

## Assoc. Prof. CEYDA İÇSEL YILMAZ

### Personal Information

**Email:** cydyilmaz@ktu.edu.tr

**Web:** <https://avesis.ktu.edu.tr/cydyilmaz>

### International Researcher IDs

ScholarID: IT8SMYIAAAAJ

ORCID: 0000-0002-2717-2430

Publons / Web Of Science ResearcherID: AAI-3342-2021

ScopusID: 55551960400

Yoksis Researcher ID: 264927

### Education Information

Doctorate, Bursa Uludağ University, Fen-Edebiyat Fakültesi, Kimya, Turkey 2013 - 2016

Postgraduate, Bursa Uludağ University, Fen-Edebiyat Fakültesi, Kimya, Turkey 2010 - 2013

Undergraduate, Bursa Uludağ University, Fen-Edebiyat Fakültesi, Kimya, Turkey 2005 - 2009

### Research Areas

Inorganic Chemistry, Bioinorganic Chemistry, Coordination Chemistry

### Academic Titles / Tasks

Associate Professor, Karadeniz Technical University, Fen Fakültesi, Kimya, 2022 - Continues

Assistant Professor, Bursa Uludağ University, Fen-Edebiyat Fakültesi, Kimya, 2017 - 2022

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

- I. **A novel cocrystal of 5-fluorouracil with 2,2'-dipyridylamine: Synthesis, structural characterization, thermal analysis and in silico anticancer evaluation as a thymidylate synthase inhibitor**  
YILDIRIM N., İÇSEL YILMAZ C., Ercan S., AYGÜN M., YILMAZ V. T.  
Journal of Molecular Structure, vol.1318, 2024 (SCI-Expanded)
- II. **Cationic first-row transition metal saccharinate complexes with tris(2-pyridylmethyl)amine: synthesis, structures and anticancer studies**  
İÇSEL YILMAZ C., Aydinlik S., AYGÜN M., YILMAZ V. T.  
DALTON TRANSACTIONS, 2024 (SCI-Expanded)
- III. **Pd(II) and Pt(II) saccharinate complexes with two phosphine derivatives: Synthesis, anticancer and antiangiogenic activities**  
İÇSEL YILMAZ C., YILMAZ V. T., AYGÜN M., Erkisa M., Ulukaya E., Akar R. O.  
Applied Organometallic Chemistry, vol.38, no.5, 2024 (SCI-Expanded)
- IV. **Water-soluble copper(II) 5-fluorouracil complexes bearing polypyridyl co-ligands: synthesis, structures and anticancer activity**  
İÇSEL YILMAZ C., YILMAZ V. T., AYGÜN M., Erkisa M., Ulukaya E.

Dalton transactions (Cambridge, England : 2003), vol.52, no.21, pp.7048-7058, 2023 (SCI-Expanded)

