

## **Assoc. Prof. BETÜL ŞEN YÜKSEL**

### **Personal Information**

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### **International Researcher IDs**

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Publons / Web Of Science ResearcherID: P-3024-2019

ScopusID: 57220527522

Yoksis Researcher ID: 138219

### **Education Information**

Doctorate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey 2009 - 2015

Postgraduate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), Turkey 2005 - 2009

Undergraduate, Dokuz Eylul University, Fen Fakültesi, Fizik Bölümü, Turkey 2000 - 2005

### **Foreign Languages**

English, B2 Upper Intermediate

### **Dissertations**

Doctorate, Bazı tiyazoltıyon ve siklobütan türevlerinin kristalografik ve kuantum mekaniksel yöntemlerle yapısal karakterizasyonu, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Fizik (Dr), 2015

Postgraduate, Bazı organik moleküllerin yapısal ve biçimlenimsel analizi, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), 2009

### **Research Areas**

Physics, Chemistry

### **Academic Titles / Tasks**

Research Assistant PhD, Dokuz Eylul University, Fen Fakültesi, Fizik Bölümü, 2005 - Continues

### **Courses**

Fizik II, Undergraduate, 2021 - 2022

Temel Fizik Laboratuvarı II, Undergraduate, 2021 - 2022

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

- I. **Plausible PEPPSI catalysts for direct C-H functionalization of furans and pyrroles**  
Munir N., Gürbüz N., Zafar M. N., Evren E., ŞEN YÜKSEL B., AYGÜN M., ÖZDEMİR İ.  
Journal of Molecular Structure, vol.1295, 2024 (SCI-Expanded)
- II. **New palladium complexes with N-heterocyclic carbene and morpholine ligands: Synthesis, characterization, crystal structure, molecular docking, and biological activities**  
Behçet A., Taslimi P., Şen Yüksel B., Taşkin Tok T., Aktaş A., Gök Y., Aygün M., Gülçin İ.  
JOURNAL OF BIOCHEMICAL AND MOLECULAR TOXICOLOGY, no.e23554, pp.23554-23570, 2023 (SCI-Expanded)
- III. **Thioether-substituted Benzimidazolium Salts: Synthesis, Characterization, Crystal Structure, and Their Inhibitory Properties Against Acetylcholinesterase and Xanthine Oxidase**  
Yavuz K., NOMA S. A. A., ŞEN YÜKSEL B., Taskin-Tok T., AKTAŞ A., ATEŞ B., OSMAN B., AYGÜN M., GÖK Y.  
Journal of Molecular Structure, vol.1287, 2023 (SCI-Expanded)
- IV. **Design, synthesis, characterization, crystal structure, in silico studies, and inhibitory properties of the PEPPSI type Pd(II)NHC complexes bearing chloro/fluorobenzyl group**  
GÖK Y., Taslimi P., ŞEN YÜKSEL B., Bal S., AKTAŞ A., AYGÜN M., Sadeghi M., GÜLÇİN İ.  
