

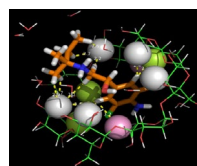
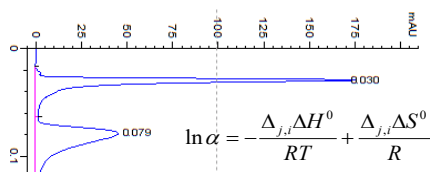


12-th Annual Symposium on Physical and Analytical Chemistry at Tbilisi State University



ACS
Chemistry for Life®

December 15-16, 2023, Tbilisi, Georgia



Co-organized by American Chemical Society Georgia International Chemical Sciences Chapter
TSU Building 1, Auditorium No. 107 (on December 15th) and No. 115 (on December 16th)

<https://aspac2023.tsu.ge/>

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Kenan Can Tok, Ankara, Türkiye

December 15th, 2023, TSU Building 1, Auditorium No. 107	
10.00-11.30	Session 1 Chairs: Sibel A. Ozkan, Bezhan Chankvetadze
10.00-10.10	Symposium Opening
10.10-10.30	PL-01 -Research on the Chair of Physical and Analytical Chemistry and in the Institute of Physical and Analytical Chemistry at Tbilisi State University in 2023 <i>Bezhan Chankvetadze, Tbilisi State University, Tbilisi, Georgia</i>
10.30-11.05	PL-02 -Liquid-phase enantioseparation of chiral ferrocenes <i>Paola Peluso Istituto di Chimica Biomolecolare, CNR, Sassari, Italy</i>
11.05-12.00	Coffee break and symposium photo
12.00-14.00	Session 2 Chairs: Emirhan Nemutlu, A. Olcay Sagirli
12.00-12.35	PL-03 -Not only reverse phase... <i>Vladimir Ioffe (on-line), Kfar Saba, Israel</i>
12.35-13.10	PL-04 -Ion mobility-mass spectrometry for structural characterization and conformational analyses of therapeutic drugs <i>Bekir Salih, Hacettepe University, Ankara, Türkiye</i>
13.10-13.35	KN-01 -Cross-reactive sensor arrays on paper-based diagnostic platforms <i>Mehmet Gokhan Caglayan, Ankara University, Ankara, Türkiye</i>
13.35-14.00	KN-02 -Sample preparation and analysis with the spotlight on forensically and clinically important drugs <i>Mehmet Gumustas, Ankara University, Ankara, Türkiye</i>
14.00-15.00	Lunch
15.00-17.00	Session 3 Chairs: Paola Peluso, Bekir Salih
15.00-15.30	KN-03 -Quartz tuning forks: A promising novel tool for the development of biosensing systems <i>Mustafa Kemal Sezginurk, Canakkale 18 Mart University, Canakkale, Türkiye</i>
15.30-16.00	KN-04 -Dual phases in metabolomics analysis <i>Emirhan Nemutlu, Hacettepe University, Ankara, Türkiye</i>
16.00-16.20	OL-01 -Optimization of enantioselective high-performance liquid chromatography-tandem mass spectrometry method for the quantitative determination of 3,4-methylenedioxy-methamphetamine (MDMA) and its phase-I metabolites in human biological fluids <i>Giorgia Sprega, Università Politecnica delle Marche, Ancona, Italy</i>
16.20-16.40	OL-02 -Development of an electrochemical sensor designed with molecularly imprinted polymer for sensitive and selective determination of ricoguat <i>Goksu Ozelikay-Akyildiz, Ankara University, Ankara, Türkiye</i>
16.40-17.00	OL-03 -Adamantane-containing new derivatives: Design, synthesis and antimicrobial study <i>Tinatin Bukia, Tbilisi State University, Tbilisi, Georgia</i>
17.00-17.30	Coffee break
17.30-19.20	Session 4 Chairs: Lokman Uzun, Giorgi Jibuti
17.30-17.55	KN-05 -Drug analysis with molecularly imprinted polymers from charge transfer complexes <i>Aysegül Gölcü, Istanbul Technical University, Istanbul, Türkiye</i>
17.55-18.20	KN-06 -Therapeutic drug monitoring of neuropsychiatric drugs by gas chromatography-mass spectrometry <i>A. Olcay Sagirli, Istanbul University, Istanbul, Türkiye</i>
18.20-18.40	OL-04 -A novel and highly selective approach based on a molecularly imprinted electrochemical sensor for the determination of muscle relaxant phenylamidol <i>Irem Kaya, University of Health Sciences, Ankara, Türkiye</i>
18.40-19.00	OL-05 -Exploring the performance of a composite sorbent membrane, based on recycled cellulose acetate, for the extraction of phenols from environmental waters <i>Massimo De Cesaris, La Sapienza University, Rome, Italy</i>
19.00-19.20	OL-06 -Development of an automated in-needle derivatization method coupled to high-performance liquid chromatography for the determination of gabapentinoids in various samples <i>Kenan Can Tok, Ankara University, Ankara, Türkiye</i>
19.30-21.30	Symposium Dinner-1