- V. **Synthesis, structural, magnetic and thermal studies of copper(II) 5,5-diethylbarbiturate complexes with nicotinamide, 2,2'-bipyridine and triethanolamine**  
YILMAZ V. T., YILMAZ F., İÇSEL YILMAZ C., AYGÜN M.  
Journal of Coordination Chemistry, vol.76, no.3-4, pp.414-423, 2023 (SCI-Expanded)
- VI. **Novel 5-fluorouracil complexes of Zn(II) with pyridine-based ligands as potential anticancer agents**  
Icel C., Yilmaz V. T., Aygün M., Erkisa M., Ulukaya E.  
DALTON TRANSACTIONS, vol.51, no.13, pp.5208-5217, 2022 (SCI-Expanded)
- VII. **New manganese(II), iron(II), cobalt(II), nickel(II) and copper(II) saccharinate complexes of 2,6-bis(2-benzimidazolyl)pyridine as potential anticancer agents**  
Icel C., YILMAZ V. T., Aydinlik S., AYGÜN M.  
EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY, vol.202, 2020 (SCI-Expanded)
- VIII. **Zn(ii), Cd(ii) and Hg(ii) saccharinate complexes with 2,6-bis(2-benzimidazolyl)pyridine as promising anticancer agents in breast and lung cancer cell lines via ROS-induced apoptosis**  
Icel C., YILMAZ V. T., Aydinlik S., AYGÜN M.  
DALTON TRANSACTIONS, vol.49, no.23, pp.7842-7851, 2020 (SCI-Expanded)
- IX. **Trans-Pd/Pt(II) saccharinate complexes with a phosphine ligand: Synthesis, cytotoxicity and structure-activity relationship**  
Icel C., YILMAZ V. T., AYGÜN M., Ulukaya E.  
BIOORGANIC & MEDICINAL CHEMISTRY LETTERS, vol.30, no.9, 2020 (SCI-Expanded)
- X. **Cytotoxic platinum(II) complexes derived from saccharinate and phosphine ligands: synthesis, structures, DNA cleavage, and oxidative stress-induced apoptosis**  
Icel C., YILMAZ V. T., Cevatemre B., AYGÜN M., Ulukaya E.  
JOURNAL OF BIOLOGICAL INORGANIC CHEMISTRY, vol.25, no.1, pp.75-87, 2020 (SCI-Expanded)
- XI. **Synthesis, structures and catalytic activity of Pd(II) saccharinate complexes with monophosphines in direct arylation of five-membered heteroarenes with aryl bromides**  
YILMAZ V. T., Icel C., Turgut O. R., AYGÜN M., Evren E., ÖZDEMİR İ.  
INORGANICA CHIMICA ACTA, vol.500, 2020 (SCI-Expanded)
- XII. **Synthesis, characterization and crystal structures of platinum(II) saccharinate complexes with 1,5-cyclooctadiene**  
Icel C.  
TURKISH JOURNAL OF CHEMISTRY, vol.44, no.3, pp.736-745, 2020 (SCI-Expanded)
- XIII. **Structures and anticancer activity of chlorido platinum(II) saccharinate complexes with mono- and dialkylphenylphosphines**  
Icel C., YILMAZ V. T., Cevatemre B., AYGÜN M., Ulukaya E.  
JOURNAL OF INORGANIC BIOCHEMISTRY, vol.195, pp.39-50, 2019 (SCI-Expanded)
- XIV. **Pd(II) and Pt(II) saccharinate complexes of bis(diphenylphosphino) propane/butane: Synthesis, structure, antiproliferative activity and mechanism of action**  
YILMAZ V. T., Icel C., AYGÜN M., Erkisa M., Ulukaya E.  
EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY, vol.158, pp.534-547, 2018 (SCI-Expanded)
- XV. **Palladium(II) and platinum(II) saccharinate complexes with bis(diphenylphosphino)methane/ethane: synthesis, S-phase arrest and ROS-mediated apoptosis in human colon cancer cells**  
Icel C., YILMAZ V. T., AYGÜN M., Cevatemre B., Alper P., Ulukaya E.  
DALTON TRANSACTIONS, vol.47, no.33, pp.11397-11410, 2018 (SCI-Expanded)
- XVI. **Synthesis, structures and anticancer potentials of platinum(II) saccharinate complexes of tertiary phosphines with phenyl and cyclohexyl groups targeting mitochondria and DNA**  
YILMAZ V. T., Icel C., Turgut O. R., AYGÜN M., Erkisa M., TÜRKDEMİR M. H., Ulukaya E.  
EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY, vol.155, pp.609-622, 2018 (SCI-Expanded)
- XVII. **Structures and biochemical evaluation of silver(I) 5,5-diethylbarbiturate complexes with bis(diphenylphosphino)alkanes as potential antimicrobial and anticancer agents**

