

# Lilit Sergey Gabrielyan

## Faculty of Biology

Chair of Biochemistry, Microbiology, and Biotechnology

Associate professor

☎ 45-19  
(374) 71-05-19

✉ lgabrielyan@ysu.am



## 🎓 Education

<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Biology Faculty, Department of Biophysics
<b>Date</b>	1994 - 1999
<b>Degree name</b>	Qualified specialist

## 🎓 Scientific Rank/degree

<b>Institution</b>	Yerevan State University
<b>Date</b>	2012
<b>Degree name</b>	Associate professor
<b>Specialty</b>	Biological sciences

<b>Institution</b>	Yerevan State University
<b>Date</b>	2006
<b>Degree name</b>	Candidate
<b>Specialty</b>	Biological sciences

## 🌐 Language skills

Հայերեն English Deutsch Русский

## 📁 Work experience

<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2022 till now
<b>Rank/degree</b>	Chairman of the Competition Committee, Academic Council, Biology Faculty

<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2016 till now
<b>Rank/degree</b>	Associate Professor, Department of Biochemistry, Microbiology and Biotechnology, Biology Faculty

<b>Institution</b>	Yerevan State University
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<b>Period of time</b>	2015 - 2016
<b>Rank/degree</b>	Associate Professor, Department of Microbiology, Microbe and Plants Biotechnology, Biology Faculty
<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2012 - 2015
<b>Rank/degree</b>	Associate Professor, Department of Biophysics, Biology Faculty
<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2007 - 2012
<b>Rank/degree</b>	Assistant Professor, Department of Biophysics, Biology Faculty
<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2006 - 2018
<b>Rank/degree</b>	Senior Scientific Researcher, Department of Biophysics, Biology Faculty
<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2003 - 2006
<b>Rank/degree</b>	Junior Scientific Researcher, Department of Biophysics, Biology Faculty
<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2001 - 2003
<b>Rank/degree</b>	Senior Lab. Assistant, Department of Biophysics, Biology Faculty

## Scientific interests

- Bioenergetics and biochemistry of phototrophic microorganisms (bio-hydrogen production; photo-fermentation; regulation of microbial growth; redox regulation; purple bacteria; green algae)
- biophysics and bioenergetics of biological membranes (membrane ion transfer, membrane potential, proton motive force, proton-translocating ATPase)
- nanotechnology (green synthesis of nanoparticles, physicochemical characteristics, antibacterial potential)

## Membership

<b>Institution</b>	Member of the Academic Council of the Faculty of Biology
<b>Period of time</b>	2022 till now

## State awards and honorary titles

2011 The “Best scientific work” award of The National Academy of Sciences of Armenia, World Armenian Congress and The Union of Armenians in Russia

2022 “Award for Excellence in Teaching at Yerevan State University” in the category of Natural Sciences

*Article*

**Gold nanoparticles activate hydrogenase synthesis and improve heterotrophic growth of *Ralstonia eutropha* H16**

Tatevik Manutsyan, Syuzanna Blbulyan, Anait Vassilian, Tatiana Semashko, Gayane Kirakosyan,

Lilit Gabrielyan, Karen Trchounian, Anna Poladyan

FEMS Microbiology Letters 2024 1-8

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*Article*

**Comparison of sulfur and nitrogen deprivation effects on photosynthetic pigments, polyphenols, photosystems activity and H<sub>2</sub> generation in *Chlorella vulgaris* and *Parachlorella kessleri***

Jemma Manoyan, Lilit Hakobyan, Tatsiana Samovich, Nikolai Kozel, Naira Sahakyan,

Hanna Muravitskaya, Vadim Demidchik, Lilit Gabrielyan

International Journal of Hydrogen Energy 2024 408-418

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*Article*

**Phototrophic microorganisms as the future of green biotechnology**

Lilit Hakobyan, Lilit Gabrielyan

Microbial Essentialism: An Industrial Prospective 2024 181-205

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*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

