

# Ashkhen Lerniki Zatikyan

## Research Center of Chemistry

Ֆիզիկական քիմիայի լաբորատորիա  
Senior researcher

☎ 38-57

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## Education

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<b>Institution</b>	YSU
<b>Faculty</b>	Faculty of Chemistry, Department of Physical and Colloid Chemistry
<b>Date</b>	2001 - 2005
<b>Degree name</b>	PhD student

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<b>Institution</b>	YSU
<b>Faculty</b>	Faculty of Chemistry, Department of Physical and Colloid Chemistry
<b>Date</b>	1999 - 2001
<b>Degree name</b>	Masters

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<b>Institution</b>	YSU
<b>Faculty</b>	Faculty of Chemistry
<b>Date</b>	1995 - 1999
<b>Degree name</b>	Bachelor

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## Scientific Rank/degree

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<b>Institution</b>	Yerevan State University
<b>Date</b>	2011
<b>Degree name</b>	Candidate
<b>Specialty</b>	Chemical sciences
<b>Scientific Supervisor</b>	Sh.A. Markarian
<b>Research Topic</b>	“The Structural and Thermodynamic Study of Diethylsulfoxide Aqueous Solutions”

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## Language skills

Հայերեն Русский English

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## Publications

*Article*

**Synthesis, theoretical and photophysical study of functionalized quinoline - Based schiff bases**

Ashkhen L. Zatikyan, Karine R. Grigoryan, Hasmik A. Shilajyan, Lilit P. Hambardzumyan,

Iskuhi L. Aleksanyan

Journal of Molecular Structure 2026 144706

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*Article*

**Iodides and polyiodides of L-arginine**

A.L. Zatikyan, A.M. Petrosyan, G. Giester, G.S. Tonoyan, R.Yu. Chilingaryan, A.A. Margaryan,

A.H. Mkrtchyan

Journal of Molecular Structure 2025 139688

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*Article*

**Preparation and characterization of I-cystinium(2+) bis-iodide monohydrate and I-cystinium(2+) bis-triiodide**

Ashkhen L. Zatikyan, Aram M. Petrosyan, Gerald Giester, Milena S. Petrosyan, Vahram V. Chazaryan

Structural Chemistry 2025 12

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*Article*

**ANTIOXIDANT PROPERTIES AND BINDING INTERACTIONS OF 1-MORPHOLIN-4-YL-3-{[2-(3-NITROPHENYL)-2-OXOETHYL]THIO}-5,6,7,8-TETRAHYDROISOQUINOLINE-4-CARBONITRILE WITH BOVINE SERUM ALBUMIN**

K. R. GRIGORYAN, A. V. IGITYAN, H. H. VARDANYAN, Zh. G. KHACHATRYAN, A. S. HARUTYUNYAN,

A. L. ZATIKYAN, H. A. SHILAJYAN

Proceedings of the YSU B: Chemical and Biological Sciences 2025 57-66

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*Article*

**Bromo- and iodobismuthates of I-proline with a (A<sup>+</sup>...A<sup>+</sup>) type dimeric and a new type of tetrameric cations**

Ashkhen L. Zatikyan, Aram M. Petrosyan, Vahram V. Ghazaryan, Gerald Giester

Structural Chemistry 2025 1-14

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*Article*

**Polyiodides of amino acids. I-proline triiodides**

Ashkhen L. Zatikyan, Vahram V. Ghazaryan, Aram M. Petrosyan, Gerald Giester

Structural Chemistry 2024 1-11

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*Article*

**Polyiodides of amino acids. Betainium triiodide**

A.L. Zatikyan, A.M. Petrosyan, G.S. Tonoyan, V.V. Ghazaryan, G. Giester, M. Szafranski

Journal of Molecular Structure 2024 136960

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*Article*

**Formation of zinc oxide composites of doxycycline with high antibacterial activity based on DC-magnetron deposition of ZnO nanoscale particles on the drug surface**

Ashkhen L. Zatikyan, Armen I. Martiryan, Emma R. Arakelova, Ashot M. Khachatryan, Anait A. Mirzoian,