	December 16th, 2023, TSU Building 1, Auditorium No. 115
10.00-11.40	Session 5 Chairs: Francesco Paolo Busardo, Mehmet Gumustas
10.00-10.35	PL-05 -An overview of molecularly imprinted polymers for electrochemical sensing and analysis: Recent developments and future prospects <i>Sibel A. Ozkan, Ankara University, Ankara, Türkiye</i>
10.35-11.00	KN-07 -LC-MS/MS stereoselective bioanalytical methods for quantitative determination of the 9R- and 9S-HHC and their metabolites in human blood, oral fluid and urine. Preliminary pharmacokinetic data <i>Alfredo Fabrizio Lo Faro, Università Politecnica delle Marche, Ancona, Italy</i>
11.00-11.20	OL-07 -Ligand fishing using sirtuin immobilized magnetic beads <i>Rusudan Kakava, Tbilisi State University, Tbilisi, Georgia</i>
11.20-11.40	OL-08 -Optimization studies of seeding assay on cerebrospinal fluid samples of Turkish Parkinson's disease patients <i>Betul Karacor, Ankara University, Ankara, Türkiye</i>
11.40-12.00	Coffee break
12.00-14.00	Session 6 Chairs: Paola Peluso, Bezhan Chankvetadze <i>Prizes for the best student presentations were sponsored by American Chemical Society Georgia International Chemical Sciences Chapter</i>
12.00-12.15	SP-01 -Enantiomerization energy barrier determination of chiral fungicide triadimefon by enantioselective high-performance liquid chromatography <i>Nutsa Tsetskhladze, Tbilisi State University, Tbilisi, Georgia</i>
12.15-12.30	SP-02 -A comparative study of on-line and off-line gas chromatography-mass spectrometry/flame ionization detector (GC-MS/FID) systems for monitoring volatile organic compounds (VOCs) in the atmosphere <i>Natia Tchanturia, Tbilisi State University, Tbilisi, Georgia</i>
12.30-12.45	SP-03 -The effect of temperature on the separation of enantiomers with amylose-based chiral stationary phases <i>Ani Rurua, Tbilisi State University, Tbilisi, Georgia</i>
12.45-13.00	SP-04 -Investigation of various agrochemicals in fruits and vegetables using high performance liquid chromatography tandem mass spectrometry (HPLC/MS/MS) <i>Saba Jorbenadze, Tbilisi State University, Tbilisi, Georgia</i>
13.00-13.15	SP-05 -The effect of temperature on the separation of enantiomers with cellulose-based chiral stationary phases <i>Mariam Shanidze, Tbilisi State University, Tbilisi, Georgia</i>
13.15-13.30	SP-06 -Investigation of the enantiomer affinity pattern of mianserin, nomifensine and primaquine towards various cyclodextrins using capillary electrophoresis <i>Nino Jajanidze, Tbilisi State University, Tbilisi, Georgia</i>
13.30-13.45	SP-07 -Comparison of on-line and off-line GC-MS/FID systems for the analysis of volatile organic compounds in the atmosphere <i>Ani Gamkrelidze, Tbilisi State University, Tbilisi, Georgia</i>
13.45-14.00	SP-08 -4-Step synthesis of azo-bridged spiropyrans <i>Mariam Shvelidze & Besarion Dgebuadze, Tbilisi State University, Tbilisi, Georgia</i>
14.00-15.00	Lunch
15.00 – 18.10	Session 7 Chairs: Mustafa Kemal Sezgintürk, Mehmet Gokhan Caglayan
15.00-15.35	PL-06 -New psychoactive substances of natural origin: Toxicological aspects and analysis in biological and non-biological samples <i>Francesco Paolo Busardo, Università Politecnica delle Marche, Ancona, Italy</i>
15.35 -16.00	KN-08 -Collagen nanobubbles as efficient carriers for targeted controlled release of ibrutinib <i>Lokman Uzun, Hacettepe University, Ankara, Türkiye</i>
16.00 -16.20	OL-09 -Synthesis and study of benzocaine-containing transition metal complexes <i>Lela Metreveli, Tbilisi State University, Tbilisi, Georgia</i>



