

# Anush Aramays Aghajanyan

## Research Institute of Biology

Basic and Pathological Biochemistry Laboratory

Researcher

☎ 37491630292

✉ a.aghajianian@ysu.am



## Education

---

<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Faculty of Biology/ Department of Biochemistry
<b>Date</b>	1989 - 1994
<b>Degree name</b>	Qualified specialist

---

## Scientific Rank/degree

---

<b>Institution</b>	Yerevan State University
<b>Date</b>	2021
<b>Degree name</b>	Associate professor
<b>Specialty</b>	Biological sciences

---

<b>Institution</b>	Yerevan State University
<b>Date</b>	2002
<b>Degree name</b>	Postgraduate
<b>Scientific Supervisor</b>	Davtyan M.A.
<b>Research Topic</b>	Influence of extracts of some herbal on the exchange of arginine and proline and on accumulation biomass of yeast <i>Candida guilliermondii</i> NP-4

---

## Language skills

Русский English

---

## Work experience

---

<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2021 till now
<b>Rank/degree</b>	Associate Professor

---

<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2013 - 2021
<b>Rank/degree</b>	Assistant

---

<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2005 - 2013
<b>Rank/degree</b>	Scientific Researcher

---

<b>Institution</b>	Yerevan State University
<b>Period of time</b>	1994 - 2005
<b>Rank/degree</b>	Junior Scientific Researcher

---

## Scientific interests

---

- Plant Biochemistry
  - Green synthesis of metallic nanoparticles synthesized by using plants
  - Hypoglycemic properties of plants
- 

## Participation in international conferences and seminars

---

<b>04/06/2018 - 05/06/2018</b>	Biochemical properties of Stevia rebaudiana extract in the stress conditions Germany
------------------------------------	---

---

<b>02/10/2019 - 04/10/2019</b>	Synthesis of silver nanoparticles by Artemisia annua extract and evaluation of their antibacterial activity Portugal
------------------------------------	---

---

<b>24/10/2019 - 25/10/2019</b>	Hydroponic Stevia rebaudiana as an alternative path of cultivation: Novel antibacterial properties Netherlands (the)
------------------------------------	---

---

<b>18/06/2020 - 22/06/2020</b>	Silver Nanoparticles by Plant Stevia rebaudiana: Green Synthesis, Characterization and Antibacterial Activity United States of America (the)
------------------------------------	---

---

<b>09/07/2022 - 14/07/2022</b>	Antibacterial activity of silver nanoparticles biosynthesized from Stevia rebaudiana extract Portugal
------------------------------------	--

---

<b>08/07/2023</b>	Green synthesis of silver nanoparticles and their effect on the energy-dependent H <sup>+</sup> -fluxes across the bacterial membrane France
-------------------	---

---

<b>08/07/2023 - 12/07/2023</b>	The effect of silver nanoparticles synthesized using Spirulina biomass on the hydrogen yield and FoF1-ATPase activity in Escherichia coli France
------------------------------------	---

---

**08/07/2023 - 12/07/2023** The antibacterial potential of *Spirulina platensis*-mediated green synthesized silver nanoparticles  
France

---

**14/10/2012 - 16/10/2012** International Symposia dedicated to the 125th anniversary of academician I.A. Orbeli  
Armenia

---

## Membership

---

**Institution** Federation of European Microbiological Societies (FEMS)  
**Period of time** 2017 till now

---

**Institution** Federation of European Biochemical Societies (FEBS)  
**Period of time** 2005 till now

---

## State awards and honorary titles

---

2019 Certificate for conscientious and productive work on the occasion of the 100th anniversary of the founding of Yerevan State University

---

## Publications

---

*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

---

*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*

**Biosynthesis of silver nanoparticles using extracts of *Stevia rebaudiana* and evaluation of**

**antibacterial activity**

Marina Timotina, Anush Aghajanyan, Robin Schubert, Karen Trchounian, Lilit Gabrielyan

World Journal of Microbiology and Biotechnology 2022 1-10

---

*Article*

**HYPOLYCEMIC ACTIVITY OF *ORIGANUM VULGARE L.* AQUEOUS EXTRACT IN HYPERGLYCEMIA INDUCED BY IMMOBILIZATION STRESS IN RABBITS**

A. A. AGHAJANYAN, A. H. TADEVOSYAN

Proceedings of the YSU B: Chemical and Biological Sciences 2022 141-150

---

*Article*

**Antioxidant potential, biochemical activity and hypoglycemic effects of *R. obtusifolius L.* seed extracts used in Armenian traditional medicine**

