



CURRICULUM VITAE

Name and Surname: İlkey Yıldırım
Academic Title: Assistant Professor
Work Address:
Email: iyildirim@biruni.edu.tr
Foreign Languages Known (Score and Year): English, B1 Intermediate, 2018
English, B1 Intermediate, 2007
Area of Expertise: Engineering and Technology
Natural Sciences

Degree	Department/Program	University	Year
Doctorate	PHYSICS (PhD)	Ondokuz Mayıs University	2013
Master's Degree	PHYSICS (MSc)	Ondokuz Mayıs University	2007
Bachelor's Degree	PHYSICS	Ondokuz Mayıs University	2004

Master's Thesis Title (abstract attached) and Thesis Supervisor(s):

Kükürtlü radikallerin EPR ile incelenmesi

Doctoral Thesis/Proficiency Study/Medical Specialization Thesis Title (abstract attached) and Supervisor(s):

Piridin-2,6-dikarboksilik asit, orotik asit, metabisülfid, sakkarin, imidazol ve metil imidazol geçiş metal komplekslerinin x-ışını, epr, optik soğurma teknikleri ile incelenmesi

Position Title	Workplace	Year
Assistant Professor	Biruni University	2014-Continues

Supervised Master's Theses:

- Sosyo-kültürel uyum sürecinde evinin dışında üniversite eğitimi alan Türk ve yabancı uyruklu öğrencilerin farklı antropometrik indeksleri kullanarak duygusal yeme davranışının değerlendirilmesi (2022)
- Hemodiyaliz hastalarında yaşam kalitesi ve nütrisyonel değerlendirmede hawthorne etkisi (2022)

Roles in Projects:

- Bazı Schiff Bazı Komplekslerinin Sentezi, Karakterizasyonu ve EPR Yöntemi Kullanılarak Özelliklerinin İncelenmesi, Foundation, Bal Demirci T., Avcu Altıparmak E., Yıldırım İ. (Executive), 2023-2025.
- Cu²⁺ ve VO₂⁺ Katkılı Bazı Orotate, İmidazol, Sakarin Komplekslerinin EPR ve Optik Soğurma Spektrumları ile İncelenmesi, Foundation, Yıldırım İ., Karabulut B. (Executive), 2010-2012.

Administrative Duties:

1. School Director - Biruni University (2025 - Continues)
 2. Head of Department - Biruni University (2021 - 2025)
 3. Deputy School Director - Biruni University (2019 - 2023)
 4. Head of Department - Biruni University (2014 - 2025)
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PUBLICATIONS

