES, vol.17, no.3, pp.465-466, 2001 (SCI-Expanded)
- XXXVI. **Crystal structure of 3,4,6,7,15,16,17,18,19,20,21-undecahydro-2,5,6-trioxa-16,20-diazatricyclo[20.4.0.09,14]hexacosa-9,11,13,22,24,26(1)-hexaene**

- Hokelek T., Akduran N., Bilge S., Kilic Z.
Analytical Sciences, vol.17, no.6, pp.801-802, 2001 (SCI-Expanded)
- XXXVII. **Crystal structure of 15,21-bis(diethoxyphosphinoyl)-2,5,8-trioxa-16,20-diazatricyclo-[20.4.0.0(9,14)] hexacosa-9,11,13,22,24,26(1)-hexaene-ethylphosphonic acid-water (1/1/1)**
Hokelek T., Bilge S., Akduran N., Kilic Z.
CRYSTAL RESEARCH AND TECHNOLOGY, vol.36, no.4-5, pp.509-515, 2001 (SCI-Expanded)
- XXXVIII. **5,6,7,8,9,10,11,12,18,19,21,22-Dodecahydro-8,9:18,19-dibenzo-1,4,7-triox a- 11,16-diazacyclononadeca-10,16-diene**
Hokelek T., Kilic Z., Bilge S.
Acta Crystallographica Section C: Crystal Structure Communications, vol.55, no.3, pp.381-383, 1999 (SCI-Expanded)
- XXXIX. **2,5,8-Trioxa-16,20-diazatricyclo[20.4.0.0 9,14]-hexacosa-9,11,13,15,20,22,24,26-octaene**
Hokelek T., Kilic Z., Bilge S.
Acta Crystallographica Section C: Crystal Structure Communications, vol.55, no.2, pp.248-250, 1999 (SCI-Expanded)

Articles Published in Other Journals

- I. **Reduction Mechanism Investigation of Some Schiff Base Podand Derivatives at Glassy Carbon Electrode by Using Electrochemical Techniques**
İsbir Turan A., Solak A. O., Natsagdorj., BİLGE KOÇAK S., KILIÇ Z.
Manas Journal of Engineering, vol.2, no.2, pp.46-58, 2014 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Synthesis and Stereogenic Properties of New Boraxane and Boroxin Groups**
Bilge Koçak S., Kusena B. Z., Çam Gündoğar B., Çoşut B.
35.Ulusal Kimya Kongresi, Diyarbakır, Turkey, 9 - 12 September 2024
- II. **Determination of Optimal Experimental Conditions for Boron-salen Complex Synthesis with Multi-Objective Artificial Intelligence Optimization**
Türkşen Ö., Tunçel S., Kusena B. Z., Bilge Koçak S.
35.Ulusal Kimya Kongresi, Diyarbakır, Turkey, 9 - 12 September 2024
- III. **Boronik Asit Türevleriyle Modifiye Yüzey Akustik Dalgası Mikroakışkan Biyosensör Çiplerinin Geliştirilmesi**
Karaçolak A. İ., Emen F. M., Çiçek A., Bilge Koçak S.
IX. Ulusal Anorganik Kimya Kongresi, Ankara, Turkey, 16 - 19 May 2024, pp.262-263
- IV. **Synthesis and Antibacterial Activity of Dinuclear and Trinuclear Boron Complexes Containing Disulfide (S-S) Bonds**
Kusena B. Z., Bilge Koçak S., Aydın E., Aşkar Ş.
34.Ulusal Kimya Kongresi, Yalova, Turkey, 01 September 2022, pp.354
- V. **Synthesis, Characterization and Antibacterial Activity of Macrocyclic Boronates**
Çam B., Bilge Koçak S., Aşkar Ş.
34.Ulusal Kimya Kongresi, Yalova, Turkey, 1 - 06 September 2022, pp.107
- VI. **Cyclotriphosphenes with Pendant Arm and Six-Membered spiro Ring: Syntheses, Structural Characterization and DNA-Binding Study**
Bilge Koçak S.
6th International Conference on Chemistry and Chemical Engineering: Research and Development in Chemistry (RDChem2018MN), Ulaanbaatar, Mongolia, 20 - 23 June 2018, pp.7
- VII. **Synthesis and Structural Characterization of Dinuclear and Trinuclear Boron Complexes**

Bilge Koçak S.