16.20-16.40	OL-10 -Synthesis of α - and β -cyclodextrin-based nanosponges and their application for the extraction of pesticides from water Samples <i>Nina Felli, La Sapienza University, Rome, Italy</i>
16.40-17.00	OL-11 -Pseudomonas aeruginosa imprinted polydopamine@graphene-coated pencil graphite electrode for selective bacterial detection <i>Tunca Karasu, Hacettepe University, Ankara, Türkiye</i>
17.00-17.20	Coffee Break
17.20-19.10	Session 8 Chairs: Lokman Uzun, Bezhan Chankvetadze
17.20-17.40	OL-12 -A versatile synthetic strategy for the development of nanostructured microparticles from recycled polymeric waste materials <i>Lorenzo Antonelli, La Sapienza University, Rome, Italy</i>
17.40-18.00	OL-13 -Extraction strategies for simultaneous determination of the buprenorphine /naloxone combination from plasma samples <i>Ceren Bozmaoglu, Ankara University, Ankara, Türkiye</i>
18.00-18.20	OL-14 -Novel enantioselective high-performance liquid chromatography-tandem mass spectrometry method for simultaneous determination of methorpan and its o-demethylated metabolite in postmortem blood samples <i>Tamar Khatishvili, Tbilisi State University, Tbilisi, Georgia</i>
18.20-18.40	OL-15 -A molecularly imprinted polymer-based electrochemical sensor for the determination of zonisamide <i>Ece Ozkan, Medipol University, Ankara, Türkiye</i>
18.40-19.00	OL-16 -Separation of undeuterated and partially deuterated enantioisotopologues of some amphetamine derivatives on achiral and polysaccharide-based chiral columns in high-performance liquid chromatography <i>Giorgi Kobidze, Università Politecnica delle Marche, Ancona, Italy</i>
19.00-19.10	Closing of the Symposium
19.10-22.00	Symposium Dinner-2

Poster Presentations:

December 16, 2023

Poster No	Information
PP-01	Development of a novel molecularly imprinted polymer-based sensing platform using electrochemical impedance spectroscopy for analysis of antiviral drug detection <i>Ahmet Cetinkaya, Ankara University, Ankara, Türkiye</i>
PP-02	Development of an electrochemical sensor based on ZnO nanoparticle-doped molecularly imprinted polymer for sensitive and selective analysis of upadacitinib <i>Fatma Budak, Ankara University, Ankara, Türkiye</i>
PP-03	Design of a highly sensitive and selective molecularly imprinted polymer-based electrochemical sensor for the determination of atorvastatin from binary mixture <i>Ensar Piskin, Ankara University, Ankara, Türkiye</i>
PP-04	Synthesis of adamantane scaffold containing dipeptides <i>Tamar Tabatadze, Tbilisi State University, Tbilisi, Georgia</i>
PP-05	Exploring the photoremediation potential of <i>Sambucus ebulus</i> L: A novel approach using microwave plasma atomic emission spectrometry (MP-AES) for measurement of soil pollution <i>Natia Tchanturia, Tbilisi State University, Tbilisi, Georgia</i>
PP-06	Determination of manganese (Mn) and some heavy metals, such as nickel (Ni), copper (Cu) and zinc (Zn) in the soils of Simoneti village in the basin of river Kvirila by microwave plasma atomic emission spectrometry (MP-AES) and atomic absorption spectrometry (AAS) methods <i>Rusudan Tsintsadze, Tbilisi State University and Scientific-Research Institute of Sanitary, Hygiene and Medical Ecology, Tbilisi, Georgia</i>