

## Assoc. Prof. Aykut KUL



### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAD-9258-2020

ScopusID: 57197808821

Yoksis Researcher ID: 298804



### Education Information

Doctorate, Istanbul University, Health Sciences Institute, Eczacılık Fakültesi Bölümü,  
Turkey 2018 - 2022

Postgraduate, Marmara University, Institute Of Health Sciences, Department Of Analytical  
Chemistry, Turkey 2013 - 2015

Undergraduate, Ondokuz Mayıs University, Faculty Of Arts And Sciences, Kimya, Turkey  
2008 - 2013

### Dissertations

Doctorate, Esrar kullanımının tespitinde enzimatik hidroliz etkinliğinin ultra performanslı sıvı kromatografisi tandem kütle spektrometresi yöntemiyle belirlenmesi, Istanbul University, Faculty Of Pharmacy , Department Of Basic Pharmaceutical Sciences, 2022

Postgraduate, Bir sentetik kannabinoid olan XLR-11 metabolitlerinin idrarda miktar tayini ve validasyonu, Marmara University, Sağlık Bilimleri Enstitüsü, Analitik Kimya, 2015

### Research Areas

Pharmacology and Therapeutics, Basic Pharmaceutics Sciences, Analytical Chemistry, Health Sciences

### Academic Titles / Tasks

Associate Professor, Istanbul University, Faculty Of Pharmacy , Department Of Basic Pharmaceutical Sciences, 2024 -  
Continues

Lecturer PhD, Istanbul University, Faculty Of Pharmacy , Department Of Basic Pharmaceutical Sciences, 2022 - 2024

Lecturer, Istanbul University, Faculty of Pharmacy , Department of Basic Pharmaceutical Sciences, 2022 - 2022

Research Assistant, Istanbul University, Faculty of Pharmacy , Department of Basic Pharmaceutical Sciences, 2019 - 2022

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

- I. **Fabrication of a molecularly imprinted polymer-based electrochemical sensor for the selective assay of antipsychotic drug clozapine and performance comparison with LC-MS/MS**  
KUL A., Budak F., Cetinkaya A., Kaya S. I., Al S., Sagirli O., ÖZKAN S. A.  
TALANTA, vol.281, 2025 (SCI-Expanded)
- II. **A chemical and biological characterization of marine mucilage that generates electricity in microbial fuel cells**  
Kilinc B., Kul A., Zirhli O., Kurt H., Kaya D., Cebeci F. C., Catal T.  
Separation Science and Technology (Philadelphia), vol.60, no.1, pp.157-171, 2025 (SCI-Expanded)
- III. **Elimination of matrix effects in urine for determination of ethyl glucuronide by liquid chromatography-tandem mass spectrometry**  
Kul A., Sağırılı A. O.  
RAPID COMMUNICATIONS IN MASS SPECTROMETRY, vol.37, no.23, 2023 (SCI-Expanded)
- IV. **Hydrogen production using cocaine metabolite in microbial electrolysis cells**  
Kilinc B., Akagunduz D., Ozdemir M., Kul A., Catal T.  
3 BIOTECH, vol.13, no.11, 2023 (SCI-Expanded)
- V. **A new method for the therapeutic drug monitoring of chlorpromazine in plasma by gas chromatography-mass spectrometry using dispersive liquid-liquid microextraction**  
Kul A., Sağırılı A. O.  
BIOANALYSIS, vol.15, no.22, pp.1343-1354, 2023 (SCI-Expanded)
- VI. **Determination of cefuroxime in breast milk by LC-MS/MS using SALLME technique**  
KUL A., SAĞIRLI A. O.  
BIOMEDICAL CHROMATOGRAPHY, vol.37, no.11, 2023 (SCI-Expanded)
- VII. **A novel method for the therapeutic drug monitoring of biperiden in plasma by GC-MS using salt-assisted liquid-liquid microextraction**  
KUL A., SAĞIRLI A. O.  
CLINICA CHIMICA ACTA, vol.543, 2023 (SCI-Expanded)
- VIII. **Determination of Enzymatic Hydrolysis Efficiency in Detection of Cannabis Use by UPLC-MS/MS.**  
Kul A., Sağırılı A. O.  
Journal of analytical toxicology, vol.46, pp.257-263, 2022 (SCI-Expanded)
- IX. **Pharmacokinetic study of clarithromycin in human breast milk by UPLC-MS/MS.**  
Kul A., Ozdemir M., Sağırılı A. O.  
Journal of pharmaceutical and biomedical analysis, vol.208, pp.114438, 2021 (SCI-Expanded)
- X. **A novel GC-MS assay method for the therapeutic drug monitoring of the atomoxetine**  
Kul A., Ozdemir M., Önal A., Sağırılı A. O.  
Microchemical Journal, vol.164, 2021 (SCI-Expanded)
- XI. **A Rapid Method for the Determination of Buprenorphine and Norbuprenorphine in Urine by UPLC-MS/MS**  
Kul A., Ozdemir M., Ozilhan S., Sağırılı A. O.  
CURRENT PHARMACEUTICAL ANALYSIS, vol.17, no.7, pp.926-931, 2021 (SCI-Expanded)
- XII. **Determination of acamprosate in human plasma by UPLC-MS/MS: Application to therapeutic drug monitoring**  
Ozdemir M., Kul A., Ozilhan S., Sağırılı A. O.  
BIOMEDICAL CHROMATOGRAPHY, vol.34, no.11, 2020 (SCI-Expanded)
- XIII. **Determination of levetiracetam in human plasma by online heart-cutting liquid chromatography: Application to therapeutic drug monitoring**  
Önal C., Kul A., Ozdemir M., Sağırılı A. O.  
JOURNAL OF SEPARATION SCIENCE, vol.43, no.18, pp.3590-3596, 2020 (SCI-Expanded)
- XIV. **Determination of pethidine of abuse and relevant metabolite norpethidine in urine by ultra-performance liquid chromatography-tandem mass spectrometry**  
Kul A., Ozdemir M., Sağırılı A. O.

