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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAN-5789-2021

ScopusID: 57189683932

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Education Information

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Kimya, Turkey 2012 - 2019

Postgraduate, Ondokuz Mayıs University, Lisansüstü Eğitim Enstitüsü, Kimya Anabilim Dalı, Turkey 2009 - 2012

Undergraduate, Selcuk University, Fen Fakültesi, Kimya, Turkey 2005 - 2009

Foreign Languages

English, B2 Upper Intermediate

Certificates, Courses and Trainings

Quality Management, TS EN ISO 19011 Yönetim Sistemleri Entegre İç Tetkik Eğitimi, Sağlık Bakanlığı, 2020

Quality Management, Temel İş Sağlığı ve Güvenliği Eğitimi , Sağlık Bakanlığı, 2020

Security, Bilgi Güvenliği Farkındalık Eğitimi, Sağlık Bakanlığı, 2019

Quality Management, Metot Validasyona Yönelik Temel İstatistik Eğitimi, Sağlık Bakanlığı, 2019

Quality Management, TS EN ISO 19011:2012 Yönetim Sistemleri Tetkik Klavuzu Eğitimi, Sağlık Bakanlığı, 2018

Quality Management, TS EN ISO/IEC 17025:2017 Deney ve Kalibrasyon Laboratuvarlarının Yetkinliği İçin Genel Gereklilikler Standardı, Sağlık Bakanlığı, 2018

Quality Management, TS EN ISO 31000 Risk Yönetimi – Kurallar ve TS EN 31010 Risk Yönetimi- Risk Değerlendirme Teknikleri Eğitimi, Sağlık Bakanlığı, 2018

Health&Medicine, İlk Yardım Eğitimi , Sağlık Bakanlığı, 2018

Quality Management, Kök Sebep Analizi Eğitimi , Sağlık Bakanlığı, 2018

Occupational Health and Safety, Uygulamalı Yangın Eğitimi , Efe Danışmanlık, 2018

Vocational Course, Tehlikeli Madde Güvenlik Danışmanlığı Eğitimi , Efe Danışmanlık, 2018

Vocational Training, Laboratuvar Güvenliği Eğitimi , Sağlık Bakanlığı, 2018

Personal Evolution, İletişim Becerileri Eğitimi , Sağlık Bakanlığı, 2018

Project Management, Impact Evaluation of Public Policies Programmes and Projects, ILO International Training Center, 2017

Quality Management, TS EN ISO/EAC 13528 LAK Yeterlilik Testlerinde Kullanılan İstatistik Yöntemler Eğitimi , Salih Ayvaz

Danışmanlık, 2017

Quality Management, Referans Standartlar ve Yeterlilik Testleri, LGC Standarts, 2017

Health&Medicine, Tüberküloz Laboratuvarlarında Tanısal Standardizasyon, Sağlık Bakanlığı, 2016

Quality Management, Genel Metroloji ve Kalibrasyon Eğitimi, Sağlık Bakanlığı, 2016

Quality Management, Kaliteye Yönelik Problem Çözme Teknikleri, Sağlık Bakanlığı, 2016

Quality Management, TS EN ISO/IEC 17025 Deney ve Kalibrasyon Laboratuvarlarının Yeterliliği İçin Genel Şartlar Standardı, İç Tetkik, Sağlık Bakanlığı, 2016

Quality Management, Laboratuvar Kalite Yönetim Sistemi , Sağlık Bakanlığı, 2016

Quality Management, TS EN ISO/IEC 17043 Yeterlilik Testleri İçin Genel Şartlar Standardı, TÜRKAK, 2016

Environment and Sustainability, Atık Yönetimi, Sağlık Bakanlığı, 2015

Quality Management, Validasyon/ Verifikasiyon ve Ölçüm Belirsizliği Eğitimi, Sağlık Bakanlığı, 2014