Mikayel Ginovyan, Naira Sahakyan, Anush Aghajanyan, Armen Trchounian

BIO Web of Conferences 2021 1-6

---

*Article*

**Silver ion bioreduction in nanoparticles using *Artemisia annua L.* extract: characterization and application as antibacterial agents**

Anush Aghajanyan, Lilit Gabrielyan, Robin Shubert, Armen Trchounian

AMB Express 2020 1-9

---

*Article*

**Herbs Extracts in the Treatment and Prevention of Experimental Metabolic Disorders: Synergistic Hypoglycemic Activity of Ethanol Extracts of *Hypericum alpestre* and *Rumex obtusifolius***

Anush Aghajanyan, Mikayel Ginovyan, Armen Trchounian

Proceedings MDPI 2019 1-3

---

*Article*

**Biochemical Activity and Hypoglycemic Effects of *Rumex obtusifolius L.* Seeds Used in Armenian Traditional Medicine**

Anush Aghajanyan, Armine Nikoyan, Armen Trchounian

BioMed Research International 2018 ID4326352 (1-9)

---

*Article*

**ANTIHYPERGLYCEMIC PROPERTIES OF THE HERBAL MIXTURE COMPOSED OF EXTRACTS FROM *SALVIA OFFICINALIS L.*, *CALENDULA OFFICINALIS LINN.*, *GLYCYRRHIZAE RADIX L.* AND *ECHINACEA PURPUREA L.* ON HYPERGLYCEMIA INDUCED BY IMMOBILIZATION STRESS IN RABBITS.**

A.A. Aghajanyan, A.H. Trchounian

Proceedings of the YSU B: Chemical and Biological Sciences 2018 180-186

---

*Article*

**Antihyperglycemic and Antihyperlipidemic Activity of Hydroponic *Stevia rebaudiana* Aqueous Extract in Hyperglycemia Induced by Immobilization Stress in Rabbits**

Anush Aghajanyan, Zaruhi Movsisyan, Armen Trchounian

BioMed Research International 2017 1-6

<https://www.hindawi.com/journals/bmri/>

---

Article

**ВЛИЯНИЕ ИММОБИЛИЗАЦИОННОГО СТРЕССА НА НЕКОТОРЫЕ БИОХИМИЧЕСКИЕ ПОКАЗАТЕЛИ УГЛЕВОДНОГО ОБМЕНА В СЫВОРОТКЕ КРОВИ КРОЛИКОВ**

Н. АЙРАПЕТЯН, А. АГАДЖАНЯН, М. ХАЧАТРЯН, А. ТРЧУНЯН

Биологический журнал Армении 2017 13-18

<http://biology.asj-oa.am/view/year/2017.html>

---

Manual

**ԲՈՒՅՍԵՐԻ ԿԵՆՍԱՔԻՄԻԱ**

Ա.Ա.Աղաջանյան, Ա.Հ. Թոքունյան

2017 152

---

Article

**ГИПОГЛИКЕМИЧЕСКАЯ И ГИПОЛИПИДЕМИЧЕСКАЯ АКТИВНОСТЬ ЛИСТЬЕВ SALVIA OFFICINALIS L.**

Агаджанян Ануш Арамаисовна

Евразийский Союз Учёных 2015 5-8

[http://elibrary.ru/title\\_about.asp?id=52740](http://elibrary.ru/title_about.asp?id=52740)