Journal of Pharmaceutical and Biomedical Analysis, vol.186, 2020 (SCI-Expanded)

- XV. **Determination of XLR-11 Metabolites in Urine by Ultrahigh-performance Liquid Chromatography-tandem Mass Spectrometry**  
KUL A., Cucu A. K., Ahmad S.  
JOURNAL OF ANALYTICAL CHEMISTRY, vol.75, no.3, pp.343-348, 2020 (SCI-Expanded)
- XVI. **Efficacy of microbial fuel cells for sensing of cocaine metabolites in urine-based wastewater**  
Catal T., Kul A., Atalay V. E., Bermek H., Ozilhan S., Tarhan N.  
JOURNAL OF POWER SOURCES, vol.414, pp.1-7, 2019 (SCI-Expanded)
- XVII. **Chemical and molecular characterization of metabolites from Flavobacterium sp.**  
Enisoglu-Atalay V., Atasever-Arslan B., Yaman B., Cebecioglu R., Kul A., Ozilhan S., Ozen F., Catal T.  
PLOS ONE, vol.13, no.10, 2018 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Cytotoxic activities of Helichrysum arenarium on ECV 304 and Ishikawa cells**  
Aricioglu A., Cebecioglu R., Akagunduz D., Kul A., Catal T.  
Pharmedicine Journal , vol.1, no.2, pp.94-101, 2024 (Peer-Reviewed Journal)
- II. **Salt-assisted liquid-liquid microextraction for determination of haloperidol in human plasma by LC-MS/MS**  
Al S., Kul A., Sagirli O.  
THE EUROPEAN CHEMISTRY AND BIOTECHNOLOGY JOURNAL, vol.1, no.1, pp.39-46, 2024 (Peer-Reviewed Journal)
- III. **Simultaneous determination of chlorpheniramine maleate, pseudoephedrine hydrochloride, oxolamine citrate and paracetamol by HPLC-PDA in pharmaceutical dosage forms**  
Kul A.  
Journal of Chemical Metrology, vol.16, no.2, pp.102-110, 2022 (ESCI)
- IV. **Yoghurt production using pinecone and investigation of the effect of the produced yogurt on ECV304 cell line**  
Arslan S., Akagündüz D., Cebecioglu R., Kul A., Çatal T.  
International Journal of Life Sciences and Biotechnology, vol.5, no.1, pp.29-41, 2022 (Scopus)
- V. **Substance Abuse Profiles of Patients Admitted to the Alcohol and Drug Addiction Research, Treatment, and Education Center in Turkey**  
Canbolat F., Kul A., Ozt Demir M., Atik U., Aydin A., Ozden S. T., Tarhan K. N.  
TURKISH JOURNAL OF PHARMACEUTICAL SCIENCES, vol.14, no.3, pp.294-303, 2017 (ESCI)

## Books & Book Chapters

- I. **Seçici Serotonin Geri Alım İnhibitörlerinin Terapötik İlaç Düzeyi İzleminde LC-MS/MS Yöntemleri**  
Kul A.  
in: Eczacılıkta Güncel Araştırmalar II, Cem YAMALI, Editor, Akademisyen Kitabevi, Ankara, pp.67-79, 2023

## Refereed Congress / Symposium Publications in Proceedings

- I. **DLLME Method for the Therapeutic Drug Monitoring of Olanzapine in Plasma by GC-MS**  
KUL A.  
13th International Medicine and Health Sciences Researches Congress, Ankara, Turkey, 26 - 27 August 2023
- II. **Therapeutic Drug Monitoring of the Free and Total Valproic Acid in Human Plasma by LC-MS/MS**  
Dincel D., Kul A., Sağırılı A. O.