Education Management and Planning, Tubitak Ardeb Ulusal Ar-Ge Programları ve Horizon 2020 Programı Bilgilendirme ve Eğitim Semineri, TÜBİTAK, 2014

Dissertations

Doctorate, N/O donör atomlu ferrosenil siklotetrafosfazenlerin mono ve bidentat ligandlar ile tepkimelerinin ve antitüberküloz aktivitelerinin incelenmesi, Ankara University, Fen Bilimleri Enstitüsü, 2019

Postgraduate, Kobalt (II) iyon seçici elektrot geliştirilmesi ve performans özelliklerinin belirlenmesi, Ondokuz Mayıs University, 2012

Research Areas

Analysis and Synthesis Methods, Chemistry, Inorganic Chemistry, Bioinorganic Chemistry, Natural Sciences

Academic Titles / Tasks

Assistant Professor, Ankara University, Fen Fakültesi, Kimya Bölümü, 2023 - Continues

Research Assistant, Akdeniz University, Faculty Of Science, Department Of Chemistry, 2012 - 2013

Courses

Temel Kimya, Undergraduate, 2023 - 2024

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Phosphorus-nitrogen compounds. Part 72. Bis(spiro(N/N)) cyclotri-phosphazenes with 4-chlorobenzyl and ferrocenyl pendant arms: Synthesis, structural characterization, dye-sensitized solar cell fabrication and antituberculosis activity studies**
Berberoğlu İ., Cemaloğlu R., Binici A., Yakut M., Asmafılız N., Kılıç Z., Güzel R., Şimşek H., Hökelek T.

JOURNAL OF MOLECULAR STRUCTURE, vol.1310, no.138305, pp.1-14, 2024 (SCI-Expanded)

- II. **Phosphorus-nitrogen compounds: part 71. Novel unsymmetrically-substituted dispiro-cyclotriphosphazenes: synthesis, characterization, antituberculosis activity, and phototunable charge storage studies**
Cemaloğlu R., Berberoglu I., Yakut M., Binici A., Asmafılız N., Kılıç Z., Guzel R., Erdal G., Şimşek H., Hokelek T.

NEW JOURNAL OF CHEMISTRY, no.42, pp.19788-19800, 2023 (SCI-Expanded)

- III. **Phosphorus-nitrogen compounds: part 70. Syntheses of tetraaminomonobis(4-**