- YILMAZ V. T., Iysel C., Batur J., Aydinlik S., Sahinturk P., AYGÜN M.  
EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY, vol.139, pp.901-916, 2017 (SCI-Expanded)
- XVIII. **Synthesis, structures, DNA/protein binding, molecular docking, anticancer activity and ROS generation of Ni(II), Cu(II) and Zn(II) 5,5-diethylbarbiturate complexes with bis(2-pyridylmethyl) amine and terpyridine**  
YILMAZ V. T., Iysel C., Suyunova F., AYGÜN M., Cevatemre B., Ulukaya E.  
NEW JOURNAL OF CHEMISTRY, vol.41, no.16, pp.8092-8106, 2017 (SCI-Expanded)
- XIX. **Synthesis, structures and biomolecular interactions of new silver(I) 5,5-diethylbarbiturate complexes of monophosphines targeting Gram-positive bacteria and breast cancer cells**  
YILMAZ V. T., Iysel C., Batur J., Aydinlik S., CENGİZ M., Buyukgungor O.  
DALTON TRANSACTIONS, vol.46, no.25, pp.8110-8124, 2017 (SCI-Expanded)
- XX. **A trans-platinum(II) complex induces apoptosis in cancer stem cells of breast cancer**  
Aztopal N., Karakas D., Cevatemre B., ARI F., Iysel C., Daidone M. G., Ulukaya E.  
BIOORGANIC & MEDICINAL CHEMISTRY, vol.25, no.1, pp.269-276, 2017 (SCI-Expanded)
- XXI. **Synthesis, characterization and structures of solvent-mediated Na(I)-Pd(II) heterometallic complexes containing [Pd(barb)(4)](2-) units (barb=5,5-diethylbarbiturate)**  
Iysel C., YILMAZ V. T., Buyukgungor O.  
JOURNAL OF COORDINATION CHEMISTRY, vol.69, no.15, pp.2272-2280, 2016 (SCI-Expanded)
- XXII. **Ni(II)/Cu(II)/Zn(II) 5,5-diethylbarbiturate complexes with 1,10-phenanthroline and 2,2'-dipyridylamine: synthesis, structures, DNA/BSA binding, nuclease activity, molecular docking, cellular uptake, cytotoxicity and the mode of cell death**  
YILMAZ V. T., Iysel C., Suyunova F., AYGÜN M., Aztopal N., Ulukaya E.  
DALTON TRANSACTIONS, vol.45, no.25, pp.10466-10479, 2016 (SCI-Expanded)
- XXIII. **Cationic Pd(II)/Pt(II) 5,5-diethylbarbiturate complexes with bis(2-pyridylmethyl)amine and terpyridine: Synthesis, structures, DNA/BSA interactions, intracellular distribution, cytotoxic activity and induction of apoptosis**  
Iysel C., YILMAZ V. T., Kaya Y., Durmus S., SARIMAHMUT M., Buyukgungor O., Ulukaya E.  
JOURNAL OF INORGANIC BIOCHEMISTRY, vol.152, pp.38-52, 2015 (SCI-Expanded)
- XXIV. **Structural, spectroscopic and quantum chemical studies of acetyl hydrazone oxime and its palladium(II) and platinum(II) complexes**  
Kaya Y., Iysel C., YILMAZ V. T., Buyukgungor O.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1095, pp.51-60, 2015 (SCI-Expanded)
- XXV. **Anti-growth effect of a novel trans-dichloridobis[2-(2-hydroxyethyl)pyridine] platinum (II) complex via induction of apoptosis on breast cancer cell lines**  
ORAL H. B., Cevatemre B., SARIMAHMUT M., Iysel C., YILMAZ V. T., Ulukaya E.  
BIOORGANIC & MEDICINAL CHEMISTRY, vol.23, no.15, pp.4303-4310, 2015 (SCI-Expanded)
- XXVI. **New palladium(II) and platinum(II) 5,5-diethylbarbiturate complexes with 2-phenylpyridine, 2,2'-bipyridine and 2,2'-dipyridylamine: synthesis, structures, DNA binding, molecular docking, cellular uptake, antioxidant activity and cytotoxicity**  
Iysel C., YILMAZ V. T., Kaya Y., ŞAMLI H., Harrison W. T. A., Buyukgungor O.  
DALTON TRANSACTIONS, vol.44, no.15, pp.6880-6895, 2015 (SCI-Expanded)
- XXVII. **A combined experimental and theoretical investigation of a new imineoxime and its palladium(II) and platinum(II) complexes: Synthesis, structural characterization and spectroscopic properties**  
Kaya Y., Iysel C., YILMAZ V. T., Buyukgungor O.  
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.133, pp.93-101, 2014 (SCI-Expanded)
- XXVIII. **Synthesis, crystal structures, in vitro DNA binding, antibacterial and cytotoxic activities of new di- and polynuclear silver(I) saccharinate complexes with tertiary monophosphanes**  
YILMAZ V. T., Gocmen E., Iysel C., CENGİZ M., Susluer S. Y., Buyukgungor O.  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY B-BIOLOGY, vol.131, pp.31-42, 2014 (SCI-Expanded)
- XXIX. **Palladium(II) and platinum(II) complexes of a new imineoxime ligand - Structural, spectroscopic and**