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*Article*

**СИНТЕЗ БИОВОДОРОДА КЛЕТКАМИ ЗЕЛЕННЫХ МИКРОВОДОРОСЛЕЙ И СПОСОБЫ ЕГО СТИМУЛЯЦИИ**

М. А. МЫСЛЕЙКО, М. С. ВЕЧЕРЕК, Дж. Г. МАНОЯН, Л. С. ГАБРИЕЛЯН, Т. В. САМОВИЧ, Н. В. КОЗЕЛ, А. О. МУРАВИЦКАЯ, В. В. ДЕМИДЧИК

Экспериментальная биология и биотехнология 2024 36-45

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*Article*

**EFFECT OF VARIOUS CARBON SOURCES ON THE GROWTH PROPERTIES AND MORPHOLOGY OF *SPIRULINA PLATENSIS***

A. A. HARUTYUNYAN, J. G. MANOYAN, L. R. HAMBARYAN, L. S. GABRIELIAN

Proceedings of the YSU B: Chemical and Biological Sciences 2023 164-171

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*Article*

**Growth characteristics, biohydrogen production and photochemical activity of photosystems in green microalgae *Parachlorella kessleri* exposed to nitrogen deprivation**

Jemma Manoyan, Tatsiana Samovich, Nikolai Kozel, Vadim Demidchik, Lilit Gabrielyan

International Journal of Hydrogen Energy 2022 16815-16823

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*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

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*Article*

**Ribes nigrum L. Extract-Mediated Green Synthesis and Antibacterial Action Mechanisms of Silver Nanoparticles**

Zaruhi Hovhannisyanyan, Marina Timotina, Jemma Manoyan, Lilit Gabrielyan, Margarit Petrosyan, Barbara Kusznierevich, Agnieszka Bartoszek, Claus Jacob, Mikayel Ginovyan, Karen Trchounian, Naira Sahakyan, Muhammad Jawad Nasim

Antibiotics 2022 1-17

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*Article*

**The prospects of brewery waste application in biohydrogen production by photofermentation of Rhodobacter sphaeroides.**

Lilit Hakobyan, Lilit Gabrielyan, Syuzanna Blbulyan, Armen Trchounian

International Journal of Hydrogen Energy 2021 289-296

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*Article*

**Antibacterial activity of royal jelly-mediated green synthesized silver nanoparticles**

Susanna Gevorgyan, Robin Schubert, Mkrtich Yeranossyan, Lilit Gabrielyan, Armen Trchounian, Kristina Lorenzen, Karen Trchounian

AMB Express 2021 51

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*Article*

**Перспективы применения отходов алкогольной промышленности в фотовыделении водорода пурпурной бактерией Rhodobacter sphaeroides**

Л. С. ГАБРИЕЛЯН

Journal of the Belarusian State University. Biology 2021 70-77

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*Article*

**THE ETHANOL INDUSTRY WASTE AS A VALUABLE FEEDSTOCK FOR HYDROGEN PHOTOPRODUCTION BY GREEN ALGAE CHLORELLA VULGARIS**

J.G. Manoyan, L.S. Gabrielyan

Proceedings of the YSU B: Chemical and Biological Sciences 2021 232-239

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*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

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*Article*

**Comparable antibacterial effects and action mechanisms of silver and iron oxide nanoparticles on Escherichia coli and Salmonella typhimurium**

Lilit Gabrielyan, Hamlet Badalyan, Vladimir Gevorgyan, Armen Trchounian

Scientific Reports 2020 13145(1-11)

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*Article*

**Growth properties and hydrogen yield in green microalga *Parachlorella kessleri*: Effects of low-intensity electromagnetic irradiation at the frequencies of 51.8 GHz and 53.0 GHz**

Jemma Manoyan, Lilit Gabrielyan, Vitaly Kalantaryan, Armen Trchounian

JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY B-BIOLOGY 2020 112016(1-6)

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*Article*

**Антибактериальные свойства наночастиц серебра и мембранотропные механизмы их действия.**

Л. С. ГАБРИЕЛЯН, А. А. ТРЧУНЯН

Journal of the Belarusian State University. Biology 2020 64-71

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*Article*

**Biohydrogen by *Rhodobacter sphaeroides* during photo-fermentation: Mixed vs. sole carbon sources enhance bacterial growth and H<sub>2</sub> production**

Lilit Hakobyan, Lilit Gabrielyan, Armen Trchounian

International Journal of Hydrogen Energy 2019 674-679

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*Article*

**Комбинирование ионов Mg(II) и Fe(II) как подход к повышению выхода водорода в *Rhodobacter sphaeroides*.**

Габриелян Л. С.