---

Article

**ԿԵՆՍԱՔԻՄԻԱՅԻ ԴԱՍԱՎԱՆԴՄԱՆ ԺԱՄԱՆԱԿԱԿԻՑ ՄԵԹՈԴՆԵՐ**

Ն.Կ.Հայրապետյան, Մ.Հ.Խաչատրյան, Ա.Ա.Աղաջանյան

Կրթությունը և գիտությունը Արցախում 2015 62-65

<http://www.ysu.am/kgartsakh>

---

Article

**ВЛИЯНИЕ НЕКОТОРЫХ ЛЕКАРСТВЕННЫХ РАСТЕНИЙ НА УРОВЕНЬ ОБЩЕГО ХОЛЕСТЕРИНА В СЫВОРОТКЕ КРОВИ ЧЕЛОВЕКА**

А.А.Агаджанян

Հայաստանի կենսաբանական հանդես 2014 38-41

<http://www.flib.sci.am/eng/Biology/>

---

Article

**АНТИОКСИДАНТНЫЕ СВОЙСТВА НЕКОТОРЫХ ЛЕКАРСТВЕННЫХ РАСТЕНИЙ**

А.А.Агаджанян, А.Х.Агаджанян

Հայաստանի կենսաբանական հանդես 2012 76-79

<http://www.flib.sci.am/eng/Biology/>

---

Article

**Аминокислотный состав некоторых лекарственных растений**

А.Х.Агаджанян, Г.А.Семерджян, А.А.Агаджанян, Г.Г.Семерджян, М.С.Мартиросян

Биологический журнал Армении 2007 103-107

<http://www.flib.sci.am/eng/Biology/>

---

Article

**АРГИНАЗА И РЕГУЛЯЦИЯ ЕЕ АКТИВНОСТИ В РАЗЛИЧНЫХ ОРГАНАХ РАДУЖНОЙ ФОРЕЛИ PARASALMO MIKISS**

А.А.ЗАХАРЯН, А.А. Агаджанян

Հայաստանի կենսաբանական հանդես 2006 152-154

<http://www.flib.sci.am/eng/Biology/>

---

Article

**ОСОБЕННОСТИ ФЕРМЕНТОВ БИОСИНТЕЗА ПРОЛИНА В РАЗЛИЧНЫХ ОРГАНАХ ФОРЕЛИ**

**PARASALMO MIKISS**

А.А.ЗАХАРЯН, А.А.Агаджанян

Հայաստանի կենսաբանական հանդես 2005 123-126

<http://www.flib.sci.am/eng/Biology/>

---

Article

**ОБМЕН ПРОЛИНА СРАВНИТЕЛЬНО-ЭВОЛЮЦИОННОМ АСПЕКТЕ**

А. А. ЗАХАРЯН, Л. Р. ТУМАНЯН, А. А. АГАДЖАНИЯН, А.Х. АГАДЖАНИЯН, С.В. ЧУБАРЯН,

Э.А. МАНТАШЯН, Дж. Г. ГУКАСЯН, А.П. ГРИГОРЯН, М.С. МАРТИРОСЯН, З.С. МИНАСЯН,

А.М. КАРАПЕТЯН, Л.Г. АНАНЯН, Л.М. АРУТЮНЯН

Сисакяновские чтения 2005 208-218

---

Article

**ՊՐՈՒԼԻՆԻ ԿԱՏԱՐՈՒԻՉՄԻ ՖԵՐՄԵՆՏՆԵՐԸ ԵՎ ՆՐԱՆՑ ԱԿՏԻՎՈՒԹՅԱՆ ԿԱՐԳԱՎՈՐՈՒՄԸ ԻՇԽԱՆ**

**ՁԿԱՆ(SALMO ISCHCHAN) ՏԱՐԲԵՐ ՕՐԳԱՆՆԵՐՈՒՄ**

Ա.Ա.ՉԱԽԱՐՅԱՆ, Ա.Ա.ԱՂԱԶԱՆՅԱՆ

ԵՊՀ Գիտական տեղեկագիր, Բնական գիտություններ 2004 95-99

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

---

Conference

**АНТИДИАБЕТИЧЕСКИЕ И АНТИОКСИДАНТНЫЕ СВОЙСТВА INULA HELENIUM L.(ДЕВЯСИЛ ВЫСОКИЙ)**

Агаджанян А.А.

---

Conference

**Antidiabetic and antioxidant properties of herbal composition aqueous extract in a diabetic rabbit models**

Aghajanyan A., Tadevosyan A., Trchounian A.