#### **DFT/time-dependent (TD) DFT studies**

Kaya Y., Içsel C., YILMAZ V. T., Buyukgungor O.

JOURNAL OF ORGANOMETALLIC CHEMISTRY, vol.752, pp.83-90, 2014 (SCI-Expanded)

- XXX. **Di- and polynuclear silver(I) saccharinate complexes of tertiary diphosphane ligands: synthesis, structures, in vitro DNA binding, and antibacterial and anticancer properties**  
YILMAZ V. T., Gocmen E., Içsel C., CENGİZ M., Susluer S. Y., Buyukgungor O.  
JOURNAL OF BIOLOGICAL INORGANIC CHEMISTRY, vol.19, no.1, pp.29-44, 2014 (SCI-Expanded)
- XXXI. **In vitro DNA binding studies of the sweetening agent saccharin and its copper(II) and zinc(II) complexes**  
Içsel C., YILMAZ V. T.  
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY B-BIOLOGY, vol.130, pp.115-121, 2014 (SCI-Expanded)
- XXXII. **Synthesis, structural characterization and cell death-inducing effect of novel palladium(II) and platinum(II) saccharinate complexes with 2-(hydroxymethyl)pyridine and 2-(2-hydroxyethyl)pyridine on cancer cells in vitro**  
ARI F., Aztopal N., Içsel C., YILMAZ V. T., Guney E., Buyukgungor O., Ulukaya E.  
BIOORGANIC & MEDICINAL CHEMISTRY, vol.21, no.21, pp.6427-6434, 2013 (SCI-Expanded)
- XXXIII. **A palladium(II) complex containing both carbonyl and imine oxime ligands: Crystal structure, experimental and theoretical UV-vis, IR and NMR studies**  
Kaya Y., Içsel C., YILMAZ V. T., Buyukgungor O.  
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.108, pp.133-140, 2013 (SCI-Expanded)
- XXXIV. **DNA Binding and Cleavage Studies of Two Palladium(II) Saccharinate Complexes with Terpyridine**  
Içsel C., YILMAZ V. T.  
DNA AND CELL BIOLOGY, vol.32, no.4, pp.165-172, 2013 (SCI-Expanded)
- XXXV. **Synthesis, crystal structures, DNA binding and cytotoxicity of two novel platinum(II) complexes containing 2-(hydroxymethyl)pyridine and pyridine-2-carboxylate ligands**  
Içsel C., YILMAZ V. T., Gölcü A., Ulukaya E., Buyukgungor O.  
BIOORGANIC & MEDICINAL CHEMISTRY LETTERS, vol.23, no.7, pp.2117-2122, 2013 (SCI-Expanded)
- XXXVI. **trans-Dichloridopalladium(II) and platinum(II) complexes with 2-(hydroxymethyl)pyridine and 2-(2-hydroxyethyl)pyridine: Synthesis, structural characterization, DNA binding and in vitro cytotoxicity studies**  
Içsel C., YILMAZ V. T., ARI F., Ulukaya E., Harrison W. T. A.  
EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY, vol.60, pp.386-394, 2013 (SCI-Expanded)