- fluorobenzyl)spiro(N/N)cyclotriphosphazenes: structural characterization, Hirshfeld surface analysis and comparative evaluation of esterase activities of hCA I and hCA II isoenzymes**
OKUMUŞ A., ELMAS G., Binici A., Tunca E., Hökelek T., Kılıç Z.
New Journal of Chemistry, vol.47, no.18, pp.8578-8588, 2023 (SCI-Expanded)
- IV. Phosphorus-nitrogen compounds. Part 58. Syntheses, structural characterizations and biological activities of 4-fluorobenzyl-spiro(N/O)cyclotriphosphazene derivatives**
Binici A., ELMAS G., OKUMUŞ A., Erden Tayhan S., Hokelek T., SABAH B. N., AÇIK L., Kilic Z.
JOURNAL OF BIOMOLECULAR STRUCTURE & DYNAMICS, vol.41, no.1, pp.298-318, 2023 (SCI-Expanded)
- V. Phosphorus-nitrogen compounds: Part 60: Synthesis of hexaminomonoferrocenyl-spiro(N/O)cyclotetraphosphazenes: Spectral and electrochemical properties, tuning of redox feature, and antituberculosis activity**
Binici A., Elmas G., Okumuş A., Güzel R., Şimşek H., Kılıç Z.
PHOSPHORUS SULFUR AND SILICON AND THE RELATED ELEMENTS, vol.198, no.1, pp.21-33, 2023 (SCI-Expanded)
- VI. Phosphorus-nitrogen compounds. Part 62. Preparation of tetraaminobis (4-fluorobenzyl)spiro(N/N)cyclotriphosphazenes: Chemical, structural characterizations, antimicrobial, antioxidant and DNA-binding activity studies**
Okumuş A., Elmas G., Binici A., Aydin B., Açık L., Kılıç Z., Hökelek T.
INORGANICA CHIMICA ACTA, vol.538, 2022 (SCI-Expanded)
- VII. Phosphorus-nitrogen compounds. Part 64. Comparative reactions of spiro and ansa (N/O) cyclotetraphosphazenes with bulky (4-fluorobenzyl) N/N and N/O donor type bidentate reagents: structure, stereogenic properties and cytotoxic activity studies**
Elmas G., Binici A., Yakut M., Okumuş A., Kılıç Z., Çoşut B., Hökelek T., Cerci N. A., Açık L.
NEW JOURNAL OF CHEMISTRY, vol.46, no.33, pp.16096-16113, 2022 (SCI-Expanded)
- VIII. Phosphorus-nitrogen compounds. Part 56. Comparative syntheses and spectral properties of multiheterocyclic 2-*cis*-4-ansa and spiro-ferrocenyl (N/O)cyclotetraphosphazenes: Antituberculosis and antimicrobial activity and DNA interaction studies**
Binici A., Okumuş A., Yakut M., Elmas G., Kılıç Z., Koyunoglu D., Açık L., Şimşek H.
PHOSPHORUS SULFUR AND SILICON AND THE RELATED ELEMENTS, vol.197, no.1, pp.18-29, 2022 (SCI-Expanded)
- IX. Phosphorus-nitrogen compounds. Part 54. syntheses of chiral amino-4-fluorobenzyl-spiro(N/O)cyclotriphosphazenes: structural and stereogenic properties**
Mutlu O. F., Binici A., OKUMUŞ A., ELMAS G., ÇOŞUT B., Kılıç Z., HÖKELEK T.
NEW JOURNAL OF CHEMISTRY, vol.45, no.27, pp.12178-12192, 2021 (SCI-Expanded)
- X. The comparative reactions of 2-*cis*-4-ansa and spiro cyclotetraphosphazenes with difunctional ligands: Structural and stereogenic properties, electrochemical, antimicrobial and cytotoxic activity studies**
Okumuş A., Elmas G., Kılıç Z., Binici A., Ramazanoglu N., Açık L., Çoşut B., Hökelek T., Güzel R., Tunalı B. Ç., et al.
APPLIED ORGANOMETALLIC CHEMISTRY, vol.35, no.4, 2021 (SCI-Expanded)
- XI. Phosphorus-nitrogen compounds. Part 42. The comparative syntheses of 2-*cis*-4-ansa(N/O) and spiro(N/O) cyclotetraphosphazene derivatives: spectroscopic and crystallographic characterization, antituberculosis and cytotoxic activity studies**
Binici A., Okumuş A., Elmas G., Kılıç Z., Ramazanoglu N., Açık L., Şimşek H., Tunalı B. Ç., Türk M., Güzel R., et al.
NEW JOURNAL OF CHEMISTRY, vol.43, no.18, pp.6856-6873, 2019 (SCI-Expanded)
- XII. Phosphorus-nitrogen compounds. Part 35. Syntheses, spectroscopic and electrochemical properties, and antituberculosis, antimicrobial and cytotoxic activities of mono-ferrocenyl-spirocyclotetraphosphazenes**
Okumuş A., Elmas G., Cemaloğlu R., Aydin B., Binici A., Şimşek H., Açık L., Türk M., Güzel R., Kılıç Z., et al.
NEW JOURNAL OF CHEMISTRY, vol.40, no.6, pp.5588-5603, 2016 (SCI-Expanded)