A. Articles published in international peer-reviewed journals:

- A1. Yıldırım İ., Altıparmak E. A., Eroğlu G. Ö., Özdemir N., Bal-demirci T., "Synthesis, spectroscopic characterization, and cytotoxic assessment of novel Cu(II) thiosemicarbazone complexes with varying anions", *Journal of Molecular Structure*, vol. 1350, 2026.
- A2. Yıldırım İ., "A detailed analysis on N-(3-hydroxyphenyl)benzenesulfonamide: Structural, spectral, computational, Hirshfeld surface and docking approach", *Journal of Molecular Structure*, vol. 1349, 2026.
- A3. Yıldırım İ., "NHC based Pd-PEPPSI complexes: synthesis, computational studies and application for Suzuki and direct arylation reactions", *TOPICS IN CATALYSIS*, vol. 69, pp. 1-15, 2026.
- A4. Yıldırım İ., "Integrated experimental-computational elucidation of a new Ag(I)-NHC complex: Synthesis, spectroscopic profiling, DFT/TD-DFT calculations, and QTAIM topological analysis", *JOURNAL OF MOLECULAR STRUCTURE*, vol. 1364, 2026.
- A5. Doğan Ulu Ö., Kuruçay A., Yıldırım İ., Özdemir N., Ateş B., Özdemir İ., "Design, synthesis, characterization, and biological activities of novel Ag(I)-NHC complexes based on 1,3-dioxane ligand", *Journal of Inorganic Biochemistry*, vol. 261, 2024.
- A6. Yıldırım İ., "Synthesis, Crystal Structure, Hirshfeld Surface Analysis and DFT Studies of (Z)-1-(2-(4-Nitrophenyl)Hydrazineylidene)Naphthalen-2(1H)-One", *Journal of Structural Chemistry*, vol. 64, no. 8, pp. 1435-1447, 2023.
- A7. Şahin N., Yıldırım İ., Özdemir N., Gürbüz N., Özdemir İ., "First used of Alkylbenzimidazole-Cobalt(II) complexes as a catalyst for the N-Alkylation of amines with alcohols under solvent-free medium", *Journal of Organometallic Chemistry*, vol. 918, 2020.
- A8. Kaloğlu M., Kaloğlu N., Yıldırım İ., Özdemir N., Özdemir İ., "Palladium-carbene catalyzed direct arylation of five-membered heteroaromatics", *Journal of Molecular Structure*, vol. 1206, 2020.
- A9. Kaloğlu M., Gürbüz N., Yıldırım İ., Özdemir N., Özdemir İ., "Well-defined PEPPSI-themed palladium–NHC complexes: synthesis, and catalytic application in the direct arylation of heteroarenes", *Applied Organometallic Chemistry*, vol. 34, no. 2, 2020.
- A10. Yıldırım İ., Fırcıncı R., Günay M. E., Özdemir N., "Synthesis, Spectroscopy, X-ray Crystallography, and DFT Studies of Dichlorobis[1-(allyl)-1H-imidazole-κN 3]copper(II)", *Russian Journal of Physical Chemistry A*, vol. 93, no. 13, pp. 2758-2764, 2019.
- A11. Yıldırım İ., Çelik Y., Karabulut B., "Characterizing the paramagnetic behavior of Cu²⁺ doped nickel(II) dipicolinato by using theoretical and experimental EPR and UV-vis studies", *Physica B: Condensed Matter*, vol. 483, pp. 90-93, 2016.
- A12. Yıldırım İ., Karabulut B., Büyüküngör O., "EPR study of Cu²⁺ ion doped orotato(nicotinamid)cobalt(II) single crystal", *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, vol. 152, pp. 608-613, 2016.
- A13. Karabulut B., Yıldırım İ., "EPR study of gamma irradiated DL-methionine sulfone single crystals", *Journal of Molecular Structure*, vol. 1102, pp. 186-189, 2015.
- A14. Yıldırım İ., Karabulut B., "Revealing the Spin-Hamiltonian and Characteristic Parameters of Paramagnetic Centers in Cu²⁺-Doped Potassium Metabisulfite (K₂S₂O₅) Single Crystal by Electron Paramagnetic Resonance Technique", *Applied Magnetic Resonance*, vol. 45, no. 1, pp. 1-8, 2014.
- A15. Yıldırım İ., Karabulut B., "EPR study of gamma irradiated N-methyl taurine (C₃H₉NO₃S) and sodium hydrogen sulphate monohydrate (NaHSO₃·H₂O) single crystals", *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, vol. 78, no. 3, pp. 1023-1026, 2011.
- A16. Yıldırım İ., Karabulut B., Bozkurt E., Köksal F., "EPR study of gamma-irradiated Na₂S₂O₃·5H₂O single crystals", *Radiation Physics and Chemistry*, vol. 78, no. 3, pp. 165-167, 2009.

B. Papers presented at international scientific meetings and published in proceedings:

- B1. Yıldırım İ., Karabulut B., EPR Study of [Cu(Him)₄]²⁺Br⁻ Complex, In: *1st International Physics Conference at the Anatolian Peak*, Erzurum, Turkey, 2016, pp. 1-4.
- B2. Yıldırım İ., Karabulut B., Structural, spectroscopic and magnetic properties of [Cu(1-meim)₄]²⁺(PF₆)⁻, In: *9th International Physics Conference of the Balkan Physical Union*, İstanbul, Turkey, 2016, pp. 1-4.
- B3. Yıldırım İ., Çelik Y., Karabulut B., Theoretical and experimental EPR and optical studies of [Cu(1-meim)₄(H₂O)]²⁺Cl⁻·H₂O single crystals, In: *9th International Physics Conference of the Balkan Physical Union*, İstanbul, Turkey, 2016, pp. 1-4.

C. National/international books written or chapters in books:

C1. National/international books written:

C1.1. Öner S., Akçe B., Akdağ G., Aksoyer S. B., Avşar İ. S., Aykin Ç., Çelik G., Çıracı E., Demirci Delipınar S., Demirel G. VeDiğerleri, *Mesleki ve Tıbbi Terminoloji*, Ankara Nobel Tıp Kitapevleri, Ankara, 2019.

C2. Chapters in national/international books written:

C2.1. Öner S., Akçe B., Akdağ G., Aksoyer S. B., Avşar İ. S., Aykin Ç., Çelik G., Çıracı E., Demirci Delipınar S., Demirel G. VeDiğerleri, "RADYOLOJİK TERİMLERİ, NÜKLEER TIP TERİMLERİ", *Mesleki ve Tıbbi Terminoloji*, Ankara Nobel Tıp Kitabevleri, Ankara, 2019.

D. Articles published in national peer-reviewed journals:

D1. Yıldırım İ., "Experimental and Theoretical Investigation of a β -Diketiminat Schiff Base Derivative", *Celal Bayar University Journal of Science*, vol. 17, no. 3, pp. 297-304, 2021.

E. Papers presented at national scientific meetings and published in proceedings:

E1. Yıldırım İ., Experimental and theoretical investigation on N-(3-hydroxyphenyl)benzenesulfonamide, In: *5th Turkish National Crystallographic Meeting*, Samsun, Turkey, 2024, pp. 29-29.