

Heghine Hmayak Ghazoyan

Faculty of Chemistry

Chair of Physical and Colloid Chemistry

Associate professor

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Education

Institution	Yerevan State University
Faculty	Post-graduate Course
Date	1991 - 1999
Degree name	PhD student

Institution	Yerevan State University
Faculty	Chemistry
Date	1986 - 1991
Degree name	Qualified specialist

Scientific Rank/degree

Institution	Institute of Chemical Physics of the AR Academy of Sciences
Date	2002
Degree name	Candidate
Specialty	Chemical sciences
Scientific Supervisor	Doctor of Sciences, Professor Shiraz Markarian
Research Topic	Intermolecular Interactions and Solvation Processes in Dialkylsulfoxides Solutions of Acrylonitrile: Polymerization of Acrylonitrile and Physicochemical Properties of the Synthesised Polymers

Language skills

Հայերեն English Русский

Work experience

Institution	Yerevan State University
Period of time	2011 till now
Rank/degree	Associate Professor

Scientific interests

- Thermodynamic Studies of Molecular Interactions in Chemical and Biochemical Systems
- The study of behavior of nanoparticles using light scattering methods

Participation in international conferences and seminars

09/07/2023 - 14/07/2023	38th International Conference on Solution Chemistry University of Novi Sad Serbia
19/06/2019 - 23/06/2019	22 nd International Conference on Chemical Thermodynamics in Russia Saint Petersburg State University Russian Federation (the)
16/09/2019 - 21/09/2019	XVI International Conference "Spectroscopy of coordination compounds" Kuban State University Russian Federation (the)
24/09/2017 - 30/09/2017	XIV International Conference "Spectroscopy of coordination compounds" Kuban State University Russian Federation (the)
24/06/2013 - 28/06/2013	XIX International Conference on Chemical Thermodynamics in Russia (RCCT-2013) Lomonosov Moscow State University of Fine Chemical Technologies Russian Federation (the)

Publications

Article

Diphenyl selenoxide: Unraveled peculiarities in methanol and acetonitrile solutions

Vitaly V. Chaban, Shiraz A. Markarian, Heghine H. Ghazoyan, Hasmik R. Sargsyan, Gevorg S. Grigoryan, Adrine D. Sahakyan, Levon A. Tavadyan
Journal of Molecular Liquids 2024 125331

Article

Dimethyl sulfoxide fosters larger micelles of docusate sodium in the mixed solutions with water

S.A. Markarian, H.R. Sargsyan, G.S. Grigoryan, H.H. Ghazoyan, V.V. Chaban
Journal of Molecular Liquids 2023 120960

Article

Dimethyl sulfoxide heavily extends homogeneous regions of the Propionitrile/DMSO/Water mixtures

Heghine H. Ghazoyan, Zara L. Grigoryan, Shiraz A. Markarian, Vitaly V. Chaban
Journal of Molecular Liquids 2023 121734

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

Article

Diphenylsulfoxide exhibits an outstanding solubility in Methanol: Physicochemical and quantum chemical evidences. Comparison to acetonitrile

Shiraz A. Markarian, Heghine H. Ghazoyan, Hasmik R. Sargsyan, Gevorg S. Grigoryan, Vitaly V. Chaban,

Adrine D. Sahakyan, Levon A. Tavadyan

Journal of Molecular Liquids 2023 122924

Article

Volumetric Properties of Butyronitrile-Dimethyl Sulfoxide and Butyronitrile-Diethyl Sulfoxide Binary Mixtures

H.H. Ghazoyan, Sh.A. Markaryan

Журнал физической химии (Russian Journal of Physical Chemistry A) 2021 1811-1820

Article

VOLUMETRIC PROPERTIES OF ACRYLONITRILE+ETHANOL MIXTURE OVER TEMPERATURE RANGE FROM (293.15 TO 323.15) K AT AMBIENT PRESSURE

H.H. Ghazoyan

Известия высших учебных заведений. Серия: химия и химическая технология (ChemChemTech) 2020 32-37

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

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

DENSITIES AND ELECTRICAL CONDUCTIVITIES OF COPPER(II) CHLORIDE SOLUTIONS IN DIMETHYL SULFOXIDE AND WATER-DIMETHYL SULFOXIDE EQUIMOLAR MIXTURE AT THE TEMPERATURES 298.15, 308.15 AND 318.15 K

