Liana Sergey Gabrielyan

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Faculty of Chemistry
Chair of Physical and Colloid Chemistry
Associate professor

Faculty of Chemistry
Chair of Physical and Colloid Chemistry
Associate professor

Faculty of Chemistry
Research Center of Chemistry
Ֆիզիկական քիմիայի լաբորատորիա
Scientific Worker

Education

Institution	Yerevan State University
Faculty	Faculty of Chemistry/Chair of Physical and Colloids Chemistry
Date	1994 - 1999
Degree name	Qualified specialist

Scientific Rank/degree

Institution	Yerevan State University
Date	2009
Degree name	Associate professor

Institution	Yerevan State University
Date	2004
Degree name	Candidate
Scientific Supervisor	Շիրազ Մարգարյան
Research Topic	Լիթիումի աղերի սուլֆօքսիդային լուծույթների ֆիզիկաքիմիական ուսումնասիրությունները

Language skills

Հայերեն Русский English Deutsch Français

Work experience

Institution	Institute of Physical and Theoretical Chemistry, Saarland University, Saarbruecken, Germany, Erasmus+

Period of time	2019 till now
Rank/degree	Visiting Lecturer

Institution	FH Joanneum, Graz, Austria, Erasmus Printel
Period of time	2018 till now
Rank/degree	Visiting Lecturer

Institution	Institute of Physics, Experimental physics II, Bayreuth University, Germany
Period of time	2017 till now
Rank/degree	Visiting Researcher

Institution	Institute of Physical Chemistry, Ruhr-University Bochum, Germany
Period of time	2013 till now
Rank/degree	Visiting Researcher

Institution	Experimental physics V, Augsburg University, Germany
Period of time	2013 till now
Rank/degree	Visiting Researcher

Institution	Institute of Physical Chemistry, Ruhr-University Bochum, Germany
Period of time	2009 till now
Rank/degree	Visiting Researcher

Institution	Chair of Physical and Colloids Chemistry, Faculty of Chemistry, Yerevan State University
Period of time	2009 till now
Rank/degree	Associate professor

Institution	Chair of Physical and Colloids Chemistry, Faculty of Chemistry, Yerevan State University
Period of time	2005 - 2009
Rank/degree	Assistant professor

Institution	Institute of Physical Chemistry, University Karlsruhe, Germany
Period of time	2004 - 2005
Rank/degree	Participant in the 40th International Seminar for Research and Teaching in Chemical Engineering and Physical Chemistry, Scientific Researcher

Institution	Chair of Physical and Colloids Chemistry, Faculty of Chemistry, Yerevan State University
Period of time	1999 - 2004
Rank/degree	Junior Scientific Researcher

Publications

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

Conference

Brewery spent grains as a potential substrate for growth and biohydrogen production by Rhodobacter sphaeroides and Parachlorella kessleri
L. Gabrielyan, J. Manoyan, A. Petrosyan, A. Hambardzumyan, L. Gabrielyan

Book of Abstracts "13th International Conference on Photosynthesis and Hydrogen Energy Research for Sustainability"
2026 21-22

https://phrs.entrat.eu/index.php

Article

Improvement of biomass and biohydrogen generation in Parachlorella kessleri using ethanol and brewery production wastes as cultivation media
Jemma Manoyan, Diana Hakobyan, Lilit Gabrielyan, Iren Shahazizyan, Lusine Sahakyan, Ela Minasyan,

Liana Gabrielyan
International Journal of Hydrogen Energy 2025 400-410

Article

A novel approach for synthesizing silver nanoparticles with antibacterial and cytotoxic activities using the leaf extract of hydroponically grown Moringa oleifera
Anush Aghajanyan, Marina Timotina, Tatevik Manutsyan, Ani Harutyunyan, Mikayel Ginovyan,

Robin Schubert, Sofiya Aydinyan, Karen Trchounian, Lilit Gabrielyan, Liana Gabrielyan

Scientific Reports 2025 1-18

Article

Silver nanoparticles fabricated using phycocyanin from Arthrospira platensis: green synthesis, physicochemical characterization, and biological activities
Ani Harutyunyan, Astghik Hambardzumyan, Liana Gabrielyan, Anush Aghajanyan, Meri Kocharyan,