4th International Turkic World Conference on Chemical Sciences and Technologies (ITWCCST), Kyiv, Ukraine, 20 - 23 June 2018, pp.7

- VIII. **An Experimental and Theoretical Study on the Interaction of DNA with New Trinuclear Boron Complexes**
Karaağaç K., Zeyrek C. T., Daysalılar Ö. C., Bilge Koçak S., Çoban B., Yıldız U.
ANCON 2017-International Congress on Chemistry and Materials Science, Ankara, Turkey, 5 - 07 October 2017, pp.62
- IX. **Experimental and Molecular Docking Investigation on DNA Interaction of Novel Dinuclear Boron Complexes**
Kömez A., Zeyrek C. T., Daysalılar Ö. C., Bilge Koçak S., Çoban B., Yıldız U.
ANCON 2017-International Congress on Chemistry and Materials Science, Ankara, Turkey, 5 - 07 October 2017, pp.63
- X. **'The Syntheses of Dinuclear Boron Complexes containing Seven-, Eight and nine-membered boraxane group, Their Spectroscopic Properties, Biological Activities and Effects against to DNA**
Kömez A., Daysalılar Ö. C., Bilge Koçak S., Çoban B., Yıldız U., Karahan Z. C., Özmen Çapın B. B.
VI. Uluslararası Katılımlı Ulusal Anorganik Kimya Kongresi, Burdur, Turkey, 18 - 21 May 2017, pp.28
- XI. **Syntheses, Characterization and Biological Activity of Boron Complexes with Boroxine Group**
Karaağaç K., Daysalılar Ö. C., Bilge Koçak S., Çoban B., Yıldız U., Karahan Z. C., Özmen Çapın B. B.
VI. Uluslararası Katılımlı Ulusal Anorganik Kimya Kongresi, Burdur, Turkey, 18 - 21 May 2017, pp.29
- XII. **Synthesis and the Crystal Structure Characterization of Fully Piperidine Substituted spiroCyclotriphosphazene**
Canan Aytuğ A., Çelik Ö., Pektaş S., Bilge Koçak S., Zeyrek C. T.
Turkish Physical Society 32nd International Physics Congress, Muğla, Turkey, 6 - 09 September 2016, pp.271
- XIII. **DNA Binding and Anticancer Activity of Novel spiro Cyclotriphosphazenes**
Bilge Koçak S., Başterzi N. S., Pektaş S., Kılıç Z., Çoban B., Yıldız U., Zeyrek C. T., Tekin İ. Ö.
2 nd International Congress of Forensic Toxicology, Industrial and Environmental Toxicology, Ankara, Turkey, 26 - 30 May 2016, pp.289-290
- XIV. **Experimental and Theoretical Spectroscopic Analysis of Partly and Fully Piperidine Substituted spiro-Phosphazene Derivatives**
Pektaş S., Zeyrek C. T., Bilge Koçak S., Çelik Ö.
XXVII. Ulusal Kimya Kongresi, Çanakkale, Turkey, 23 - 28 August 2015, pp.254
- XV. **'Syntheses, Characterization and Biological Activity of spiro-Phosphazenes containing 4-Hydroxyphenylethyl Pendant Arm'**
Pektaş S., Bilge Koçak S., Başterzi N. S., Çelik Ö., Karahan Z. C., Büşra Betül Ö. Ç., Çoban B., Yıldız U.
XXVII. Ulusal Kimya Kongresi, Çanakkale, Turkey, 23 - 25 August 2015, pp.289
- XVI. **The Synthesis and Crystal Structure of Partly Substituted spiro Phosphazene with a 4 Hydroxyphenylethyl Pendant Arm**
Çelik Ö., Fırat A., Bilge Koçak S., Pektaş S.
The 48th Crystallographic Course "Engineering Crystallography from Molecule to Crystal to Functional Form" at Ettore Majorana Centre, Palermo, Italy, 5 - 14 June 2015, pp.268
- XVII. **Syntheses, Characterization and Biological Activity of spiro-ansa-spiro-Phosphazenes**
Bilge Koçak S., Başterzi N. S., Okumuş A., Kılıç Z., Hökelek T., Çelik Ö., Türk M., Koç L. Y., Açıık L., Aydın B.
V. Ulusal Anorganik Kimya Kongresi, Mersin, Turkey, 22 - 25 April 2015, pp.67
- XVIII. **Synthesis Single Crystal X ray Diffraction and Density Functional Modelling Studies of a Schiff Base Combining Salicylaldehyde and Tyramine**
Anğay F., Çelik Ö., Zeyrek C. T., Bilge Koçak S., Başterzi N. S., Pektaş S.
TUCr2014 4th National Crystallographic Meeting with International Participation, Diyarbakır, Turkey, 17 - 19 May 2014, pp.84
- XIX. **Partly Substituted spiro ansa spiro sas Phosphazene**
Başterzi N. S., Bilge Koçak S., Okumuş A., Kılıç Z., Hökelek T., Çelik Ö.
TUCr2014 4th National Crystallographic Meeting with International Participation, Diyarbakır, Turkey, 17 - 19 May

