

# Gohar A. Shahinyan

## Faculty of Chemistry

Chair of Inorganic and Analytical Chemistry

Assistant

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✉ g.shahinyan@ysu.am

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## Education

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<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Faculty of Chemistry, Department of Physical Chemistry
<b>Date</b>	2013 - 2017
<b>Degree name</b>	PhD student

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<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Faculty of Chemistry, Department of Physical Chemistry
<b>Date</b>	2011 - 2013
<b>Degree name</b>	Masters

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<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Faculty of Chemistry
<b>Date</b>	2007 - 2011
<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>	2025
<b>Degree name</b>	Associate professor
<b>Specialty</b>	Chemical sciences

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<b>Institution</b>	Institute of Chemical Physics, NAS RA
<b>Date</b>	2017
<b>Degree name</b>	Candidate
<b>Specialty</b>	Chemical sciences
<b>Scientific Supervisor</b>	S.A. Markarian
<b>Research Topic</b>	Physicochemical study of n-heptane – AOT (dioctyl sulfosuccinate sodium salt) – polar phase reverse micellar systems

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## Language skills

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Հայերեն Русский English

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## Work experience

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**Institution** American University of Armenia  
**Period of time** 2023 till now  
**Rank/degree** Lecturer

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**Institution** Laboratory of Ecological Safety of Scientific Center of Chemistry, Faculty of Chemistry, Yerevan State University  
**Period of time** 2023 till now  
**Rank/degree** Researcher

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**Institution** Department of Inorganic and Analytical Chemistry, Yerevan State University  
**Period of time** 2020 till now  
**Rank/degree** Professor Assistant

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**Institution** Department of Pharmacy, Eurasia International University  
**Period of time** 2019 - 2023  
**Rank/degree** Professor Assistant (for foreign students in English)

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**Institution** Department of Physical Chemistry, Faculty of Chemistry, Yerevan State University  
**Period of time** 2017 - 2018  
**Rank/degree** Junior Researcher

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**Institution** Department of Physical Chemistry, Faculty of Chemistry, Yerevan State University  
**Period of time** 2014 - 2020  
**Rank/degree** Senior Laboratory Assistant

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**Institution** Physical Chemistry research laboratory, Faculty of Chemistry, Yerevan State University  
**Period of time** 2010 - 2011  
**Rank/degree** Senior Laboratory Assistant

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## Scientific interests

- Molecular Spectroscopy, Antioxidant properties, Analytical Chemistry, Food Chemistry
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## Publications

*Manual*

**Սևնդամբերքի ուսումնասիրման մեթոդներ**  
Գոհար Շահինյան, Արմեն Մարտիրոսյան

2025 110

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Article

**Antioxidant activity, mineral profile, fatty acids and organic acids analysis of Sambucus Nigra L. flower extracts. Optimization of extraction methods**

Vladimir V. Vardapetyan, Ani A. Grigoryan, Gohar A. Shahinyan, Anna M. Soloyan, Armen I. Martiryan

Food Chemistry 2025 143546

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Article

**Synthesis and Physicochemical Properties of Hydrazides of Malonic Acid with Different Substitutes**

T.V. Ghochikyan, A.I. Martiryan, G.A. Shahinyan, M.A. Samvelyan, A.S. Galstyan, H.R. Sargsyan,

H.H. Ghazoyan

Eurasian Chemico-Technological Journal 2024 203-209

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Article

**The Effect of Dimethylsulfoxide (or Diethylsulfoxide) on Methylene Blue-Calf Thymus DNA Binding in Aqueous Solutions by Fluorescence Polarization and Steady-State Fluorescence Quenching**

Gohar A. Shahinyan, Heghine H. Ghazoyan, Shiraz A. Markarian

Journal of Solution Chemistry 2023 708-719

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Article

**HERBAL INFUSIONS AS INHIBITORS OF TRYPSIN ACTIVITY IN WATER AND POLAR ORGANIC SOLVENT-WATER SYSTEMS**

A. Kh. JAMAL, A. Q. MOHAMMED, A. H. RASHEED, A. R. AL-RUBBAWI, G. A. SHAHINYAN

Proceedings of the YSU B: Chemical and Biological Sciences 2023 77-89

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Article

**PREPARATION AND STUDY OF JUNIPER BERRY AND SEED EXTRACTS**

M. S. TOROSYAN, V. V. VARDAPETYAN, G. A. SHAHINYAN, A. I. MARTIRYAN

Proceedings of the YSU B: Chemical and Biological Sciences 2023 177-181

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Article

**STUDY OF ANTIOXIDANT PROPERTIES OF SOME TYPES OF PACKAGED COFFEE**

V. V. VARDAPETYAN, M. S. TOROSYAN, G. A. SHAHINYAN, A. I. MARTIRYAN

Proceedings of the YSU B: Chemical and Biological Sciences 2023 182-189

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Article

**The Study of the Effect of Dimethylsulfoxide (or Diethylsulfoxide) on Quinine Sulfate-DNA Binding by UV-Vis and Steady-State Fluorescence Spectroscopies**