Bioorganic Chemistry, vol.135, 2023 (SCI-Expanded)
- V. **Cobalt(II), nickel(II), palladium(II) and zinc(II) metallothiosemicarbazones: Synthesis, characterization, X-ray structures and biological activity**  
Çakmakçı E., SUBAŞI E., ÖZTÜRK E. K., Şahiner A., ŞEN YÜKSEL B.  
Inorganica Chimica Acta, vol.551, 2023 (SCI-Expanded)
- VI. **Fluorinated benzimidazolium salts: Synthesis, characterization, molecular docking studies and inhibitory properties against some metabolic enzymes**  
Zengin R., GÖK Y., Demir Y., ŞEN YÜKSEL B., Taskin-Tok T., AKTAŞ A., Demirci Ö., GÜLÇİN İ., AYGÜN M.  
Journal of Fluorine Chemistry, vol.267, 2023 (SCI-Expanded)
- VII. **Synthesis, characterization and inhibitor properties of benzimidazolium salts bearing 4-(methylsulfonyl)benzyl side arms**  
Güzel A., Noma S. A. A., Şen Yüksel B., Kazancı A., Taskin-Tok T., Kolaç T., Aktaş A., Ateş B., Aygün M., Gök Y.  
Journal of Molecular Structure, vol.1273, 2023 (SCI-Expanded)
- VIII. **Synthesis, crystal structures and antimicrobial activities of 3-methyl and 3-bromo substituted benzo[b]thiophene based thiosemicarbazones**  
Öztürk E., SUBAŞI E., Çakmakçı E. S., Şahiner A., ŞEN YÜKSEL B.  
Journal of Sulfur Chemistry, vol.45, no.1, pp.101-119, 2023 (SCI-Expanded)
- IX. **Synthesis and biological evaluation of Au-NHC complexes**  
Ekinci O., Akkoc M., Khan S., YAŞAR S., GÜRSES C., Noma S., Balcioğlu S., Sen B., AYGÜN M., YILMAZ İ.  
APPLIED ORGANOMETALLIC CHEMISTRY, vol.36, no.9, 2022 (SCI-Expanded)
- X. **Half-Sandwich Arene Ruthenium(II) Thiosemicarbazone Complexes: Evaluation of Anticancer Effect on Primary and Metastatic Ovarian Cancer Cell Lines**  
Guler S., Kayali H. A., Sadan E. O., ŞEN YÜKSEL B., SUBAŞI E.  
FRONTIERS IN PHARMACOLOGY, vol.13, 2022 (SCI-Expanded)
- XI. **A study about excellent xanthine oxidase inhibitory effects of new pyridine salts**  
Yilmaz U., Noma S. A. A., TAŞKIN TOK T., Sen B., GÖK Y., AKTAŞ A., ATEŞ B., AYGÜN M.  
MONATSHEFTE FÜR CHEMIE, vol.152, no.10, pp.1251-1260, 2021 (SCI-Expanded)
- XII. **Silver N-heterocyclic carbene complexes bearing fluorinated benzyl group: Synthesis, characterization, crystal structure, computational studies, and inhibitory properties against some metabolic enzymes**  
BAL S., Demirci O., Sen B., TAŞKIN TOK T., Taslimi P., AKTAŞ A., GÖK Y., AYGÜN M., GÜLÇİN İ.  
APPLIED ORGANOMETALLIC CHEMISTRY, vol.35, no.9, 2021 (SCI-Expanded)
- XIII. **Dinuclear silver-bis(N-heterocyclic carbene) complexes: Synthesis, catalytic activity in propargylamine formation and computational studies**  
Atli D. D., Sen B.

