

## Prof. KERİM SERBEST

### Personal Information

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### Education Information

Doctorate, Karadeniz Technical University, -, Kimya, Turkey 1999 - 2003

Postgraduate, Karadeniz Technical University, -, Kimya, Turkey 1996 - 1999

### Dissertations

Doctorate, YENİ BİR SIKLIK DİESTER, İMİDATLARI, BAKIR(II) KOMPLEKSLERİNİN SENTEZİ VE KARAKTERİZASYONU, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Kimya, 2003

Postgraduate, YENİ BİR TETRAOKSİM LİGANDININ DİNÜKLEER, TETRAİNÜKLEER GEÇİŞ METAL KOMPLEKSLERİNİN SENTEZİ VE KARAKTERİZASYONU , Recep Tayyip Erdogan University, Fen Bilimleri Enstitüsü, Kimya, 1999

### Research Areas

Chemistry, Inorganic Chemistry, Bioinorganic Chemistry, Coordination Chemistry, Organometallic Chemistry, Novel Ligands, Natural Sciences

### Academic Titles / Tasks

Professor, Recep Tayyip Erdogan University, Fen Edebiyat Fakültesi, Kimya Bölümü, 2012 - Continues

### Academic and Administrative Experience

Recep Tayyip Erdogan University, Fen Edebiyat Fak., Kimya Bölümü, 2012 - Continues

University Executive Board Member, Recep Tayyip Erdogan University, Fen Edebiyat Fakültesi, Kimya Bölümü, 2017 - 2018

Recep Tayyip Erdogan University, 2014 - 2017

Recep Tayyip Erdogan University, Teknik Bilimler Myo, 2014 - 2017

Recep Tayyip Erdogan University, Teknik Bilimler Myo, Kimya Ve Kimyasal İşleme Teknolojileri, 2014 - 2017

Recep Tayyip Erdogan University, Fen Edebiyat Fak., 2012 - 2015

Recep Tayyip Erdogan University, Fen Edebiyat Fak., Kimya Bölümü, 2012 - 2014

Recep Tayyip Erdogan University, 2008 - 2011

Recep Tayyip Erdogan University, Fen Bilimleri Enstitüsü, 2007 - 2011

Recep Tayyip Erdogan University, Fen Edebiyat Fak., Kimya Bölümü, 2005 - 2010

## Courses

İş Sağlığı ve Güvenliği-I, Undergraduate, 2019 - 2020  
Anorganik Kimya-II, Undergraduate, 2019 - 2020  
Koordinasyon Kimyasına Giriş, Undergraduate, 2020 - 2021  
Uzmanlık Alan Dersi II, Doctorate, 2019 - 2020  
Dönem Projesi, Undergraduate, 2020 - 2021  
Uzmanlık Alan Dersi I, Postgraduate, 2020 - 2021  
Anorganik Tepkime Mekanizmalarına Giriş, Undergraduate, 2019 - 2020  
Doktora Tezi, Doctorate, 2019 - 2020  
İş Sağlığı ve Güvenliği-I, Undergraduate, 2020 - 2021