Nikolay Avtandilyan, Alina Zurnachyan, Inga Bazukyan, Wojciech Kujawski, Lilit Gabrielyan

Microbial Cell Factories 2025 1-23

Conference

Comparative Analysis of Antibacterial Properties of Silver Nanoparticles Synthesized Using “Green Biomass” of Phototrophic Organisms
Lilit Gabrielyan, Ani Harutyunyan, Anush Aghajanyan, Liana Gabrielyan, Wojciech Kujawski

2025 45-45

https://m3s.umk.pl/pages/home/

Conference

“Green synthesis” of Silver Nanoparticles with Antimicrobial Activity Using Biomass of Microalgae

Lilit Gabrielyan, Anna Harutyunyan, Jemma Manoyan, Anush Aghajanyan, Liana Gabrielyan

2025 89-89

https://www.ysu.am/en/conference/869

Conference

Green synthesis of silver nanoparticles mediated by phycocyanin from Arthrospira platensis
Harutyunyan A., Hambardzumyan A., Aghajanyan A., Gabrielyan L., Gabrielyan L.

2025 186-186

https://newtrendschem.org/

Article

Comparative Study of Physicochemical Properties and Antibacterial Potential of Cyanobacteria Spirulina platensis-Derived and Chemically Synthesized Silver Nanoparticles
Ani Harutyunyan, Liana Gabrielyan, Anush Aghajanyan, Susanna Gevorgyan, Robin Schubert,

Christian Betzel, Wojciech Kujawski, Lilit Gabrielyan

ACS Omega 2024 29410−29421

Article

Synthesis and Investigation of Polymers Containing Different Ratio of Quinonediiminic and Benzenoid Units in PANi-Like Structure
Parandzem Minasyan, Svetlana Sargsyan, Narine Durgaryan, Liana Gabrielyan

ChemistrySelect 2024 e20240194

Article

Пиразолины и пиримидины на основе (E)-1-(4-пентилоксифенил)-3-арилпроп2-ен-1-онов. Синтез, докинг-исследование и люминесцентные свойства
Исаханян А.У., Овасян З.А., Григорян Г.С., Мхитарян Р.П., Габриелян Л.С., Паносян Г.А.,

Дангян М.Ю., Саргсян А.С., Амбарцумян А.А., Арутюнян А.А.

Журнал Общей Химии 2024 569-582

Conference

Antibacterial, hemolytic and anticancer activities of silver nanoparticles biosynthesized by phycocyanin extracted from Spirulina
L. Gabrielyan, A. Harutyunyan, A. Hambardzumyan, A. Aghajanyan, N. Avtandilyan, L. Gabrielyan

2024 152-152

https://2024.febscongress.org/

Conference

Նոր մոտեցումներ միկրոջրիմուռների կենսազանգվածից կենսաբանական ակտիվությամբ օժտված արծաթի նանոմասնիկների սինթեզի համար
Հարությունյան Ա.Ա., Մանոյան Ջ.Գ., Աղաջանյան Ա.Ա., Գաբրիելյան Լ.Ս., Գաբրիելյան Լ.Ս.

2024 209 - 209

https://www.ysu.am/conference/868

Article

QUANTUM CHEMICAL CALCULATION OF STRUCTURAL AND THERMODYNAMIC PROPERTIES OF ETHYL METHYL SULFONE IN THE GAS PHASE
L. S. Gabrielyan, Z. Kh. Papanyan

Proceedings of the YSU B Chemical and Biological Sciences 2023 199-206

Conference

CONFORMATIONAL AND VIBRATIONAL ANALYSIS OF DIPROPYL SULFONE BY DENSITY FUNCTIONAL THEORY METHODS

Papanyan Z., Gabrielyan L.

2023 152 - 152

https://newtrendschem.org/

Conference

DFT AND EXPERIMENTAL UV/Vis SPECTRA OF SELECTED AZO DYES

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

2023 268 - 268

https://newtrendschem.org/

Conference

THE PHYSICOCHEMICAL AND ANTIMICROBIAL PROPERTIES OF SILVER NANOPARTICLES SYNTHESIZED BY Spirulina BIOMASS

Harutyunyan A., Manoyan J., Gevorgyan S., Gabrielyan L., Aghajanyan A., Gabrielyan L.