- JOURNAL OF COORDINATION CHEMISTRY, vol.74, no.14, pp.2289-2301, 2021 (SCI-Expanded)
- XIV. **Synthesis, characterization, crystal structure, alpha-glycosidase, and acetylcholinesterase inhibitory properties of 1,3-disubstituted benzimidazolium salts**  
BAL S., Demirci O., Sen B., Taslimi P., AKTAŞ A., GÖK Y., AYGÜN M., GÜLÇİN İ.  
ARCHIV DER PHARMAZIE, vol.354, no.5, 2021 (SCI-Expanded)
- XV. **PEPPSI type Pd(II)NHC complexes bearing chloro-/fluorobenzyl group: Synthesis, characterization, crystal structures, alpha-glycosidase and acetylcholinesterase inhibitory properties**  
BAL S., Demirci O., Sen B., Taslimi P., AKTAŞ A., GÖK Y., AYGÜN M., GÜLÇİN İ.  
POLYHEDRON, vol.198, 2021 (SCI-Expanded)
- XVI. **Spectroscopic characterization (IR and NMR), structural investigation, DFT study, and Hirshfeld surface analysis of two zinc(II) 2-acetylthiophenyl-thiosemicarbazone complexes**  
Yuksel B.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1229, 2021 (SCI-Expanded)
- XVII. **Synthesis and characterization of thiosemicarbazone-functionalized organoruthenium (II)-arene complexes: Investigation of antitumor characteristics in colorectal cancer cell lines**  
SUBAŞI E., Atalay E. B., Erdogan D., Sen B., Pakyapan B., Kayali H.  
MATERIALS SCIENCE AND ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.106, 2020 (SCI-Expanded)
- XVIII. **Crystal structures, spectroscopic properties of new cobalt(II), nickel(II), zinc (II) and palladium(II) complexes derived from 2-acetyl-5-chloro thiophene thiosemicarbazone: Anticancer evaluation**  
Sen B., Kalhan H. K., Demir V., Guler E. E., AYAR KAYALI H., SUBAŞI E.  
MATERIALS SCIENCE AND ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.98, pp.550-559, 2019 (SCI-Expanded)
- XIX. **Heterobimetallic Complexes Bridged by Imidazol{[4,5-f][1,10]-phenanthrolin}-2-ylidene: Synthesis and Catalytic Activity in Tandem Reactions**  
Pezuk L. G., Sen B., Hahn F. E., TÜRKMEN H.  
ORGANOMETALLICS, vol.38, no.2, pp.593-601, 2019 (SCI-Expanded)
- XX. **Synthesis, structural characterization, DFT calculations and Hirshfeld surface analysis of (R)-2-((S)-2((S)(-)hydroxy(ferrocenyl)methyl)aziridin-1yl)butan-1-ol**  
Sen B., SEVİNÇEK R., Beksultanova N., DOĞAN Ö.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1173, pp.33-41, 2018 (SCI-Expanded)
- XXI. **Synthesis, structural analysis, spectral investigations, and DFT calculations of 1-(3-amino-4-thia-1,2-diazaspiro[4.11]hexadec-2-en-1-yl)ethan-1-one**  
Barut Celepçi D., Yıldırım A., Sen B.  
JOURNAL OF THE CHINESE CHEMICAL SOCIETY, vol.65, no.8, pp.932-939, 2018 (SCI-Expanded)
- XXII. **Half-sandwich ruthenium-arene complexes with thiophen containing thiosemicarbazones: Synthesis and structural characterization**  
KÖSE YAMAN P., Sen B., Karagoz C. S., SUBAŞI E.  
JOURNAL OF ORGANOMETALLIC CHEMISTRY, vol.832, pp.27-35, 2017 (SCI-Expanded)
- XXIII. **Ruthenium(II) complexes derived from 2-phenylthiazoline-4-carboxylic acid: structure and catalytic activity for transfer hydrogenation reaction**  
DENİZALTı S., Sen B., Gokce A. G., Cetinkaya B.  
APPLIED ORGANOMETALLIC CHEMISTRY, vol.30, no.5, pp.373-377, 2016 (SCI-Expanded)
- XXIV. **Synthesis, structural characterization, and DFT calculations of 3-buthyl-4-(3-methyl-3-mesitylcyclobut-1-yl)-1,3-thiazole-2(3H)-thione**  
Sen B., Barim E., Kirilmis C., Aygun M.  
CRYSTALLOGRAPHY REPORTS, vol.61, no.2, pp.243-248, 2016 (SCI-Expanded)
- XXV. **Crystal structure of 3-benzyl-4-(3-methyl-3-phenylcyclobut-1-yl)-1,3-thiazole-2(3H)-thione**  
Şen B., Barim E., Kirilmis C., Aygün M.  
Asian Journal of Chemistry, vol.28, no.3, pp.631-633, 2016 (SCI-Expanded)
- XXVI. **Asymmetric transfer hydrogenation reaction in water: Comparison of chiral proline amide/amine**