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

- I. **Binuclear Cu(II), Ni(II) and Zn(II) complexes of hydrazone Schiff bases: Synthesis, spectroscopy, DFT calculations, and SOD mimetic activity**  
Zengin A., Serbest K., Emirik M., Özil M., Mentеше E., Faiz Ö.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1278, 2023 (SCI-Expanded)
- II. **Ternary Transition Metal Complexes with an Azo-Imine Ligand and 2,2'-Bipyridine: Characterization, Computational Calculations, and Acetylcholinesterase Inhibition Activities**  
SERBEST K., DURAL T., KIZIL D., EMİRİK M., ZENGİN A., DİNÇER B.  
ACTA CHIMICA SLOVENICA, vol.69, no.3, pp.604-618, 2022 (SCI-Expanded)
- III. **Novel phthalocyanines containing substituted salicyclic hydrazone-1,3-thiazole moieties: Microwave-assisted synthesis, spectroscopic characterization, X-ray structure and thermal characterization**  
DEĞİRMENCİOĞLU İ., ATALAY E., ER M., KÖYSAL Y., İŞİK Ş., SERBEST K.  
DYES AND PIGMENTS, vol.84, no.1, pp.69-78, 2010 (SCI-Expanded)
- IV. **The microwave-assisted synthesis and structural characterization of novel, dithia-bridged polymeric phthalocyanines containing a substituted thiophenylamine Schiff base**  
DEĞİRMENCİOĞLU İ., BAYRAK R., ER M., SERBEST K.  
DYES AND PIGMENTS, vol.83, no.1, pp.51-58, 2009 (SCI-Expanded)
- V. **Spectroscopic and theoretical study of 1,2,4-triazole-3-one based salicylaldehyde complexes and evaluation of superoxide-scavenging properties**  
SERBEST K., OZEN A., ÜNVER Y., ER M., DEĞİRMENCİOĞLU İ., SANCAK K.  
JOURNAL OF MOLECULAR STRUCTURE, vol.922, pp.1-10, 2009 (SCI-Expanded)
- VI. **Two novel macrocyclic schiff bases containing bis-N2O2 donor set and their binuclear complexes: synthesis, spectroscopic and magnetic properties**  
KARAOĞLU K., BARAN T., SERBEST K., ER M., DEĞİRMENCİOĞLU İ.  
JOURNAL OF MOLECULAR STRUCTURE, vol.922, pp.39-45, 2009 (SCI-Expanded)
- VII. **Binuclear transition metal complexes of a novel lateral-N-methylthiosemicarbazone through the central ethylene bridge: Synthesis, structural characterization and the response of ligand molecule to different solvent media**  
ER M., SANCAK K., DEĞİRMENCİOĞLU İ., SERBEST K.  
JOURNAL OF MOLECULAR STRUCTURE, vol.882, pp.35-46, 2008 (SCI-Expanded)
- VIII. **Ni(II), Cu(II), and Zn(II) Complexes of Tetradentate Schiff Base Containing Two Thiadiazoles Units: Structural, Spectroscopic, Magnetic Properties, and Molecular Modeling Studies**  
SERBEST K., KAYI H., ER M., SANCAK K., DEĞİRMENCİOĞLU İ.  
HETEROATOM CHEMISTRY, vol.19, no.7, pp.700-712, 2008 (SCI-Expanded)
- IX. **Microwave-assisted synthesis and characterization and theoretical calculations of the first example of free and metallophthalocyanines from salen type Schiff base derivative bearing thiophen and triazole heterocyclic rings**  
SERBEST K., DEĞİRMENCİOĞLU İ., ÜNVER Y., ER M., KANTAR C., SANCAK K.  
JOURNAL OF ORGANOMETALLIC CHEMISTRY, vol.692, no.25, pp.5646-5654, 2007 (SCI-Expanded)