33rd International Symposium on Pharmaceutical and Biomedical Analysis, Ankara, Turkey, 2 - 06 June 2023, pp.126

III. **Quantification of Carbamazepine Profile in Human Plasma by GCMS**

Özdemir Z., Kul A., Sağırılı A. O.

33rd International Symposium on Pharmaceutical and Biomedical Analysis, Ankara, Turkey, 2 - 06 June 2023, pp.134

IV. **A Dispersive Liquid-Liquid Microextraction Method for Therapeutic Drug Monitoring of Four Antidepressants Drug in Plasma by GC-MS**

Al S., Kul A., Sağırılı A. O.

33rd International Symposium on Pharmaceutical and Biomedical Analysis, Ankara, Turkey, 2 - 06 June 2023, pp.228

V. **A New Method for Therapeutic Drug Monitoring of Anxiolytic Drugs in Plasma by LC-MS/MS**

Kul A., Al S., Özdemir M., Dincel D., Sağırılı A. O.

33rd International Symposium on Pharmaceutical and Biomedical Analysis, Ankara, Turkey, 2 - 06 June 2023, pp.228-229

VI. **GC-MS İLE İNSAN PLAZMASINDA BİPERİDEN TAYİNİ: TERAPÖTİK İLAÇ İZLEMİ UYGULAMASI**

Kul A., Sağırılı A. O.

10. Ulusal Analitik Kimya Kongresi, Muğla, Turkey, 7 - 11 September 2022, pp.82

VII. **Klorfeniramin maleat, psödoefedrin HCl, oksolamin sitrat ve parasetamol'ün tabletlerde HPLC-PDA ile yan yana analizi**

Kul A.

10. Ulusal Analitik Kimya Kongresi, Muğla, Turkey, 7 - 11 September 2022, pp.195

VIII. **Determination of Cannabinoids in Hemp Seed Oils by GC-MS**

Kul A.

Uluslararası 1. Gıda Kimyası Kongresi, Antalya, Turkey, 3 - 06 March 2022, pp.34

IX. **A New Method for the Detection of Heroin Abuse in Urine by UPLC-MS/MS**

Kul A.

8th International Medicine and Health Sciences Researches Congress, Ankara, Turkey, 25 - 26 December 2021, pp.105-108

X. **UPLC-MS/MS Yöntemi ile Anne Sütünde Klaritromisinin Tayini**

Kul A.

33. Ulusal Kimya Kongresi, Tekirdağ, Turkey, 7 - 09 October 2021, pp.153

XI. **LC-MS/MS Yöntemi ile Etil Glukuronid Miktar Tayininde Matriks Etkilerinin Giderilmesi**

Kul A.

32. Ulusal Kimya Kongresi, İstanbul, Turkey, 17 - 19 September 2020, pp.94

XII. **Effects of Ferula assafoetida, Rosa canina and a microalgae isolate on ECV 304 and Ishikawa Cell Lines**

CEBECIOĞLU R., AKGÜNÜZ D., KORKMAZ I., CAPANOĞLU Y., TURAN A., İSTANBULLU H. B., ALNAHHAL A., KUL A., CATAL T.

8th International Molecular Biology And Biotechnology Congress, Afyon, Turkey, 17 - 20 December 2019, pp.68

XIII. **Effects of helichrysum arenarium (Immortelle) on ECV304 and Ishikawa cell lines**

CEBECIOĞLU R., AKGÜNÜZ D., KORKMAZ I., ARICIOĞLU A., KUL A., CATAL T.

MolBiyKon'19, İstanbul, Turkey, 27 - 29 September 2019, pp.68

XIV. **Determination of pethidine of abuse and relevant metabolite norpethidine in urine by ultraperformance liquid chromatography tandem mass spectrometry**

KUL A., ÖZDEMİR M., SAĞIRLI A. O.

Euroanalysis 2019, İstanbul, Turkey, 1 - 05 September 2019, pp.275

XV. **Determination of buprenorphine and norbuprenorphine in human urine by ultra-performance liquid chromatography-tandem mass spectrometry**

KUL A., ÖZDEMİR M., SAĞIRLI A. O.