### **ruthenium(II) complexes**

DENİZALTI S., Mercan D., Sen B., Gokce A. G., Cetinkaya B.

JOURNAL OF ORGANOMETALLIC CHEMISTRY, vol.779, pp.62-66, 2015 (SCI-Expanded)

- XXVII. **1,3-Di-3-pyridyl-2,3-dihydro-1H-naphth[1,2-e] [1,3]oxazine**

Sen B., TURGUT Z., Pelit E., AYGÜN M.

ACTA CRYSTALLOGRAPHICA SECTION E-STRUCTURE REPORTS ONLINE, vol.64, 2008 (SCI-Expanded)

- XXVIII. **2-Methoxy-4-[(5-oxo-2-phenyl-4,5-dihydro-1,3-oxazol-4-ylidene)methyl]-phenyl 4-methylbenzenesulfonate**

Sen B., Ozturk G., ALP S., Aygun M., Buyukgungor O.

ACTA CRYSTALLOGRAPHICA SECTION C-CRYSTAL STRUCTURE COMMUNICATIONS, vol.63, 2007 (SCI-Expanded)

## **Articles Published in Other Journals**

- I. **New Pd(II)PPh<sub>3</sub> Complex Bearing Meta-Cyanobenzyl-Substituted NHC: Crystal Structure and Computational Studies**

ŞEN B.

İğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.12, no.4, pp.2188-2198, 2022 (Peer-Reviewed Journal)

- II. **Synthesis, crystal structure, DFT calculations and Hirshfeld surface analysis of new 2-oxo-1,2-dihydroquinoline-4-carboxylate derivative**

OUZIDAN Y., ŞEN B., Filali Baba Y., Hafez B., Kandri Rodi Y., Quazzani Chahdi F., Mague J. T., El Hakmaoui A., Safi M., Akssira M., et al.

Chemical Data Collections, vol.41, pp.100902, 2022 (Peer-Reviewed Journal)

- III. **2-Acetyl-5-Chloro-Thiophene Thiosemicarbazone and its Nickel(II) and Zinc(II) Complexes: Hirshfeld Surface Analysis and Density Functional Theory calculations for Molecular Geometry, Vibrational Spectra and HOMO-LUMO Studies**

Yüksel B.

Turkish Computational and Theoretical Chemistry, vol.5, no.1, pp.27-38, 2021 (Scopus)

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **Synthesis of Bioactive Organoruthenium Complexes**

SUBAŞI E., AYAR KAYALI H., ŞEN B., GÜLER S., SADAN E. O.

4th International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2021), Ankara, Turkey, 24 - 26 November 2021, pp.344

- II. **Structural Investigation and Dft Study of Three Novel Pyridine Liganded Pd-Based N- Heterocyclic Carbene Complexes**

ŞEN B.

The 10th International Scientific Research Congress - Science and Engineering-, Ankara, Turkey, 11 April 2021

- III. **Two Zinc(II) complexes containing 2-acetylthiophenyl-thiosemicarbazone ligand: Crystal structure and Hirshfeld surface analysis**

ŞEN B.

AEGEAN SUMMIT 2nd INTERNATIONAL APPLIED SCIENCES CONGRESS, İzmir, Turkey, 27 March 2021

- IV. **Visible and Detectable Colors of Electromagnetic Spectrum**

ŞEN B.

EUROPEAN CONFERENCE ON SCIENCE, ART CULTURE-2018, 19 - 22 April 2018

- V. **Molecular and Crystal Structural Analysis of Some Complexes with Thiosemicarbazones**

ŞEN B.

EUROPEAN CONFERENCE ON SCIENCE, ART CULTURE-2018, 19 - 22 April 2018

- VI. **Structural and computational analysis of 3 6 dioctyloxiphenyl 2 5 dimethyl 1 4 diketopyrrolo 3 4 c**

**pyrrole 1 4 dione**

SEN B., SEVİNÇEK R., ÇELİK ERBAŞ S., AYGÜN M., ALP S.

XXII International Congress and General Assembly of the IUCr, Madrid, Spain, 22 - 30 August 2011, vol.67, pp.599

**VII. Crystal Structure Analysis**

SEN YÜKSEL B.

4th INTERNATIONAL STUDENT CONFERENCE OF THE BALKAN PHYSICAL UNION (ISCBPU-4), Muğla, Turkey, 29 August - 01 September 2006

**VIII. Porfirin Bazlı Fotoalgilayıcılar Yardımıyla Kanser Tanısı**

SEN YÜKSEL B.

4th INTERNATIONAL CONFERENCE AND FESTIVAL OF PHYSICS STUDENTS, İzmir, Turkey, 31 August - 03 September 2005

## **Tasks In Event Organizations**

Şen Yüksel B., Third Turkish National Crystallographic Association Scientific Meeting, Scientific Congress, İzmir, Turkey, Haziran 2012

## **Metrics**

Publication: 43

Citation (WoS): 201

Citation (Scopus): 211

H-Index (WoS): 9

H-Index (Scopus): 10