- X. **Cu(II), Ni(II) and Fe(II) complexes with a new substituted [1,2,4] triazole Schiff base derived from 4-amino-5-(thien-2-yl ethyl)-2,4-dihydro-3H-1,2,4-triazol-3-one and 2-hydroxy-1-naphthaldehyde: synthesis, characterization and a comparison of theoretical and experimental results by Ab initio calculation**  
 SANCAK K., ER M., UNVER Y., YILDIRIM M., DEGIRMENCIOLU I., Serbest K.  
 TRANSITION METAL CHEMISTRY, vol.32, no.1, pp.16-22, 2007 (SCI-Expanded)
- XI. **2,2'-[2,3-bis(1-formyl-2-naphthyloxymethyl)-but-2-ene-1,4-diylldioxy]bis(naphthalene-1-carbaldehyde)**  
 USTABAS R., Coruh U., ER M., Serbest K., VAZQUEZ-LOPEZ E. M.  
 ACTA CRYSTALLOGRAPHICA SECTION E-STRUCTURE REPORTS ONLINE, vol.62, 2006 (SCI-Expanded)
- XII. **DNA hydrolysis by homo- and heteronuclear Cu(II)-Ni(II) complexes of two diester-type ligands**  
 SAGLAM N., COLAK A., Serbest K., KARABOCEK S., GUNER S. B.  
 MONATSHEFTE FUR CHEMIE, vol.135, no.8, pp.1023-1031, 2004 (SCI-Expanded)
- XIII. **Synthesis and characterization of Cu(II) complexes of two ligands derived from malonyl dichloride**  
 Karabocek N., Karabocek S., Mazlum H., Degirmencioglu I., Serbest K.  
 TURKISH JOURNAL OF CHEMISTRY, vol.28, no.1, pp.87-94, 2004 (SCI-Expanded)
- XIV. **Copper(II)-nickel(II) complexes of novel 1,9-dioxo-3,6-dithiacyclotridecane-10,12-dione and 1,4-dioxo-7,10-dithiacyclododecane-2,3-dione ligands**  
 KARABOCEK S., DEGIRMENCIOLU I., KARABOCEK N., Serbest K.  
 TRANSITION METAL CHEMISTRY, vol.28, no.5, pp.529-533, 2003 (SCI-Expanded)
- XV. **The effect of intramolecular-hydrogen bonds in the synthesis of novel imidates from a 13-membered dioxadithia crown ether diester**  
 KARABOCEK S., Serbest K., DEGIRMENCIOLU I., KARABOCEK N., ER M.  
 JOURNAL OF HETEROCYCLIC CHEMISTRY, vol.40, no.4, pp.639-643, 2003 (SCI-Expanded)
- XVI. **Synthesis and characterization of new phthalocyanines peripherally fused to four 21-membered dithiacrown ether macrocycles**  
 DEGIRMENCIOLU I., KARABOCEK S., KARABOCEK N., ER M., Serbest K.  
 MONATSHEFTE FUR CHEMIE, vol.134, no.6, pp.875-881, 2003 (SCI-Expanded)
- XVII. **Oxidative cleavage of DNA by homo- and heteronuclear Cu(II)-Mn(II) complexes of an oxime-type ligand**  
 SAGLAM N., COLAK A., Serbest K., DULGER S., GUNER S. B., KARABOCEK S., BELDUZ A.  
 BIOMETALS, vol.15, no.4, pp.357-365, 2002 (SCI-Expanded)
- XVIII. **A new binucleating ligand incorporating four oxime groups and its copper(II), manganese(II) and cobalt(III) complexes**  
 Serbest K., DEGIRMENCIOLU I., KARABOCEK S., GUNER S. B.  
 TRANSITION METAL CHEMISTRY, vol.26, pp.232-236, 2001 (SCI-Expanded)
- XIX. **Mono-, di- and trinuclear copper(II) dioxime complexes; 3-{2-[2-(2-hydroxyimino-1-methylpropylideneamino)ethylamino]ethylimino}butan-2-one oxime**  
 Serbest K., KARABOCEK S., DEGIRMENCIOLU I., GUNER S. B., KORMALI F.  
 TRANSITION METAL CHEMISTRY, vol.26, pp.375-379, 2001 (SCI-Expanded)
- XX. **Copper(II)-manganese(II) complexes of 3,3'-(1,3-propanediylidimine)bis-(3-methyl-2-butanone)dioxime with superoxide dismutase-like activity**  
 Serbest K., COLAK A., GUNER S. B., KARABOCEK S., KORMALI F.  
 TRANSITION METAL CHEMISTRY, vol.26, no.6, pp.625-629, 2001 (SCI-Expanded)
- XXI. **A novel tetraoxime and its dinuclear and tetranuclear transition metal complexes**  
 BILGIN A., Serbest K., GOK Y.  
 TRANSITION METAL CHEMISTRY, vol.25, no.1, pp.63-68, 2000 (SCI-Expanded)

