

# Hasmik Avetik Shilajyan

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## Faculty of Chemistry

Office of the Faculty of Chemistry

Head of the office - deputy dean

## Education

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<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Chemistry
<b>Date</b>	2010 - 2015
<b>Degree name</b>	Applicant

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<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Chemistry
<b>Date</b>	2007 - 2009
<b>Degree name</b>	Masters

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<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Chemistry
<b>Date</b>	2003 - 2007
<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>	2015
<b>Degree name</b>	Postgraduate
<b>Scientific Supervisor</b>	Grigoryan Karine
<b>Research Topic</b>	The Effect of Electrolytes on Physicolchemical Properties of Serum Albumin-Water-Dialkylsulfoxide Systems

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## Language skills

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Հայերեն Русский English

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## Work experience

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<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2025 till now
<b>Rank/degree</b>	head of the office-deputy dean

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*Article*

**Spectroscopic and DFT studies of 3-(m-nitrophenyl)-4-allyl-5-mercapto-1,2,4-triazole and 3-furyl-4-allyl-5-mercapto-1,2,4-triazole**

Liana Gabrielyan, Karine Grigoryan, Hasmik Shilajyan, Melanya Samvelyan, Gevorg Grigoryan,

Tariel Ghochikyan

Next Materials 2026 101424

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*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*

**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*

**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*

**THE IMPACT OF AGING ON THE ANTIOXIDANT PROPERTIES OF ARMENIAN GRAPE BRANDIES**

K. R. Grigoryan, H. A. Shilajyan

Proceedings of the YSU B: Chemical and Biological Sciences 2024 107-113

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*Article*

**MOLECULAR INTERACTIONS OF L-TYROSINE IN DIMETHYL SULFOXIDE AQUEOUS SOLUTIONS. PART 1: ELECTRONIC ABSORPTION AND FLUORESCENCE SPECTROSCOPY STUDIES**

K.R. Grigoryan, H.A. Shilajyan, R.G. Harutyunyan

Proceedings of the YSU B: Chemical and Biological Sciences 2023 1-7

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*Article*

**Study of complexation of single-stranded poly(rA) and poly(rU) with methylene blue**

Poghos O. Vardevanyan, Ara P. Antonyan, Zvart H. Movsisyan, Marine A. Parsadanyan,

Mariam A. Shahinyan, Karine R. Grigoryan, Hasmik A. Shilajyan

Journal of Biomolecular Structure and Dynamics 2023 15320-15327

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*Article*

**Citrullination of adenosine deaminase impairs its binding to dipeptidyl peptidase IV**

Luiza Karapetyan, Svetlana Sharoyan, Sona Mardanyan, Giulio Lupidi, Massimiliano Cuccioloni,  
Mauro Angeletti, Shiraz Markarian, Hasmik Shilajyan, Alvard Antonyan  
Biophysical Chemistry 2022 106820

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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  
MONATSHEFTE FUR CHEMIE 2022 507-515

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*Article*

**FLUORESCENCE STUDIES ON THE BLOOD PLASMA ALBUMIN INTERACTION WITH 4-HYDROXY-2-METHYLQUINOLINE**

K. R. GRIGORYAN, H. A. SHILAJYAN, I. L. ALEKSANYAN, L. P. HAMBARDZUMYAN, H. H. HOVHANNISYAN  
Proceedings of the YSU B: Chemical and Biological Sciences 2022 100-107

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*Article*

**THE EFFECT OF DIMETHYLSULFOXIDE ON THE FLUORESCENCE PROPERTIES OF SOME 4-HYDROXYQUINOLINES**

Karine R. Grigoryan, Hasmik A. Shilajyan, Iskuhi L. Aleksanyan, Zara L. Grigoryan,  
Lilit P. Hambardzumyan  
Proceedings of the YSU B: Chemical and Biological Sciences 2021 112-117

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*Article*

**UV/Vis and fluorescence study on the interaction of Ni(II) complex of Schiff base of glycine and chiral auxiliary (S)-2-[N-(N'-benzylpropyl)- amino]benzophenone with bovine serum albumin**

Hasmik A. Shilajyan, Karine R. Grigoryan  
MONATSHEFTE FUR CHEMIE 2020 135-139

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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*

**BOVINE SERUM ALBUMIN FLUORESCENCE QUENCHING BY TANNIC ACID IN DIMETHYLSULFOXIDE CONTAINING SOLUTIONS**

K. R. GRIGORYAN, H. A. SHILAJYAN, V. A. HOVHANNISYAN  
Proceedings of the YSU B: Chemical and Biological Sciences 2020 99-104

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*Article*

**FLUORESCENCE STUDY ON TRYPTOPHAN-POTASSIUM IODIDE INTERACTION**

H. A. Shilajyan, K.R. Grigoryan  
Proceedings of the YSU B: Chemical and Biological Sciences 2018 75-79

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*Article*

**FLUORESCENCE 2D AND 3D SPECTRA ANALYSIS OF TRYPTOPHAN, TYROSINE AND PHENYLALANINE**

K.R.GRIGOTRAN, H. A. SHILAJYAN

Proceedings of the YSU B: Chemical and Biological Sciences 2017 3-7

<http://www.y-su.am/science/hy/journals>

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*Article*

**Analysis of the Interaction of Gallic Acid and Myoglobin by UV-vis Absorption Spectroscopy**

Grigoryan K. R., Shilajyan H. A.