Gohar A. Shahinyan, Shiraz A. Markarian

Journal of Fluorescence 2023 1-12

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Article

**Synthesis, Photophysical Properties and Antioxidant Activity of Novel Quinoline Derivatives**

Armen I. Martiryan, Gohar A. Shahinyan, Iskuhi L. Aleksanyan, Lilit P. Hambardzumyan

Journal of Fluorescence 2023 1-8

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Article

**Antiradical activity, base-catalyzed hydrolysis and partition coefficients of some surfactants**

Armen I. Martiryan, Gohar A. Shahinyan, Vladimir V. Vardapetyan

Article

**Study of the Interaction of Novel Nonprotein Amino Acids with Trypsin by Steady-State Fluorescence Spectroscopy**

Gohar A. Shahinyan, Ani S. Dadayan, Nelli A. Hovhannisyan, Shiraz A. Markarian

Journal of Fluorescence 2020 229-233

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Article

**Fluorescence anisotropy studies on the Hoechst 33258-DNA interaction: the solvent effect**

Karen Yu. Amirbekyan, Gohar A. Shahinyan, Heghine H. Ghazoyan, Hasmik R. Sargsyan,

Shiraz A. Markarian

Journal of Biomolecular Structure and Dynamics 2020 1-5

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Article

**Volumetric, UV-Vis and FT IR Studies of Isoniazid in Diethylsulfoxide Solutions**

Shiraz A. Markarian, Zakar K. Papanyan, Gohar A. Shahinyan

Journal of Solution Chemistry 2020 1-13

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Article

**Photophysical properties of methylene blue in water and in aqueous solutions of dimethylsulfoxide**

Gohar A. Shahinyan, Aren Yu. Amirbekyan, Shiraz A. Markarian

SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY 2019 170-175

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Article

**Synthesis, Structure, and Properties of Novel Enamine Containing Coumarin and Phosphonium Fragments**

L. D. Popov, I. N. Scherbakov, S. A. Borodkin, Yu. V. Revinskii, E. A. Kazoyan, G. A. Shaginyan,

A. R. Sarkisyan, Sh. A. Markaryan

Russian Journal of General Chemistry (Журнал общей химии) 2019 906-912

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Article

**Synthesis of Phosphonium Enamines: Physicochemical Properties of Dimethyl Sulfoxide Solutions**

S. A. Borodkin, E. A. Kazoyan, L. D. Popov, G. A. Shaginyan, A. R. Sarkisyan, I. N. Shcherbakov,

Sh. A. Markaryan

Russian Journal of Physical Chemistry A 2019 2187-2191

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Article

**Thermodynamic and Spectroscopic (UV-Vis, FT IR) Studies of Solutions of CoCl<sub>2</sub> (or NiCl<sub>2</sub>) in Diethylsulfoxide**

Shiraz A. Markarian, Heghine H. Ghazoyan, Hasmik R. Sargsyan, Gohar A. Shahinyan

Journal of Solution Chemistry 2019 1378-1392

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Article

**ОБЪЕМНЫЕ СВОЙСТВА ОБРАЩЕННОЙ МИЦЕЛЛЯРНОЙ СИСТЕМЫ n-ГЕПТАН - БИС-(2-ЭТИЛГЕКСИЛ) СУЛЬФОСУКЦИНАТ НАТРИЯ - ПОЛЯРНАЯ ФАЗА (ВОДА+ДИМЕТИЛФОРМАМИД (ИЛИ АЦЕТОНИТРИЛ))**