Articles Published in Other Journals

- I. **Syntheses of Hexaminomonoferrocenylspiro(N/O)cyclotetraphosphazenes: Spectral Properties and Antituberculosis Activities**
Binici A.
Cumhuriyet Science Journal, vol.43, no.2, pp.193-200, 2022 (Peer-Reviewed Journal)
- II. **Determination of pesticides in water by LC-MS/MS Sularda pestisitlerin LC-MS/MS ile belirlenmesi**
Baloğlu Z., Bozkurt E. N., Binici A.
Turk Hijyen ve Deneysel Biyoloji Dergisi, vol.74, pp.41-48, 2017 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

- I. **Unsymmetrically-substituted dispirocyclotriphosphazenes with ferrocenyl pendant arms: synthesis, characterization, antituberculosis activities and phototunable charge storage studies**
Asmafıllı N., Cemaloğlu R., Kılıç Z., Berberoğlu İ., Yakut M., Binici A., Güzel R., Erdal G., Şimşek H., Hökelek T.
FJS-2024, Ulm, Germany, 13 - 16 March 2024, pp.99
- II. **Antimicrobial, Antioxidant and DNA Cleavage Activities of Tetraaminobis(4-fluorobenzyl)spiro(N/N)cyclotriphosphazenes**
Elmas G., Okumuş A., Binici A., Aydin B., Açık L., Kılıç Z.
ACS Spring 2023, Indiana, United States Of America, 26 - 30 March 2023, pp.2
- III. **Syntheses of Tetraaminobis(4-fluorobenzyl)spiro(N/N)cyclotri phosphazenes: Evaluations of Chemical, Spectral and Crystallographic Properties**
Elmas G., Okumuş A., Binici A., Kılıç Z., Hökelek T.
ACS Spring 2023, Indiana, United States Of America, 26 - 30 March 2023, pp.1
- IV. **Reactions of dispirocyclotetraphosphazenes containing bis(4-fluorobenzyl) pendant arms with difunctional ligands: structural and spectroscopic properties**
Binici A.
4th International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2022), Ankara, Turkey, 14 - 16 December 2022, pp.171
- V. **Reactions of spiro and ansa(N/O) ferrocenylcyclotetraphosphazenes with N/N donor type bidentate ligand**
Binici A.
4th International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2022), Ankara, Turkey, 14 - 16 December 2022, pp.169
- VI. **Comparative syntheses of Monocyclic and Bicyclic 2-Trans-6-bis(4-fluorobenzyl)spirotetrachlorocyclotetra phosphazenes: Evaluations of Spectroscopic and Crystallographic Properties**
Elmas G., Okumuş A., Binici A., Kılıç Z., Hökelek T.
ACS Fall 2022, Illinois, United States Of America, 21 - 25 August 2022, pp.2
- VII. **Antibacterial, Antifungal and DNA Cleavage Activities of Monocyclic and Bicyclic 2-Trans-6-bis(4-fluorobenzyl)spirotetrachlorocyclotetra phosphazenes**
Elmas G., Okumuş A., Binici A., Açık L., Özbeden Küçük P., Kılıç Z.
ACS Fall 2022, Illinois, United States Of America, 21 - 25 August 2022, pp.1
- VIII. **Antiproliferative and antimigrative activities of 4-fluorobenzyl-spiro(N/O)cyclotriphosphazene derivatives**
Elmas G., Okumuş A., Binici A., Erden Tayhan S., Kılıç Z.
4th International Eurasian Conference on Biological and Chemical Sciences , Ankara, Turkey, 24 - 26 November 2021, pp.1093
- IX. **Synthesis and spectroscopic properties of fully primary amine substituted mono-ferrocenylspirocyclotetraphosphazenes**