Russian Journal of Bioorganic Chemistry 2017 257-260

<https://link.springer.com/journal/11171>

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*Article*

**Իոնների սովատացիայի ուսումնասիրությունը դիմերիտուլֆօքսիդի ջրային լուծույթներում  
Էլեկտրահաղորդականության մեթոդով**

Հասմիկ Շիլաջյան, Մերրի Մկրտչյան

ԵՊՀ ՌԲԸ գիտական հոդվածների ժողովածու 2015 131-134

<http://www.y-su.am/sss/hy>

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*Article*

**Heat Induced Denaturation Of Bovine Serum Albumin In Dimethylsulfoxide Containing Solutions In The Presence Of Potassium Iodide**

K. R. Grigoryan, H.A.Shilajyan

Proceedings of the YSU B: Chemical and Biological Sciences 2015 3-5

<http://www.y-su.am/science/hy/journals>

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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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*Article*

**STUDY OF THERMAL DENATURING OF HUMAN SERUM ALBUMIN IN THE PRESENCE OF POTASSIUM CHLORIDE BY THE EXCITATION/EMISSION MATRIX METHOD**

K. R. Grigoryan, H. A. Shilajyan

Journal of Applied Spectroscopy 2013 786-789

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*Article*

**Intermolecular Interactions in Albumin-Sulfoxide-Water Systems at Low Temperatures, Investigated by Means of Fluorescence Quenching**

Grigoryan K. R., Shilajyan H. A.

Журнал физической химии (Russian Journal of Physical Chemistry A) 2013 780-782

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*Article*

**INFLUENCE OF DIMETHYLSULFOXIDE ON THE FLUORESCENCE BEHAVIOR OF HUMAN SERUM ALBUMIN STUDIED BY EXCITATION/EMISSION MATRIX FLUORESCENCE SPECTROSCOPY METHOD**

Grigoryan K. R., Shilajyan H.A.

Proceedings of the YSU B: Chemical and Biological Sciences 2013 50-53

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Article

**Physicochemical Peculiarities of Iodine-Dimethylsulfoxide-H<sub>2</sub>O Solutions and Effect on Ion Binding to Bovine Serum Albumin**

Grigoryan K. R., Shilajyan H.A.

Datasets International Dataset Papers in Chemistry 2013 1-5

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Article

**The effect of solvated ions on the thermal denaturation of human serum albumin in water-dimethylsulfoxide solutions**

Grigoryan K. R., Shiladzhyan A.A.

Биоорганическая Химия (Russian Journal of Bioorganic Chemistry) 2009 581-584

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Conference

**СПЕКТРАЛЬНЫЕ ИССЛЕДОВАНИЯ ВЗАИМОДЕЙСТВИЯ ГАЛЛОВОЙ И ДУБИЛЬНОЙ КИСЛОТ С МИОГЛОБИНОМ**

Григорян К.Р., Шиладжян А.А.

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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., Затикян А.Л.

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Conference

**Флуоресценция комплексов альбумин-танин в смешанных растворителях вода-диметилсульфоксид.**

К.Р. Григорян, А.А. Шиладжян, В. А. Оганисян

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Conference

**Fluorescence Study of 2-(5-Mercapto-1,3,4-oxadiazol-2-yl)-6-methylquinoline-4-ol binding to Bovine Serum Albumin**

Grigoryan K.R., Shilajyan H.A., Aleqsanyan I.L., Hambardzumyan L.P., Hovhannisyan H.H.

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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

**FLUORESCENCE PROPERTIES OF 2-METHYLQUINOLIN-4-OL AND ITS MERCAPTO-OXADIAZOLYL DERIVATIVE IN DIMETHYLSULFOXIDE AQUEOUS SOLUTIONS**

Hasmik Shilajyan, Karine Grigoryan, Iskuhy Aleksanyan, Zara Grigoryan, Lilit Hambardzumyan

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Conference

**ОСОБЕННОСТИ СВЯЗЫВАНИЯ МЕТИЛЕНОВОГО СИНЕГО С ОДНОЦЕПОЧЕЧНЫМИ СИНТЕТИЧЕСКИМИ ПОЛИНУКЛЕОТИДАМИ POLY(rA) И POLY(rU)**

Антонян А.П., Парсаданян М.А., Мовсесян З.О., Шиладжян А.А., Григорян К.Р., Вардеванян П.О

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Conference

**STUDY ON SOLVENT- MEDIATED RADICAL SCAVENGING ACTIVITY OF MORIN TOWARDS 2, 2-DIPHENYL-1- PICRYLHYDRAZYL**

Grigoryan K. R., Shilajyan H., Mkhitarian L., Harutyunyan R., Khachatryan Zh.

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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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