Հայաստանի Կենսաբանական հանդես 2019 60-66

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*Article*

**НАКОПЛЕНИЕ БЕЛКА И ЭКСПРЕССИЯ ГЕНА НИТРАТРЕДУКТАЗЫ В КЛЕТКАХ *SPIRULINA PLATENSIS* В ЗАВИСИМОСТИ ОТ СПЕКТРАЛЬНОГО СОСТАВА СВЕТОДИОДНОГО ИЗЛУЧЕНИЯ**

Н. В. КОЗЕЛ, М. С. РАДЮК, Т. В. САМОВИЧ, И. А. ДРЕМУК, Л. С. ГАБРИЕЛЯН

Proceedings of the National Academy of Sciences of Belarus. Biological Series 2019 180-189

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*Article*

**Antibacterial activities of transient metals nanoparticles and membranous mechanisms of action**

Lilit Gabrielyan, Armen Trchounian

World Journal of Microbiology and Biotechnology 2019 1-10

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*Article*

**Regulation of biohydrogen production by protonophores in novel green microalgae *Parachlorella kessleri***

Jemma Manoyan, Lilit Gabrielyan, Nikolai Kozel, Armen Trchounian

JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY B-BIOLOGY 2019 1-5

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*Article*

**ДЕЙСТВИЕ ЭЛЕКТРОМАГНИТНОГО ИЗЛУЧЕНИЯ С ЧАСТОТОЙ 51,8 И 53,0 ГГц НА РОСТ, СОДЕРЖАНИЕ ПИГМЕНТОВ, ФОТОВЫДЕЛЕНИЕ ВОДОРОДА И АКТИВНОСТЬ F0F1-АТФазы ПУРПУРНОЙ БАКТЕРИИ *Rhodobacter sphaeroides***

Л. Габриелян, В. Калантарян, А. Трчунян

Биофизика (Biophysics) 2018 468-474

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

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*Monograph*

**Metal Nanoparticles (eds. Y. Saylor, V. Irby): Chapter 4. Nanoparticles of Various Transition Metals and Their Applications as Antimicrobial Agents**

A. Trchounian, L. Gabrielyan, N. Mnatsakanyan

2018 161-211

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*Article*

**Characterization of light-dependent hydrogen production by new green microalga *Parachlorella kessleri* in various conditions**

Lilit Gabrielyan, Lusine Hakobyan, Armen Trchounian

JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY B-BIOLOGY 2017 207-210

<http://www.journals.elsevier.com/journal-of-photochemistry-and-photobiology-b-b...>

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*Article*

**Влияние режима освещения на выделение водорода фототрофными организмами**

Габриелян Л.С.

Биологический журнал Армении 2017 30-34

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

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*Article*

**Bio-hydrogen production by *Rhodobacter sphaeroides* during mixed carbon fermentation**

Hakobyan L.Y., Gabrielyan L.S, Trchounian A.H.

Biological Journal of Armenia 2017 110-113

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

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*Article*

**The distillers grains with solubles as a perspective substrate for obtaining biomass and producing bio-hydrogen by *Rhodobacter sphaeroides***

Harutyun Sargsyan, Lilit Gabrielyan, Armen Trchounian

BIOMASS & BIOENERGY 2016 90-94

<http://www.journals.elsevier.com/biomass-and-bioenergy>

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*Article*

**Novel approach of ethanol waste utilization: Biohydrogen production by mixed cultures of dark and photo-fermentative bacteria using distillers grains**