---

Conference

**ԿԵՆՍԱԹԵՄԻԱՅԻ ՂԱՍԱԿԱՆԴՄԱՆ ԳՈՐԾԸՆԹՅՈՒՄ ԼԱԲՈՐԱՏՈՐ ԱՇԽԱՏԱՆՔՆԵՐԻ**

**ԱՐԴՅՈՒՆԱՎԵՏՈՒԹՅԱՆ ԲԱՐՁՐԱՑՄԱՆ ԺԱՍԱՆԱԿԱԿԻՑ ՄՈՏԵՑՈՒՄՆԵՐԸ**

Աղաջանյան Ա.Ա., Սեմերջյան Գ.Հ., Նիկոյան Ա.Ա., Թռչունյան Ա.Հ

---

Conference

**BIOCHEMICAL PROPERTIES OF STEVIA REBAUDIANA EXTRACT IN THE STRESS CONDITIONS**

AGHAJANYAN Anush, TRCHOUNIAN Armen

---

Conference

**HYDROPONIC STEVIA REBAUDIANA AS AN ALTERNATIVE PATH OF CULTIVATION: NOVEL**

**ANTIBACTERIAL PROPERTIES**

AGHAJANYAN Anush, GABRIELIAN Lilit, BABAKHANYAN Mikayel, HOVHANNISYAN Lusya,

TRCHOUNIAN Armen

---

Conference

**SYNTHESIS OF SILVER NANOPARTICLES BY ARTEMISIA ANNUA EXTRACT AND EVALUATION OF**

**THEIR ANTIBACTERIAL ACTIVITY**

Aghajanyan A, Trchounian A

---

*Conference*

**ЗЕЛЕНЬЙ СИНТЕЗ НАНОЧАСТИЦ СЕРЕБРА С ИСПОЛЬЗОВАНИЕМ ЭКСТРАКТА ARTEMISIA ANNUA L.**

A.A. Агаджанян, Л.С. Габриелян, А.А. Трчунян

---

*Conference*

**ANTIMICROBIAL, ANTIOXIDANT AND ANTI-HYPERGLYCEMIC ACTIVITY OF SOME PLANTS FROM ARMENIAN FLORA AND GROWING IN HYDROPONIC CONDITIONS: MODERN STUDIES AND FURTHER APPLICATIONS**

Sahakyan N., Ginovyan M., Aghajanyan A., Petrosyan M., Trchounian A.

---

*Conference*

**Silver Nanoparticles by Plant Stevia rebaudiana: Green Synthesis, Characterization and Antibacterial Activity**

A. Aghajanyan, A. Trchounian

---

*Conference*

**Antibacterial activity of silver nanoparticles biosynthesized from Stevia rebaudiana extract**

M. Timotina, A. Aghajanyan, L. Gabrielyan, K. Trchounian

---

*Patent*

**Հակաշաքարախտային պատրաստուկ <<Արմադ-2 >>**

Արամայիս Աղաջանյան, Անուշ Աղաջանյան

---

*Conference*

**Green synthesis of silver nanoparticles and their effect on the energy-dependent H<sup>+</sup> -fluxes across the bacterial membrane**

M. Timotina, T. Manutsyan, A. Aghajanyan, K. Trchounian, L. Gabrielyan

---

*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.

---

*Conference*

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

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

---

*Conference*

**The effect of silver nanoparticles synthesized using Spirulina biomass on the hydrogen yield and FoF1-ATPase activity in Escherichia coli.**

A. Harutyunyan, D. Hakobyan, A. Aghajanyan, L. Gabrielyan

---

*Conference*

**SPIRULINA-ի ԿԵՆՍԱԶՉԱՆԳՎԱԾԻՑ ԱՐԾԱԹԻ ՆԱՆՈՍԱՄԱՆԻԿԼԵՐԻ ՍԻՆԹԵԶԸ ԵՎ ԴՐԱՆՑ ՀԱԿԱԲԱԿՏԵՐԻԱԿԱՆ ԱԿՏԻՎՈՒԹՅՈՒՆԸ**

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

---

*Conference*

**Membranous mechanisms of antibacterial action of Spirulina-derived silver nanoparticles on kanamycin-resistant Escherichia coli**

A. Harutyunyan, D. Hakobyan, A. Aghajanyan, L. Gabrielyan

---

*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

---

*Conference*

**The cytotoxicity and antibacterial activity of Moringa oleifera-mediated silver nanoparticles**

M. Timotina, T. Manutsyan, M. Ginovyan, K. Trchounian, L. Gabrielyan, A. Aghajanyan

---

*Conference*

**Նոր մոտեցումներ միկրոօրգանիզմների կենսազանգվածից կենսաբանական ակտիվությամբ օժտված արծաթի նանոմասնիկների սինթեզի համար**

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

---

*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

---

*Conference*

**Biogenic Silver Nanoparticles Synthesized from Rumex obtusifolius as Effective Antibacterial Agents**

Anush Aghajanyan, Nune Petakchyan, Lilit Gabrielyan

---

*Conference*

**Antibacterial Properties of Medicinal Plants-Mediated Silver Nanoparticles**

M. Timotina, A. Aghajanyan, K. Trchounian, L. Gabrielyan

---

*Conference*

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

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

---

*Conference*

**Green synthesis of silver nanoparticles mediated by phycocyanin from Arthrospira platensis**

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

---