2023 171-171

https://newtrendschem.org/

Conference

The antibacterial potential of Spirulina platensis-mediated green synthesized silver nanoparticles

L. Gabrielyan, A. Harutyunyan, A. Aghajanyan, L. Gabrielyan

2023 124-125

https://2023.febscongress.org/

Conference

SPIRULINA-Ի ԿԵՆՍԱԶԱՆԳՎԱԾԻՑ ԱՐԾԱԹԻ ՆԱՆՈՄԱՍՆԻԿՆԵՐԻ ՍԻՆԹԵԶԸ ԵՎ ԴՐԱՆՑ ՀԱԿԱԲԱԿՏԵՐԻԱԿԱՆ ԱԿՏԻՎՈՒԹՅՈՒՆԸ

Հարությունյան Ա.Ա., Մանոյան Ջ.Գ., Աղաջանյան Ա.Ա., Գաբրիելյան Լ.Ս., Գաբրիելյան Լ.Ս.

2023 185-185

https://www.ysu.am/conference/770

Article

PREDICTION OF DIPROPYL SULFONE PROPERTIES BY DENSITY FUNCTIONAL THEORY METHODS: CONFORMATIONAL ANALYSIS AND SIMULATED IR SPECTRUM

Z. Kh. PAPANYAN, L. S. GABRIELYAN

Proceedings of the YSU B Chemical and Biological Sciences 2022 185-202

Conference

Brewer’s spent grain as a potential substrate for hydrogen production by Parachlorella kessleri

L. Gabrielyan, J. Manoyan, L. Gabrielyan

2022 184-184

https://2022congress.febs-iubmb-pabmb.org/

Conference

Quantum chemical studies of lithium ion/sulfone complexes

Zakar Papanyan, Liana Gabrielyan

2022 62-63

https://polychar-28.ysu.am/program/

Conference

COMPOSITION AND TEMPERATURE DEPENDENCE OF SURFACE TENSION AND DENSITY OF AQUEOUS SOLUTIONS OF DIBUTYL SULFONE

Manucharyan V.K., Papanyan Z.K., Gabrielyan L.S.

2021 95

http://cluster.isc-ras.ru/en

Article

Dielectric relaxation and proton field-cycling NMR relaxometry study of dimethyl sulfoxide/glycerol mixtures down to glass-forming temperatures

Max Flämig, Liana Gabrielyan, Rafael Minikejew, Shiraz Markarian, Ernst A. Rössler

Physical Chemistry Chemical Physics 2020 9014-9028

Study manual

Ֆիզիկական քիմիայի խնդիրների ժողովածու

Գաբրիելյան Լ. Ս., Խաչատրյան Ա. Գ., Մարգարյան Շ. Ա.

2020 222

Article

Study of thermodynamic properties of binary mixtures of propionitrile with dimethylsulfoxide (or diethylsulfoxide) at temperatures from (298.15 to 323.15)K

Heghine H. Ghazoyan, Zara L. Grigoryan, Liana S. Gabrielyan, Shiraz A. Markarian

Journal of Molecular Liquids 2019 147-156

Article

Study of thermodynamic properties of binary mixtures of propionitrile with dimethylsulfoxide (or diethylsulfoxide) at temperatures from (298.15 to 323.15)K

H.H. Ghazoyan, Z.L. Grigoryan, L.S. Gabrielyan, S.A. Markarian

Journal of Molecular Liquids 2019 147-156

Conference

Dielectric Relaxation and Field-Cycling 1H NMR Relaxometry Studies of Dimethylsulfoxide/ Glycerol Mixtures at Low Temperatures

Gabrielyan L.S., Markarian S.A, Flämig M., Rössler E.A.

2019 65-65

https://events.spbu.ru/events/rcct2019?lang=Eng

Conference

Quantum Chemical Calculation of Thermodynamic Properties of Diethyl Sulfone

Gabrielyan L.S., Papanyan Z.K., Mkhitaryan A.S.