H. H. GHAZOYAN, Sh. A. MARKARIAN

Proceedings of the YSU B: Chemical and Biological Sciences 2019 3-9

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

Article

Reply to “Comments on 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

Journal of Molecular Liquids 2019 111104-111105

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

Article

Thermodynamic and Spectroscopic (UV-Vis, FT IR) Studies of Solutions of CoCl₂ (or NiCl₂) in Diethylsulfoxide

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

Journal of Solution Chemistry 2019 1378-1392

Article

Corrigendum to “Volumetric properties of binary mixtures of acrylonitrile with dimethylsulfoxide (or diethylsulfoxide) at temperatures from 298.15 to 323.15K” [Chemical Journal of Armenia 70 (2017) 462-476]

H.H. Ghazoyan

Հայաստանի քիմիական հանդես 2019 534-537

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

Article

Densities and volumetric properties of L-ascorbic acid solutions in water-ethanol mixtures at temperatures from 298.15 to 318.15 K

H.H. Ghazoyan, Sh.A. Markarian

Proceedings of the YSU B: Chemical and Biological Sciences 2018 3-9

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

Article

ОБЪЕМНЫЕ СВОЙСТВА РАСТВОРОВ ДИМЕТИЛСУЛЬФОНА В СМЕШАННОМ РАСТВОРИТЕЛЕ (ЭТАНОЛ-ВОДА) В ИНТЕРВАЛЕ ТЕМПЕРАТУР 298,15-323,15 К

Е.А. Казоян, Ш.А. Маркарян

Известия высших учебных заведений. Серия: химия и химическая технология (ChemChemTech) 2017 27-33

<http://ctj.isuct.ru/>

Article

Volumetric Properties and Viscosity of Diethylsulfoxide in Acetonitrile at Different

Temperatures

Z.L. Grigoryan, H.H. Ghazoyan, Sh.A. Markarian

Proceedings of the YSU B: Chemical and Biological Sciences 2017 147-155

<http://www.ysu.am/science/hy/1511853083>

Article

Volumetric properties of binary mixtures of acrylonitrile with dimethylsulfoxide (or diethylsulfoxide) at temperatures from 298.15 to 323.15 K

H.H. Ghazoyan, Z.L. Grigoryan, Sh.A. Markarian

Chemical Journal of Armenia 2017 462-476

<http://chemjournal.sci.am>

Article

VOLUMETRIC PROPERTIES AND VISCOSITY OF DIETHYL SULFOXIDE IN ACETONITRILE AT DIFFERENT TEMPERATURES

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

ԵՊՀ Գիտական տեղեկագիր, Բնական գիտություններ 2017 147-155

Article

Thermodynamics of Liquid-Vapor Phase Equilibrium in Dimethyl Sulfoxide-Alkanol Systems in the Range of 293.15-323.15 K

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

Russian Journal of Physical Chemistry A 2015 1790-1794

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

Article

Thermodynamics of Liquid-Vapor Phase Equilibrium in Dimethyl Sulfoxide-Alkanol Systems in the Range of 293.15-323.15 K

Z. L. Grigoryan, E. A. Kazoyan, Sh. A. Markaryan

Russian Journal of Physical Chemistry A 2015 1588-1592

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

Article

Volumetric properties of dimethylsulfone in ethanol-aqueous solutions

H.H. Ghazoyan

Proceedings of the YSU B: Chemical and Biological Sciences 2015 3-8

<http://www.ysu.am/science/hy/journals>

Article

ИССЛЕДОВАНИЕ РАВНОВЕСИЯ ЖИДКОСТЬ-ПАР В БИНАРНОЙ СИСТЕМЕ ДИМЕТИЛСУЛЬФОКСИД-ЭТАНОЛ

Է. Ա. ԿԱԶՕՅԱՆ, Յ. Լ. ԳՐԻԳՕՐՅԱՆ, Շ. Ա. ՄԱՐԿԱՐՅԱՆ

Chemical Journal of Armenia 2014 36-42

Article

DENSITIES, EXCESS MOLAR AND PARTIAL MOLAR VOLUMES FOR DIETHYLSULFOXIDE WITH METHANOL OR ETHANOL BINARY SYSTEMS AT TEMPERATURE RANGE 298.15-323.15 K

H. H. GHAZOYAN, Sh. A. MARKARIAN

Proceedings of the YSU B: Chemical and Biological Sciences 2014 17-25

Article

Densities and thermochemical properties of dimethylsulfone in dimethylsulfoxide and dimethylsulfoxide/water equimolar mixture

Heghine H. Ghazoyan, Shiraz A. Markarian

Journal of Molecular Liquids 2013 85-88

Conference

Calorimetric study of interactions of amino acids with surfactants in aqueous solutions at 298.15 K

Harutyunyan N.G., Harutyunyan L.R., Ghazoyan H.H., Harutyunyan R.S.