Г. А. ШАГИНЯН, Ш. А. МАРКАРЯН

*Article*

**The study of n-heptane/AOT/water+ dimethylsulfoxide reverse micelles using acridine orange base as molecular probe**

G.A. SHAHINYAN, S.A. MARKARIAN

Հայաստանի քիմիական հանդես 2016 33-46

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

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*Article*

**Effect of diethyl sulfoxide on rheological properties of AOT microemulsions**

G.A. SHAHINYAN

ԵՊՀ Գիտական տեղեկագիր, Բնական գիտություններ 2016 3-7

<http://ysu.am/science/hy/1355990920>

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*Article*

**Effect of diethylsulfoxide on volumetric properties of sodium bis (2-ethylhexyl) sulfosuccinate microemulsions**

G.A. SHAHINYAN, H.R. SARGSYAN, A.M. KOLKER, S.A. MARKARIAN

Հայաստանի քիմիական հանդես 2016 407-415

<http://chemistry.asj-oa.am/view/year/2016.html>

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*Article*

**Влияние концентрации Na-сульфосукцината (НАС) на свойства мицеллярной системы НАС-н-гептан-ДМСО-вода**

Մ.Ա. Մարկարյան, Ա.Ր. Տարկիսյան, Գ.Ա. Շահինյան

Журнал физической химии (Russian Journal of Physical Chemistry A) 2015 1606-1611

<http://www.maik.ru/ru/journal/fizkhim/>

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*Article*

**The effect of dimethylsulfoxide on absorption and fluorescence spectra of aqueous solutions of acridine orange base**

Shiraz A. Markarian, Gohar A. Shahinyan

SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY 2015 662-666

<http://www.journals.elsevier.com/spectrochimica-acta-part-a-molecular-and-biomo...>

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*Article*

**Effect of the Dioctyl Sodium Sulfosuccinate (AOT) Concentration on the Properties of the AOT-n-Heptane-DMSO-Water Micellar System**

Sh. A. Markaryan, A. R. Sarkisyan, G. A. Shaginyan

Russian Journal of Physical Chemistry A 2015 1808-1813

<http://link.springer.com/journal/11504>

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*Article*

**Volume Properties of Reverse Micellar Systems AOT/nHeptane/DMSO-Water**

A. R. Sargsyan, G. A. Shahinyan, S. A. Markarian

Журнал физической химии (Russian Journal of Physical Chemistry A) 2014 858-862

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*Article*

**Влияние диметилсульфоксида на электрохимические и антирадикальные свойства**

**аскорбиновой кислоты**

Ш. А. Маркарян, Л. А. Тавадян, Г. Г. Кочарян, Г. А. Шагинян

Известия Академии наук. Серия химическая 2013 1625-1629

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*Conference*

**Physicochemical properties of n-heptane/AOT/water+ sulfoxide microemulsions**

G.A. Shahinyan, H.R. Sargsyan, S.A. Markarian

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*Conference*

**ИЗУЧЕНИЕ КОМПЛЕКСООБРАЗОВАНИЯ ХЛОРИДА И НИТРАТА МЕДИ (II) С ДИЭТИЛСУЛЬФОКСИДОМ МЕТОДОМ УФ СПЕКТРОСКОПИИ**

А.Р. Саркисян, Г.А. Щагинян, Е.А. Казоян, И.Н. Щербаков, Ш.А. Маркарян

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*Conference*

**THE STUDY OF MOLECULAR INTERACTIONS IN DIMETHYLSULFOXIDE AQUEOUS SOLUTIONS OF ACRIDINE ORANGE BASE BY UV-VIS AND FLUORESCENCE SPECTROSCOPY**

Markarian S.A., Shahinyan G.A.

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*Conference*

**FT IR study of cobalt chloride or nickel chloride solutions in diethylsulfoxide**

Gohar A. Shahinyan, Shiraz Markarian

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*Conference*

**UV-VIS AND FT IR STUDY OF COMPLEX FORMATION BETWEEN ISONIAZID AND DIMETHYLSULFOXIDE OR DIETHYLSULFOXIDE**

G.A. Shahinyan, Z.K. Papanyan, S.A. Markarian

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*Conference*

**BIODEGRADABILITY AND BIOAVAILABILITY OF SEVERAL ENVIRONMENTALLY FRIENDLY SURFACTANTS**

Armen I. Martiryan, Gohar A. Shahinyan, Vladimir V. Vardapetyan

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*Conference*

**Antioxidant Activity of Alpine Herbal Tea**

Gohar A. Shahinyan, Armen I. Martiryan

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*Conference*

**The effect of dimethylsulfoxide (or diethylsulfoxide) on the properties of DNA solutions**

Shiraz A. Markarian, Gohar A. Shahinyan, Heghine H. Ghazoyan

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