- Binici A.
4th International Eurasian Conference on Biological and Chemical Sciences , Ankara, Turkey, 24 - 26 November 2021, pp.124
- X. **4-Florobenzil-Spiro(N/O)Siklotrifosfazen Türevlerinin Sentezi ve Spektroskopik Özellikler**
Elmas G., Okumuş A., Binici A., Kılıç Z.
VIII. Ulusal Anorganik Kimya Kongresi , Tekirdağ, Turkey, 2 - 05 September 2021, pp.51
- XI. **Syntheses of chiral 2-cis-4-ansa and spiro cyclotetraphosphazenes: Investigation of spectroscopic and stereogenic properties with chiral HPLC**
Elmas G., Okumuş A., Binici A., Kılıç Z., Çoşut B., Hökelek T.
IUPAC CCCE 2021 - 104th Canadian Chemistry Conference and Exhibition, Montreal, Canada, 13 - 20 August 2021, pp.1
- XII. **Chiral amino-4-fluorobenzyl-spiro(N/O)cyclotriphosphazenes: Syntheses, spectroscopic and stereogenic properties with chiral HPLC**
Elmas G., Okumuş A., Binici A., Mutlu Ö. F., Kılıç Z., Çoşut B.
IUPAC CCCE 2021 - 104th Canadian Chemistry Conference and Exhibition, Montreal, Canada, 13 - 20 August 2021, pp.2
- XIII. **Antituberculosis Activities of 2-CIS-4-ANSA and Spirocyclotetraphosphazene derivatives containing difunctional reagents**
Okumuş A., Elmas G., Binici A., Kılıç Z., Şimşek H.
International Asian Congress on Contemporary Sciences-V, Nakhchivan, Azerbaijan, 1 - 02 June 2021
- XIV. **Partly and Fully Primer Amine Substituted Mono- ferrocenylcyclotetraphosphazenes: The Investigations of Syntheses**
Elmas G., Okumuş A., Yakut M., Binici A., Kılıç Z., Koyunoğlu D., Açık L.
International Asian Congress on Contemporary Sciences-V, Nakhchivan, Azerbaijan, 1 - 02 June 2021, pp.35
- XV. **Anticancer Activities of Spiro(N/O) and 2-cis-4-Ansa(N/O) Cyclotetraphosphazene Derivatives**
Okumuş A., Elmas G., Yakut M., Binici A., Kılıç Z., Çerçi N. A., Açık L., Türk M.
Cell Bio Virtual 2020-An Online ASCB|EMBO Meeting, Massachusetts, United States Of America, 2 - 06 December 2020, pp.612
- XVI. **The Thermal and Electrochemical Properties of 2-cis-4-ansa(N/O) and Spiro(N/O) Cyclotetraphosphazenes**
Okumuş A., Elmas G., Binici A., Kılıç Z., Güzel R.
ISPEC, 4th International Conference On Engineering & Natural Sciences, Ankara, Turkey, 18 - 20 November 2019, pp.3-6
- XVII. **The Biological Activity Studies of 2-cis-4-ansa(N/O) and spiro(N/O) Cyclotetraphosphazene Derivatives**
Okumuş A., Elmas G., Binici A., Kılıç Z., Ramazanoğlu N., Açık L., Tunali B. Ç., Türk M.
ISPEC, 4th International Conference On Engineering & Natural Sciences, Ankara, Turkey, 18 - 20 November 2019, pp.1-3
- XVIII. **Mono-Ferrosenil N/O Spirosiklotetrafosfazelerin N/O Dönorlü 4-florobenzil Ligandları ile Reaksiyonları ve Spektral Özellikleri**
Elmas G., Okumuş A., Binici A., Yakut M., Kılıç Z.
2st International Eurasian Conference on Biological and Chemical Sciences, Ankara, Turkey, 28 - 29 June 2019, pp.224
- XIX. **Kısmen ve Tamamen Primer Amin Sübstítüe Mono-Ferrosenil Spirosiklotetrafosfazen Türevlerinin Antitüberküloz Aktiviteleri**
Elmas G., Okumuş A., Binici A., Yakut M., Şimşek H., Kılıç Z.
2st International Eurasian Conference on Biological and Chemical Sciences, Ankara, Turkey, 28 - 29 June 2019, pp.757
- XX. **Mono-Ferrosenil Spirosiklotetrafosfazen türevlerinin sentezi ve spektroskopik özelliklerinin incelenmesi**
Elmas G., Okumuş A., Binici A., Yakut M., Kılıç Z.