Conference

Molecular interaction between nitrile group containing compounds (acetonitrile, acrylonitrile, polyacrylonitrile) and dimethylsulfoxide

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

Conference

Volumetric properties of diethylsulfoxide-alkanol binary mixtures

H.H. Ghazoyan, S.A. Markarian

Conference

Liquid-vapor equilibrium, volumetric and transport properties of dimethylsulfoxide-acetonitrile system

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

Conference

Viscosity and volumetric properties of acrylonitrile+ dimethylsulfoxide binary mixtures at T=(298.15-318.15)K

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

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

Conference

The study of thermodynamic properties of binary mixtures diethylsulfoxide-acetonitrile (or propionitrile)

Ghazoyan H.H., Grigoryan Z.L., Sargsyan H.R., Markarian S.A.

Conference

Thermodynamic Properties of Dimethylsulfone- Dimethylsulfoxide-Water Ternary System

Ghazoyan H.H., Markarian S.A.

Conference

UV-VIS AND THERMODYNAMIC STUDIES OF COMPLEX FORMATION OF DIETHYLSULFOXIDE WITH CoCl₂ AND NiCl₂

H.H. Ghazoyan, H.R. Sargsyan, Z.K. Papanyan, S.A. Markarian

Conference

Thermogravimetric and FT IR study of interaction of polyacrylonitrile with dimethylsulfoxide
H.H. Ghazoyan, Z.L. Grigoryan, S.A. Markarian

Conference

**УФ-ИССЛЕДОВАНИЕ КОМПЛЕКСООБРАЗОВАНИЯ п-НИТРОАНИЛИНА С МОЛЕКУЛАМИ
АЭРОЗОЛЯ ОТ В МИЦЕЛЛЯРНЫХ СИСТЕМАХ**

A.P. Саркисян, Е.А. Казоян, Ш.А. Маркарян

Conference

**ИССЛЕДОВАНИЕ СМЕСЕЙ АЛИФАТИЧЕСКИХ НИТРИЛОВ С СУЛЬФОКСИДАМИ НА
ОСНОВАНИИ ДАННЫХ ДЕНСИТОМЕТРИИ, ВИСКОЗИМЕТРИИ И ФАЗОВЫХ РАВНОВЕСИЙ**

Казоян Е.А., Григорян З.Л., Маркарян Ш.А.

Conference

THE DYNAMIC LIGHT SCATTERING OF B1 AND B6 VITAMINES IN DMSO-WATER MIXTURES

H.H. Ghazoyan, L. Baghdasaryan, S.A. Markarian

Conference

THE MICELIZATION OF AOT IN AQUEOUS SOLUTION OF DMSO

H. Sargsyan, G. Grigoryan, H. Ghazoyan, Sh. Markarian

Conference

**Excess Molar Volumes in Homogeneous Region of Propionitrile+DMSO+Water Ternary Liquid
Mixtures at Temperatures From (298.15 to 323.15)K**

Ghazoyan H.H., Markarian Sh.A.

Conference

**Thermodynamic study of binary mixtures of aliphatic nitriles (acetonitrile, propionitrile,
butyronitrile and acrylonitrile) with dimethylsulfoxide (or diethylsulfoxide)**

Shiraz Markarian, Zara Grigoryan, Heghine Ghazoyan

Conference

**Size determination of nanoparticles of vitamins B1 and B6 in DMSO-water mixtures by
dynamic light scattering**

Heghine Ghazoyan, Shiraz Markarian

Conference

THE THERMODYNAMIC STUDY OF SOLUTIONS OF DIALKYL SULFOXIDES WITH ALCOHOLS

Ghazoyan H.H., Markarian S.A.

Conference

**Dynamic Light Scattering and Volumetric Study of Vitamins (B1 and B6) in Aqueous Solutions
of DMSO**

Heghine H. Ghazoyan, Shiraz A. Markarian

Conference

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

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