Susanna L. Grigoryan, Rafayel E. Muradyan, Hrachik R. Stepanyan, Stepan G. Grigoryan,

Mkrtich A. Yerosyan

Applied Physics A: Materials Science and Processing 2024 152

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*Article*

**Effect of bovine serum albumin on gallic acid and tannic acid radical scavenging properties**

**and binding kinetics with 2,2-diphenyl-1-picrylhydrazyl**

Ashkhen Zatikyan, Karine Grigoryan, Hasmik Shilajyan, Ioannis Savvaidis, Liana Mkhitarian

Process Biochemistry 2024 30-38

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*Article*

**Hexahalogenobismuthates of Glycine**

Ashkhen L. Zatikyan, Vahram V. Ghazaryan,, Gerald Giester, Gayane S. Tonoyan, Aram M. Petrosyan

Journal of Physics: Conference Series 2024 012012

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*Article*

**FTIR ATR SPECTRAL AND THEORETICAL VIBRATIONAL STUDIES OF URACIL IN DIMETHYLSULFOXIDE OR DIETHYLSULFOXIDE SOLUTIONS**

A.L. Zatikyan, Sh.A. Markarian

Journal of Structural Chemistry 2022 388-406

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*Article*

**Spectroscopic analysis of 2-(5-mercapto-1,3,4-oxadiazol-2-yl)-6-methylquinolin-4-ol binding to blood plasma albumin**

Karine R. Grigoryan, Hasmik A. Shilajyan, Ashkhen Zatikyan, Iskuhi Aleksanyan, Lilit Hambardzumyan

MONATSCHEFTE FUR CHEMIE 2022 507-515

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*Article*

**Effect of monovalent ions on the thermal stability of bovine serum albumin in dimethylsulfoxide aqueous solutions. Spectroscopic approach**

Karine Grigoryan, Ashkhen Zatikyan, Hasmik Shilajyan

Journal of Biomolecular Structure and Dynamics 2020 1-15

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*Article*

**Ab initio исследования комплексообразования галловой кислоты в водных растворах**

К.Р. Григорян, А.Л. Затикян

Журнал структурной химии (Journal of Structural Chemistry) 2018 1544-1551

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*Article*

**EXPERIMENTAL AND THEORETICAL STUDIES ON THE SOLVATION OF POTASSIUM AND CHLORINE IONS IN AQUEOUS DIMETHYLSULFOXIDE SOLUTIONS**

K. R. Grigoryan, A. A. Shilajyan, A. L. Zatikyan

Journal of Structural Chemistry 2015 662-666

<http://www.springer.com/chemistry/inorganic+chemistry/journal/10947>

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*Conference*

**Medium effect on hydrogen bonded complexes of L-ascorbic acid with diethylsulfoxide: quantum chemical calculations**

A.L. Zatikyan, S.A. Markarian

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*Conference*

**Ab initio study of molecular interactions in ascorbic acid dimethylsulfoxides/water mixture**

A.L. Zatikyan, S.A. Markarian

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*Conference*

**Experimetal and theoretical studies on competetive interactions in gallic acid - water**

**system**

L.S. Sargsyan, K.R. Grigoryan, A.L. Zatikyan

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*Conference***Теоретические исследования межмолекулярных взаимодействий водных растворов галловой кислоты**

А.Л. Затикиан, К.Р. Григорян

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*Conference***FT-IR ATR STUDY OF URACIL IN DIMETHYLSULFOXIDE SOLUTIONS**

Zatikyan A.L., Markarian S.A.

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*Conference***ТЕРМИЧЕСКАЯ ДЕНАТУРАЦИЯ БЫЧЬЕГО СЫВОРОТОЧНОГО АЛЬБУМИНА В РАСТВОРАХ ВОДА - ДИМЕТИЛСУЛЬФОКСИД В ПРИСУТСТВИИ LiCl И LiClO<sub>4</sub>**

Григорян К.Р., Шиладжян А.А., Затикиан А.Л.