2014, pp.138

- XX. **Syntheses of Amine Substituted spiro-ansa-spiro- and spiro-bino-spiro-Phosphazene Derivatives, the Investigations of Their Crystal Structures, Spectroscopic Properties, Biological Activities and Effects Against DNA**
Koçoğlu S., Okumuş A., Bilge Koçak S., Kılıç Z., Açık L., Öztürk Kiraz A., Hökelek T.
III. Ulusal Anorganik Kimya Kongresi, Çanakkale, Turkey, 19 - 22 May 2011, pp.12
- XXI. **Fully Substituted spiro-CycloPhosphazenic Lariat (PNP-Pivot) Ether Derivatives**
Okumuş A., Bilge Koçak S., Kılıç Z., Öztürk Kiraz A., Hökelek T.
II. Ulusal Anorganik Kimya Kongresi, Elazığ, Turkey, 16 - 19 May 2009, pp.61
- XXII. **Anisochronic and Stereogenic phosphazene derivatives**
Okumuş A., Demiriz Ş., Bilge Koçak S., Kılıç Z., Hökelek T.
Sixth International Conference of the Chemical Societies of the South-Eastern European Countries, Sofija, Bulgaria, 10 - 14 September 2008, pp.187
- XXIII. **Crystal Structure Analysis of 4,4',6,6'-Tetramorfolino-spiro {1,3,2[1,2-etandioksibis(2-fenilamin)fosforin-2λ5-[4λ5,6λ5][1,3,5,2,4,6]-triazatrifosforin]}**
Öztürk Kiraz A., Hökelek T., Okumuş A., Bilge Koçak S., Kılıç Z.
Türk Fizik Derneği 25. Uluslararası Fizik Kongresi, Muğla, Turkey, 25 - 29 August 2008
- XXIV. **Spectroscopic and Crystallographic Properties of Morpholine and 1,4-Dioxa-8-azaspiro[4,5]decane Substituted Phosphazene Derivatives**
Bilge Koçak S., Okumuş A., Demiriz Ş., Kılıç Z., Hökelek T.
XXI. Ulusal Kimya Kongresi, Malatya, Turkey, 23 - 27 August 2007
- XXV. **spiro ansa spiro and spiro bino spiro Phosphazenes Syntheses Crystallographic and Spectroscopic Properties of Phosphazenes**
Natsagdorj A., Bilge Koçak S., Okumuş A., Kılıç Z., Hökelek T.
ICHAC-8. International Conference on Heteroatom Chemistry University of California, Riverside, USA, California, United States Of America, 12 - 16 August 2007, pp.50
- XXVI. **spiro and spiro Crypta Phosphazenes Relationships between Structural Parameters and P shifts of Bulky Substituted Phosphazenes**
Bilge Koçak S., Kılıç Z., Okumuş A., Demiriz Ş., Hökelek T., Tercan M. B.
ICHAC-8. International Conference on Heteroatom Chemistry University of California, Riverside, USA, California, United States Of America, 12 - 16 August 2007, pp.26
- XXVII. **The Relationship between 31P NMR Chemical Shifts and Endocyclic and Exocyclic NPN Bond Angles in Cyclic Phosphazene Derivatives**
Bilge Koçak S., Okumuş A., Demiriz Ş., Kılıç Z., Tercan M. B., Hökelek T.
Second International Symposium in Chemistry "Key Issues in Chemistry and Environmental Problems-2006", Ulaanbaatar, Mongolia, 28 - 30 September 2006, pp.20
- XXVIII. **The Synthesis and Spectroscopic Properties of Phosphazene Derivatives with Ethane 1 2 Diamine Precursor**
Natsagdorj A., Bilge Koçak S., Okumuş A., Demiriz Ş., Kılıç Z.
Second International Symposium in Chemistry "Key Issues in Chemistry and Environmental Problems-2006" Ulaanbaatar, Moğolistan, Ulaanbaatar, Mongolia, 28 - 30 September 2006, pp.27
- XXIX. **Determination of Absolute Configuration of spiro-Crypta and spiro-ansa-spiro-Phosphazene Derivatives by Using 31P NMR**
Okumuş A., Bilge Koçak S., Demiriz Ş., Kılıç Z.
XX. Ulusal Kimya Kongresi, Kayseri, Turkey, 4 - 08 September 2006, pp.60
- XXX. **spiro-ansa-spiro ve spiro-Fosfazenler**
Tercan M. B., Hökelek T., İlder E. E., Bilge Koçak S., Özgüç B., Natsagdori A., Demiriz Ş., Işıklan M., Asmafiliz N., Kılıç Z.
Ulusal Kristallografi Toplantısı, Samsun, Turkey, 22 - 24 April 2004
- XXXI. **spiro- and spiro-Crypta Phosphazene Derivatives**
Çaylak N., Hökelek T., Bilge Koçak S., İlder E. E., Işıklan M., Asmafiliz N., Kılıç Z.
Ulusal Kristallografi Toplantısı, Samsun, Turkey, 22 - 24 April 2004