- I. **N-HETEROSİKLİK OKSİM LİGANDI VE MONONÜKLEER Cu(II) KOMPLEKSİ: SENTEZ, SPEKTROSKOPİ, ELEKTROKİMYA, DFT HESAPLAMALARI VE KATEKOLAZ AKTİVİTESİ**  
ZENGİN A., SERBEST K.  
2. Uluslararası Türk Dünyası Mühendislik ve Fen Bilimleri Kongresi, 7 - 10 November 2019, pp.529-539
- II. **The Molecular Structure Determination of [Cu{(n5-C5H5)Fe(n5-C5H4)-(H)C=N-N=C(H)-(naphthalen)}]2]**  
ÇORUH U., KARAOĞLU K., SERBEST K., LOPEZ E. M. V.  
XXIV Congress of Chemists and Technologists of Macedonia, 11 - 14 September 2016
- III. **Ferrosen Birimi İçeren Salisilazin Bileşikleri, Bakır Komplekslerinin Sentezi ve Karakterizasyonu**  
KARAOĞLU K., SERBEST K.  
IV. Ulusal Anorganik Kimya Kongresi, Tokat, Turkey, 30 May - 02 June 2013, pp.268
- IV. **Amino Asit Türevi Makroasiklik Schiff Bazı Ligandı ve Geçiş Metal Komplekslerinin Sentezi, Karakterizasyonu**  
Baran T., KARAOĞLU K., Dural B., SERBEST K.  
24. Ulusal Kimya Kongresi, Zonguldak, Turkey, 29 June - 02 July 2010
- V. **İki Yeni Bis-Makrosiklik Schiff Bazı Ligandı ve Metal Komplekslerinin Sentezi, Karakterizasyonu**  
KARAOĞLU K., Baran T., Dural B., SERBEST K.  
24. Ulusal Kimya Kongresi, Zonguldak, Turkey, 29 June - 02 July 2010
- VI. **Etanolamin Türevi Makroasiklik Schiff Bazı Ligandı, Cu(II), Ni(II), Zn(II) Komplekslerinin Sentezi ve Karakterizasyonu**  
BARAN T., KARAOĞLU K., ERMAN M., SERBEST K.  
II. Ulusal Anorganik Kimya Kongresi, Elazığ, Turkey, 16 - 19 May 2009, pp.248
- VII. **Yeni Bir Makroasiklik Schiff Bazı Ligandı Geçiş Metal Komplekslerinin Sentezi ve Karakterizasyonu**  
KARAOĞLU K., BARAN T., ER M., DEĞİRMENCİOĞLU İ., SERBEST K.  
XXII. Ulusal Kimya Kongresi, Gazimagusa, Cyprus (Kkct), 6 - 10 October 2008, pp.74
- VIII. **Yeni Bir Mahrosiklik Schiff Bazı Ligandı, Geçiş Metali Komplekslerinin Sentezi ve Karakterizasyonu**  
KARAOĞLU K., BARAN T., ER M., SERBEST K.  
XXII. Ulusal Kimya Kongresi, Gazimagusa, Cyprus (Kkct), 6 - 10 October 2006
- IX. **Yeni Bir Triazol Türevi Makroasiklik Schiff Bazı Ligandı, Geçiş Metal Komplekslerinin Sentezi ve Karakterizasyonu**  
BARAN T., KARAOĞLU K., ER M., DEĞİRMENCİOĞLU İ., SERBEST K.  
XXII. Ulusal Kimya Kongresi, Gazimagusa, Cyprus (Kkct), 6 - 10 October 2006

## Supported Projects

Özel A., Serbest K., TUBITAK Project, Bazı Aril Sübstitüe Azin Ferrosen Bakır(II) Komplekslerinin DNA Bağlama, DNA Kesim, Topoizomeraz I Aktivitelerinin ve Antioksidan Kapasitelerinin İncelenmesi, 2014 - 2015  
Serbest K., Alpay Karaoğlu Ş., Er M., TUBITAK Project, Yeni Makroasiklik/Makrobisiklik Schiff Bazı Ligandlarının, Geçiş Metal Komplekslerinin Sentezi, Karakterizasyonu ve Biyolojik Aktivitelerinin İncelenmesi, 2007 - 2010  
SERBEST K., TUBITAK Project, Biyolojik Aktif Türler Olan 1,2,4-Triazol ve Tiyofen Heterosiklik Birimlerini İçeren Yeni Salen Tipi Schiff Bazı Ligandı ve Onun Fe(III), Co(II), Ni(II), Bakır(II) ve Zn(II) Komplekslerinin Sentezi, Karakterizasyonu ve Biyolojik Aktivitelerinin İncelenmesi, 2006 - 2007

## Scientific Refereeing

Monatshefte Für Chemie, SCI Journal, April 2015  
Monatshefte Für Chemie, SCI Journal, January 2015  
Project Supported by Higher Education Institutions, July 2014  
TUBITAK Project, June 2014

Journal Of Molecular Structure, SCI Journal, April 2014  
Monatshefte Für Chemie, SCI Journal, February 2014  
Journal Of Organometallic Chemistry, SCI Journal, November 2013  
Journal Of Molecular Structure, SCI Journal, October 2013  
European Journal Of Medicinal Chemistry, SCI Journal, June 2013  
Monatshefte Für Chemie, SCI Journal, June 2013  
Journal Of Organometallic Chemistry, SCI Journal, June 2013  
Monatshefte Für Chemie, SCI Journal, May 2013  
Monatshefte Für Chemie, SCI Journal, April 2013  
Spectrochimica Acta Part A, SCI Journal, July 2012  
Spectrochimica Acta Part A, SCI Journal, March 2011  
Spectrochimica Acta Part A, SCI Journal, December 2009  
Molecules, SCI Journal, December 2008  
Dyes and Pigments, SCI Journal, February 2008

## **Metrics**

Publication: 45

Citation (WoS): 504

Citation (Scopus): 528

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H-Index (Scopus): 14