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*Conference***Structural Peculiarities of L-Tyrosine Associates in Dimethylsulfoxide Aqueous Solutions**

Zatikyan A.L., Shilajyan H.A., Grigoryan K.R.

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*Conference***THEORETICAL STUDY ON THE MOLECULAR STRUCTURE OF 4-HYDROXY-2-METHYL-6-AMINOQUINOLINE**

Zatikyan Ashkhen, Grigoryan Karine

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*Conference***DFT AND EXPERIMENTAL UV/Vis SPECTRA OF SELECTED AZO DYES**

Petrosyan S., Papanyan Z., Zatikyan A., Gabrielyan L.

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*Conference***DFT STUDY ON THE EFFECT OF HYDROXYL GROUPS ON THE STRUCTURE AND REACTIVITY OF 2-METHYLQUINOLIN-4-OL DERIVATIVES**

Zatikyan A., Grigoryan K.

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*Conference***ԱՄԻՆՈԹԻՈՒՆԵՐԻ ՆՈՐ ՀԱՆՈԳԵԼԱՍՏԱԿՆԵՐ, ՀԱՆՈԳԵԼԱԲԻՍՍՈՒԹԱՏՆԵՐ ԵՎ ՊՈԼԻՅՈՒՂԻՆԵՐ**

Չատիկյան Ա.Լ., Պետրոսյան Ա.Մ., Գիստեր Զ., Ղազարյան Վ.Վ., Տոնոյան Գ.Ս., Շաֆրանսկի Մ.,

Զիլինգարյան Ռ.Յ., Մարգարյան Ա.Ա., Աբրահամյան Ա.Ս., Մկրտչյան Ա.Հ.

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*Conference***Growth and characterization of halogenobismuthates of amino acids**

Zatikyan AL, Petrosyan AM, Ghazaryan VV, Tonoyan GS, Giester G, Mkrtchyan AH, Szafranski M

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*Conference***Polyiodides of amino acids**

Zatikyan AL, Petrosyan AM, Petrosyan MS, Tonoyan GS, Ghazaryan VV, Giester G

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*Conference*

### **Hexahalogenobismuthates of Glycine**

A.L. Zatikyan, V.V. Ghazaryan, G. Giester, G.S. Tonoyan, A.M. Petrosyan

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*Conference*

### **Tetrahalogenobismuthates of Dimethylglycine**

A.L. Zatikyan, G. Giester, V.V. Ghazaryan, G.S. Tonoyan, A.M. Petrosyan

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*Conference*

### **Effect of Polystyrene Nanoparticles on Gangleron Binding to Bovine Serum Albumin**

Grigoryan K.R., Zatikyan A.L., Grigoryan Z.L., Gabrielyan A.A., Shilajyan H.A.

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*Conference*

### **Mixed Salts of Amino Acids with Different Anions Incorporating Hexaiodobismuthate Anion**

Zatikyan A.L., Ghazaryan V.V., Tonoyan G.S., Petrosyan A.M., Giester G.

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*Conference*

### **The first halogenobismuthate salt containing two different amino acids**

Zatikyan A.L., Ghazaryan V.V., Tonoyan G.S., Gevorkyan G.K., Petrosyan A.M., Giester G.

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*Conference*

### **Polyiodides of L-ornithine**

Zatikyan A.L., Petrosyan M.S., Ghazaryan V.V., Petrosyan M.A., Giester G.

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*Conference*

### **Discovery of asymmetric(L-Orn(H)-H-L-OrnH) (3+)-cation in the structure of (L-Orn(H)-H-L-OrnH)(I3)3•4H2O**

Ashkhen Zatikyan, Milena Petrosyan, Aram Petrosyan, Vahram Ghazaryan, Gerald Giester

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*Conference*

### **Halogenobismuthate Salts Containing Different Amino Acids**

A. L. Zatikyan, A. M. Petrosyan, V. V. Ghazaryan, G. S. Tonoyan, G. K. Gevorkyan, G. Giester

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