- XXXII. **Ni(II) and Pd(II) Complexes of Macrocyclic Ligands Containing O₂N_x (x=2 and 3) Donor Atoms**
Bilge Koçak S., Kılıç Z., Hökelek T., Erdoğan B.
XVI. Ulusal Kimya Kongresi, Konya, Turkey, 10 - 13 September 2002, pp.231
- XXXIII. **Investigation of Electrochemical Behavior of 2,5,8-Trioxa-16,21-diazatricyclo [21.4.0.09,14] heptacosa-9,11,13,15,21,23,25,27-octaene Molecule by Using Several Voltametric Techniques**
Gökmeşe E., Gökmeşe F., Bilge Koçak S., Kılıç Z.
XVI. Ulusal Kimya Kongresi, Konya, Turkey, 10 - 13 September 2002, pp.120
- XXXIV. **Synthesis of O₂N_x (x=2, 3 and 4) Donor Type Ligands and Their Complexes**
Natsagdorj A., Bilge Koçak S., Kılıç Z., Hökelek T.
XVI. Ulusal Kimya Kongresi, Konya, Turkey, 10 - 13 September 2002, pp.232
- XXXV. **Synthesis of C-Bis-pivot Podands and Lariat Ethers and Their Spectral Properties**
Bilge Koçak S., Natsagdorj A., Kılıç Z., Hökelek T.
XVI. Ulusal Kimya Kongresi, Konya, Turkey, 10 - 13 September 2002, pp.199
- XXXVI. **Synthesis of Podand, Coronand and Cryptand Ligands and Their Complexes**
Bilge Koçak S., Kılıç Z., Yamak İ., Hökelek T.
XV. Ulusal Kimya Kongresi, İstanbul, Turkey, 4 - 07 September 2001, pp.11
- XXXVII. **Synthesis of Diaza Crown Ethers and Investigations of Their Structures**
Bilge Koçak S., Kılıç Z., Hökelek T.
XIV. Ulusal Kimya Kongresi, Diyarbakır, Turkey, 10 - 15 September 2000, pp.562
- XXXVIII. **Synthesis of New C-bispivot Podands and Lariat Ethers Containing Phosphorus and Investigations of Their Structures**
Bilge Koçak S., Kılıç Z., Natsagdorj A.
XIV. Ulusal Kimya Kongresi, Diyarbakır, Turkey, 10 - 15 September 2000, pp.38
- XXXIX. **Electrochemical Behaviour of a Crown Type Polyether 2,5,8-Trioxa-16,20-diazatricyclo [20.4.0.09,14] hexacosa-9,11,13,15,20,22,24,26-octaene**
Solak A. O., Gökmeşe E., Gökmeşe F., Bilge Koçak S., Kılıç Z.
3rd Mediterranean Basin Conference on Analytical Chemistry, Antalya, Turkey, 4 - 09 June 2000, pp.136
- XL. **Synthesis and Spectroscopic Properties of Diaza-Macrocyclic Crown Ethers**