#### **Articles Published in Other Journals**

- I. **Metal complexes of saccharin and thiosaccharin as potential anticancer and antimicrobial agents**  
İçsel Yılmaz C., Yılmaz V. T., Yeşilel O. Z., Harrison W. T.  
EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY REPORTS, vol.12, 2024 (ESCI)
- II. **Synthesis, Spectroscopic Characterization, Crystal Structure, and DNA Docking Studies of A New Trans-Platinum Saccharinate Complex Containing Aqua and Dimethyl Sulfoxide Ligands**  
İÇSEL YILMAZ C.  
Journal of the Turkish Chemical Society, Section A: Chemistry, vol.11, no.2, pp.683-690, 2024 (Scopus)
- III. **DNA/HSA Interactions and Anticancer Activity of a Palladium(II) Saccharinate Complex Bearing Ethyldiphenylphosphine**  
İÇSEL C.  
Hacettepe Journal of Biology and Chemistry, vol.49, no.1, pp.107-116, 2021 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Synthesis, Characterization and Structure of Chlorido Platinum(II) Saccharinate Complex Bearing 1,1-Bis(Diphenylphosphino)methane**  
İÇSEL C.  
6th International Conference on New Trends in Chemistry, 16 - 18 October 2020
- II. **Fosfinoplatin(II) Sakkarinat Komplekslerinin Sentezine Yönelik Sentetik Yöntemler**  
İÇSEL C.  
32. Ulusal Kimya Kongresi, Turkey, 17 - 19 September 2020
- III. **Difosfin Ligantları İçeren Nötral ve Katyonik Palladyum(II) ve Platin(II) Sakkarinat Komplekslerinin Sentezi ve Yapıları**  
YILMAZ V. T., İÇSEL C.  
VI. Ulusal Anorganik Kimya Kongresi, Turkey, 18 - 21 May 2017
- IV. **Monofosfinler İçeren Yeni Palladyum(II) Kloro ve Sakkarinat Komplekslerinin Sentezi ve Yapıları**  
Turgut Ö. R., İÇSEL C., YILMAZ V. T.  
VI. Ulusal Anorganik Kimya Kongresi, Turkey, 18 - 21 May 2017
- V. **Monofosfin Ligantlı Gümüş(I) 5,5-Dietilbarbitürat Komplekslerinin Yapıları, Antimikrobiyal ve Antikanser Özellikleri**  
BATUR J., İÇSEL C., YILMAZ V. T.  
VI. Ulusal Anorganik Kimya Kongresi, Turkey, 18 - 21 May 2017
- VI. **Safety, disposition, and efficacy assesment of a palladium based compound as part of preclinical drug development stage**  
DURMUŞ ERİM S., Ünal O., KHODADUST R., İÇSEL C., YILMAZ V. T., Yağcı A., ULUKAYA E., Van TELLİGEN O., Şahin O.  
4th International Bau Drug Design Congress, 13 - 15 October 2016
- VII. **Preclinical assesment of a novel palladium-based anticancer drug candidate: Assessing its metabolism, pharmacokinetics and interaction with drug**  
DURMUŞ ERİM S., Ünal O., Khodadust R., İÇSEL C., YILMAZ V. T., Yağcı A., ULUKAYA E., van TELLİGEN O., Şahin O.  
The 21st International Symposium on Microsomes and Drug Oxidations, United States Of America, 2 - 06 October 2016
- VIII. **Preclinical characterization of a novel palladium complex as anticancer drug candidate**  
Erim S. D., Unal O., Khodadust R., Iysel C., YILMAZ V. T., Ulukaya E., Acar F. Y., Sahin O.  
41st FEBS Congress on Molecular and Systems Biology for a Better Life, Kusadasi, Turkey, 3 - 08 September 2016, vol.283, pp.102
- IX. **Trans-dichloridoplatinum (II) complex induces apoptosis in cancer stem-cell enriched mammospheres**  
Aztopal N., Karakas D., ARI F., Iysel C., Ulukaya E.  
41st FEBS Congress on Molecular and Systems Biology for a Better Life, Kusadasi, Turkey, 3 - 08 September 2016, vol.283, pp.301-302
- X. **Preclinical Assessment of a Novel Palladium-Based Anticancer Drug Candidate: Assessing Its Pharmacokinetics and Interaction With Drug Transporters**  
DURMUŞ ERİM S., unal o., Khodadust r., İÇSEL C., YILMAZ V. T., yağcı a., ULUKAYA E., van Telligen O., Şahin O.  
Transporter Conference, 11 - 13 May 2016
- XI. **Predicting Efficacy Of A Novel Anticancer Drug Candidate In The Scope Of ABC And OATP Drug Transporters**  
DURMUŞ ERİM S., ÜNAL O., KHODADUST R., İÇSEL C., YILMAZ V. T., ACAR F. Y., ŞAHİN Ö., ULUKAYA E.  
3rd INTERNATIONALBAU-DRUG DESIGN CONGRESS, 1 - 03 October 2015
- XII. **Inhibition of sonic hedgehog pathway in breast cancer stem cells does not provide extra benefit in cytotoxicity resulted from Pd(II)-saccharinate complex of terpyridine**  
ULUKAYA E., CEVATEMRE B., KARAKAŞ D., AZTOPAL N., İÇSEL C.  
MedChem 2015, 5 - 10 July 2015
- XIII. **One molecule with two faces: solvent dependent activity of the Pd (II) complex determines the form**