Euroanalysis 2019, İstanbul, Turkey, 1 - 05 September 2019, pp.275

- XVI. **İdrar Örneklerinde Morfinin Biyoanalitik Yöntem Validasyonu**  
KUL A., CANBOLAT F., ÖZİLHAN S., ATİK U., ÖZDEN S. T., TARHAN K. N.  
4. İlaç Kimyası: İlaç Etkin Maddesi Tasarımı, Sentezi, Üretimi Ve Standardizasyonu Kongresi, İzmir, Turkey, 17 - 20 March 2016, pp.3
- XVII. **A Validated Rapid And Simple Hplc-MS/MS Method For Prediction Of Cyp2d6 Phenotype By Using Metabolic Ratios**  
CANBOLAT F., ÖZİLHAN S., KUL A., ATİK U., ÖZDEN S. T., TARHAN K. N.  
1st Pharmacogenomics Istanbul Summit: Increasing The Safety And Effectiveness Of Personalized Therapy For Metabolic Disorders, İstanbul, Turkey, 27 - 28 November 2015, pp.77
- XVIII. **Risperidone/Paliperidone Plasma Level's Ratio Can Be Used As A Cyp2d6 Pm Phenotyping Marker**  
ÖZİLHAN S., CANBOLAT F., KUL A., ATİK U., ÖZDEN S. T., TARHAN K. N.  
1st Pharmacogenomics Istanbul Summit: Increasing The Safety And Effectiveness Of Personalized Therapy For Metabolic Disorders, İstanbul, Turkey, 27 - 28 November 2015, pp.82
- XIX. **Determination And Validation Of A Synthetic Cannabinoid XLR-11 Metabolites In Urine**  
KUL A., KURT CÜCÜ A.  
Drd 2015 (international Multidisciplinary Symposium On Drug Research Development), Eskişehir, Turkey, 15 - 17 October 2015, pp.87

## Supported Projects

- SAĞIRLI A. O., KUL A., Project Supported by Higher Education Institutions, Klorpromazinin terapötik ilaç izlemesi için GC-MS Yönteminin Oluşturulması, 2022 - 2024
- Al A. S., Kul A., TÜBİTAK Project, Piyasada Bulunan Kenevir Tohumu Yağlarında  $\Delta^9$ -THC'nin GC-MS ile Belirlenmesi, 2021 - 2023
- SAĞIRLI A. O., KUL A., Project Supported by Higher Education Institutions, Esrar Kullanımının Tespitinde Enzimatik Hidroliz Etkinliğinin Ultra Performanslı Sıvı Kromatografisi Tandem Kütle Spektrometresi Yöntemiyle Belirlenmesi, 2020 - 2022
- SAĞIRLI A. O., ÖZDEMİR M., KUL A., Project Supported by Higher Education Institutions, Sıvı Kromatografisi Yöntemi ile Anne Sütünde Antibakteriyel İlaç Miktar Tayini, 2020 - 2021
- SAĞIRLI A. O., KUL A., ÖZDEMİR M., Project Supported by Higher Education Institutions, Petidin ve Norpetidin Maddelerinin İdrarda Miktar Tayini ve Validasyonu, 2019 - 2020
- KUL A., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Toksik ve Bağımlılık Yapan Maddelerin Kanıta Dayalı Tayin, Tarama ve Danışma Merkezi, 2014 - 2015

## Patent

- Atasever Arslan B., Özilhan S., Kul A., Çatal T., Cebecioglu R. E., Enisoğlu Atalay V., Yaman M. B., Biyolojik Yöntemle Kuersetin Üretimi, Patent, CHAPTER C Chemistry; Metallurgy, The Invention Registration Number: 2018 00883 , Standard Registration, 2024

## Scientific Refereeing

- JOURNAL OF CHROMATOGRAPHY A, SCI Journal, June 2022
- INTERNATIONAL JOURNAL OF ANALYTICAL CHEMISTRY, Journal Indexed in SCI-E, January 2022
- COGENT MEDICINE, Other Indexed Journal, August 2021
- BMC CHEMISTRY, Journal Indexed in SCI-E, February 2021
- MICROCHEMICAL JOURNAL, Journal Indexed in SCI-E, November 2020
- JOURNAL OF KING SAUD UNIVERSITY SCIENCE, Journal Indexed in SCI-E, August 2020

## **Metrics**

Publication: 42

Citation (WoS): 79

Citation (Scopus): 100

H-Index (WoS): 4

H-Index (Scopus): 4

## **Congress and Symposium Activities**

10. Ulusal Alkol ve Madde Bağımlılığı Kongresi, Invited Speaker, Antalya, Turkey, 2016

## **Non Academic Experience**

University, Üsküdar Üniversitesi, İleri Toksikoloji Analiz Laboratuvarı