Bilge Koçak S., Kılıç Z., Gündüz N.
XIII. Ulusal Kimya Kongresi, Samsun, Turkey, 31 August - 04 September 1999, pp.133
- XLI. **Synthesis of Some Bis[Dialkylphosphonate] Compounds and Investigations of Their Structures Using Spectroscopic Methods**
Acar N., Kaya İter E. E., Bilge Koçak S., Natsagdorj A., Yılmaz H., Kılıç Z.
XIII. Ulusal Kimya Kongresi, Samsun, Turkey, 31 August - 04 September 1999, pp.136

Metrics

Publication: 115

Citation (WoS): 661

Citation (Scopus): 745

H-Index (WoS): 18

H-Index (Scopus): 18

Invited Talks

Studies on Boron in the World and in Turkey and the Future of Boron Compounds, Workshop, Yalova Üniversitesi, Turkey, September 2022

Cyclotriphosphazenes with Pendant Arm and Six-Membered spiro Ring: Syntheses, Structural Characterization and DNA-Binding Study, Conference, National University of Mongolia (6th International Conference on Chemistry and Chemical

Engineering Research and Development in Chemistry (RDChem2018MN)), Mongolia, June 2018

Linear Phosphazene Polymers: Their Synthesis Using An Initiator Based On Carborane Anion [HCB₁₁H₅Br₆]- and N-Silylated Phosphazene Cation [Et₃Si(N₃P₃Cl₆)]+, Conference, National University of Mongolia (International Conference "Minerals and Materials Chemistry, Engineering-Mongolia), Mongolia, September 2011

The Use of Boron in the Treatment of Cancer, Seminar, Ministry of Education, Chairman of the Board of Education (2011 International Year of Chemistry Events), Turkey, April 2011

The Relationship between ³¹P-NMR Chemical Shifts and Endocyclic and Exocyclic NPN Bond Angles in Cyclic Phosphazene Derivatives, Conference, National University of Mongolia (Second International Symposium in Chemistry "Key Issues in Chemistry and Environmental Problems-2006), Mongolia, September 2006

Scholarships

TUBITAK 2219 International Postdoctoral Research Scholarship, TUBITAK, 2007 - 2008

TUBITAK Munir Birsal Foundation Ph.D Scholarship, TUBITAK, 1999 - 2003

M.Sc Scholarship of the Scientific and Technical Research Council of Turkey (TUBITAK), TUBITAK, 1996 - 1998