**of the function, death or alive?**

AZTOPAL N., ERKISA M., İÇSEL C., YILMAZ V. T., ULUKAYA E.

3rd Anticancer Agent Development Congress, 18 - 19 May 2015

- XIV. **Yeni Sentezlenen Trans-dikloridobis[2-(2-hidroksietil)piridin]platin(II) Kompleksinin Meme Kanseri Hücre Soyları Üzerine Sitotoksik/Apoptotik Etkisi**  
YILMAZTEPE ORAL A., CEVATEMRE B., SARIMAHMUT M., İÇSEL C., YILMAZ V. T., ULUKAYA E.  
3. İlaç Kimyası: İlaç Etkin Maddesi Tasarımı, Sentezi, Üretimi ve Standardizasyonu Kongresi, Turkey, 20 - 22 March 2015
- XV. **Possible Cross-talk between Hedgehog, Wnt and Notch Pathways Following a Cytotoxic Treatment with Pd(II)-saccharinate complex of terpyridine**  
CEVATEMRE B., KARAKAŞ D., SARIMAHMUT M., Aydınlık Ş., AZTOPAL N., İÇSEL C., ULUKAYA E.  
Focused Joint Meeting for ESRs, COST Action CM1106 Meeting, 19 - 20 January 2015
- XVI. **2-(Hidroksimetil)piridin ve 2-(2-hidroksietil)piridin ligantları içeren palladyum(II) ve platin(II) komplekslerinin kristal yapıları ve DNA bağlanma özellikleri**  
İÇSEL C., YILMAZ V. T.  
IV. Ulusal Anorganik Kimya Kongresi, Turkey, 30 May - 02 June 2013
- XVII. **Tersiyer Fosfin Ligantı İçeren Polimerik Gümüş(I) Sakkarinat Kompleksinin Sentezi, Kristal Yapısı, DNA Bağlanma ve Biyolojik Aktivite Çalışmaları**  
GÖÇMEN E., İÇSEL C., YILMAZ V. T.  
IV. Ulusal Anorganik Kimya Kongresi, Turkey, 30 May - 02 June 2013
- XVIII. **trans-[Pt(2-mpy)<sub>2</sub>].4H<sub>2</sub>O ve [PtCl(2-pyc)(2-hmpy)].H<sub>2</sub>O komplekslerinin DNA-bağlanma özellikleri**  
İÇSEL C., YILMAZ V. T.  
IV Multidipsiliner Kanser Araştırma Kongresi, Turkey, 13 - 16 December 2012
- XIX. **Piridin varlığındaki palladyum(II) ve platin(II) sakkarinat komplekslerinin sentezi, kristal yapıları, termik ve floresans özellikleri**  
İÇSEL C., GÜNEY E., YILMAZ V. T.  
III. Ulusal Anorganik Kimya Kongresi, Çanakkale, Turkey, 19 - 22 May 2011