2019 202-202

https://events.spbu.ru/events/rcct2019?lang=Eng

Article

Dielectric Relaxation Spectroscopy Study of the Structure and Dynamics of Dialkyl Sulfoxide Solutions

L.S. Gabrielyan, Sh.A. Markaryan

Russian Journal of Physical Chemistry A 2018 205-213

Article

Quantum chemical study on the solvation of lithium chloride in dimethyl- and diethyl sulfones
A.S. Mkhitaryan, Z. K. Papanyan, L.S. Gabrielyan

Proceedings of the YSU B Chemical and Biological Sciences 2018 10-19

http://www.ysu.am/science/hy/1520431333

Article

Theoretical ab initio calculation of entropy and heat capacity of dialkylsulfones in the gas phase
A.S. Mkhitaryan, Z.K. Papanyan, L.S. Gabrielyan, S.A. Markarian

Chemical Journal of Armenia 2018 13-22

Article

КВАНТОВО-ХИМИЧЕСКОЕ ОПРЕДЕЛЕНИЕ ТЕПЛОТЫ ГИДРАТАЦИИ ДИЭТИЛСУЛЬФОНА
Л.С. Габриелян, Ш.А. Маркарян, З.Х. Папанян, А.С. Мхитарян

IZVESTIYA VYSSHIKH UCHEBNYKH ZAVEDENIY KHIMIYA KHIMICHESKAYA TEKHNOLOGIYA 2018 17-21

Article

AB INITIO HARTREE–FOCK AND DENSITY FUNCTIONAL THEORY INVESTIGATIONS ON THE POTENTIAL ENERGY SURFACE AND VIBRATIONAL SPECTRA OF DIETHYL SULFONE
Z. Kh. PAPANYAN, A. S. MKHITARYAN, L. S. GABRIELYAN

Proceedings of the YSU B Chemical and Biological Sciences 2018 147-154

Conference

AB INITIO STUDY OF LITHIUM CHLORIDE SOLVATION BY SULFONES
Gabrielyan L.S., Mkhitaryan A.S., Papanyan Z.K., Markarian S.A.

2018 228

http://cluster.isc-ras.ru./

Article

Dielectric relaxation study of sulfolane-water mixtures
Liana S. Gabrielyan
Journal of Molecular Liquids 2017 217-220

https://www.journals.elsevier.com/journal-of-molecular-liquids/

Article

FTIR and Ab Initio Studies of Diisopropylsulfoxide and its Solutions
Liana S. Gabrielyan
Journal of Solution Chemistry 2017 759-776

http://link.springer.com/journal/10953

Article

Изучение диэлектрической релаксации бинарной системы сульфолан/диметилсульфоксид.
Л.С. ГАБРИЕЛЯН, Ш.А. МАРКАРЯН

Հայաստանի քիմիական հանդես 2017 37-44

http://www.flib.sci.am/eng/Qimia/Frame.html

Conference

AB INITIO STUDY OF ETHYLMETHYLSULFONE

Gabrielyan L.S., Mkhitaryan A.S.

2017 51

http://krestov.isc-ras.ru/

Conference

Диэлектрические и релаксационные характеристики водных растворов диэтилсульфоксида

Л.С. Габриелян, Ш.А. Маркарян

2015 27

http://www.biophys.ru/arxiv/congress/2015

Conference

Dielectric relaxation on dialkylsulfoxides solutions

L.S. Gabrielyan

2015 203

http://chph.sci.am/conference/IChPh2015.html

Article

Dielectric spectroscopy of dimethylsulfone solutions in water and dimethylsulfoxide

Liana S. Gabrielyan, Shiraz A. Markarian, Hermann Weingärtner

Journal of Molecular Liquids 2014 37-40

Article

Low temperature dielectric relaxation study of aqueous solutions of diethylsulfoxide

Liana Gabrielyan, Shiraz Markarian, Peter Lunkenheimer, Alois Loidl

The European Physical Journal Plus 2014 245

Article

IR SPECTROSCOPY DETERMINATION OF THE COMPLEXATION CONSTANT FOR A CHOLESTEROL–DIISOPROPYL SULFOXIDE COMPLEX

L. S. Gabrielyan, L. G. Melik-Ohanjanyan,, S. A. Markarian

Journal of Applied Spectroscopy 2013 135-137

Article

FT IR ATR Study of Molecular Interactions in the Urea/Dimethyl Sulfoxide and Urea/Diethyl Sulfoxide Binary Systems

Karine R. Grigoryan, Shiraz A. Markarian, Liana S. Gabrielyan

Journal of Solution Chemistry 2004 1005-1015