- 1st International Eurasian Conference on Science, Engineering and Technology , Ankara, Turkey, 22 - 23 November 2018, pp.77
- XXI. **Syntheses, Spectral Properties and Antituberculosis, Antifungal and Cytotoxic Activities of Mono-ferrocenyl-spirocyclotetraphosphazenes**
Okumuş A., Elmas G., Cemaloğlu R., Aydin B., Binici A., Şimşek H., Açık L., Türk M., Kılıç Z.
1st International Eurasian Conference on Biological and Chemical Sciences, Ankara, Turkey, 26 - 27 April 2018, pp.473
- XXII. 'Tüberküloz Tedavisinde Uygulanabilecek Yeni İlaçların Üretiminde Kullanılacak Yerli Kimyasallar'
ELMAS G., OKUMUŞ A., CEMALOĞLU R., KILIÇ Z., BİNİCİ A., ŞİMŞEK H.
29. Antalya OSB Ar-ge İnovasyon Proje Pazarı, 29 March 2018
- XXIII. **Mono-Ferrosenil Spirosiklotetrafosfazelerin Antitüberküloz Aktivitelerinin İncelenmesi**
Elmas G., Okumuş A., Binici A., Kılıç Z., Şimşek H.
29. Ulusal Kimya Kongresi , Ankara, Turkey, 10 - 14 September 2017, pp.304
- XXIV. **Antituberculosis Activities of Mono-FerrocenylSpiroCyclotetraphosphazenes**
Şimşek H., Binici A., Okumuş A., Elmas G., Cemaloğlu R., Kılıç Z.
37 th Congress European Society of Mycobacteriology, Catania, Italy, 3 - 06 July 2016, pp.57
- XXV. **Development of Cobalt (II) Selective Electrode and Determination of Performance Properties**
Yetik A., Işıldak İ.
10th International Electrochemistry Days, Konya, Turkey, 04 September 2013, pp.160
- XXVI. **Bor içeren yeni poliorganosilosan (SiBOC) sentezi, seramik oluşum çalışmaları ve karakterizasyonu**
Gencer A., Yetik A., Oksal B.Ş.
4. Anorganik Kimya Kongresi , Tokat, Turkey, 30 May - 02 June 2013, pp.1
- XXVII. **Katı Hal Kontakt PVC Membran Anyon (nitrat, fosfat, klorür anyonları) Seçici Elektrotların Toprak Örneklerine Uygulanması**
ÇEPNİLER F., EREN E., TOPCU C., YETİK A., İŞILDAK İ.
5.Uluslararası Analitik Kimya Kongresi, 21 June 2010

Patent

Kılıç Z., Asmafılız N., Binici A., Berberoğlu I., Şimşek H., Hökelek T., *Mycobacterium tuberculosis'in Neden Olduğu Tüberküloz (Verem) Hastalığının Tedavisi İçin Bispiro-trans-[(N-metil-N'-benzil-etandiamino) (N-metil-N'-ferroisenil-etandiamino)]-diklorosiklotrifosfazen*, Patent, CHAPTER C Chemistry; Metallurgy, The Invention Registration Number: 2021 008408 , Standard Registration, 2023

Memberships / Tasks in Scientific Organizations

American Chemical Society, Member, 2022 - Continues, United States Of America

Scientific Refereeing

Selçuk Üniversitesi Fen Edebiyat Fakültesi Fen Dergisi, National Scientific Refreed Journal, April 2024
PHOSPHORUS, SULFUR AND SILICON AND THE RELATED ELEMENTS, Journal Indexed in SCI-E, January 2022

Metrics

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