Harutyun Sargsyan, Karen Trchounian, Lilit Gabrielyan, Armen Trchounian

International Journal of Hydrogen Energy 2016 2377-2382

<http://www.journals.elsevier.com/international-journal-of-hydrogen-energy/>

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*Article*

**Biohydrogen production by purple non-sulfur bacteria *Rhodobacter sphaeroides*: Effect of low-intensity electromagnetic irradiation**

Lilit Gabrielyan, Harutyun Sargsyan, Armen Trchounian

JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY B-BIOLOGY 2016 592-596

<http://www.journals.elsevier.com/journal-of-photochemistry-and-photobiology-b-b...>

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*Article*

**The effect of Cu (I) and Cu (II) ions' low concentrations on growth, biohydrogen production and the FoF1-ATPase activity of *Rhodobacter sphaeroides***

Lilit Hakobyan, Harutyun Sargsyan, Lilit Gabrielyan, Armen Trchounian

International Journal of Hydrogen Energy 2016 16807-16812

*Article*

**Հայաստանի հանքային աղբյուրներից մեկուսացված *Rhodobacter sphaeroides* բակտերիաներում կենսաչրածնի ֆոտոարտադրության առանձնահատկությունները տարբեր վերականգնիչների և օքսիդիչների առկայությամբ**

Արսիսնե Պողոսյան, Լիլիթ Գաբրիելյան

ԵՊՀ ՌԻԳԸ գիտական հոդվածների ժողովածու 2016 102-107

<http://www.ysu.am/sss/hy>

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*Article*

**Comparative effects of Ni(II) and Cu(II) ions and their combinations on redox potential and hydrogen photoproduction by *Rhodobacter sphaeroides***

Lilit Gabrielyan, Lilit Hakobyan, Armen Trchounian

JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY B-BIOLOGY 2016 271-275

<http://www.journals.elsevier.com/journal-of-photochemistry-and-photobiology-b-b...>

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*Article*

**Novel properties of photofermentative biohydrogen production by purple bacteria *Rhodobacter sphaeroides*: effects of protonophores and inhibitors**

Lilit Gabrielyan, Harutyun Sargsyan, Armen Trchounian

Microbial Cell Factories 2015 131-141

<https://microbialcellfactories.biomedcentral.com/>

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*Article*

**Study of membrane properties of *Rhodobacter sphaeroides* under various growth conditions.**

Gabrielyan L., Hakobyan L., Sargsyan H., Trchounian A.

European Biophysics Journal with Biophysics Letters 2015 S88-S88

<https://link.springer.com/journal/249>

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*Article*

**Light-dark duration alternation effects on *Rhodobacter sphaeroides* growth, membrane properties and bio-hydrogen production in batch culture**

Harutyun Sargsyan, Lilit Gabrielyan, Lilit Hakobyan, Armen Trchounian

International Journal of Hydrogen Energy 2015 4084-4091

<http://www.journals.elsevier.com/international-journal-of-hydrogen-energy/>

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*Article*

**Regulation of hydrogen photoproduction in *Rhodobacter sphaeroides* batch culture by external oxidizers and reducers**

Lilit Gabrielyan, Harutyun Sargsyan, Armen Trchounian

Applied Energy 2014 20-25

<http://www.elsevier.com/locate/apenergy>

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*Article*

**Concentration-dependent effects of metronidazole, inhibiting nitrogenase, on hydrogen photoproduction and proton-translocating ATPase activity of *Rhodobacter sphaeroides***

Harutyun Sargsyan, Lilit Gabrielyan, Armen Trchounian

International Journal of Hydrogen Energy 2014 100-106

<http://www.journals.elsevier.com/international-journal-of-hydrogen-energy/>

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Article

**Համակարգչային տեխնոլոգիաների կիրառման առավելությունները և փորձը բուհական կենսաբանության դասավանդման ընթացքում**  
L.Ս. Գաբրիելյան, Ա.Ա. Փոլադյան, Ա.Հ. Թռչունյան  
Բնագետ 2014 139-141

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Article

**The Effect of Various Metal Ions on Bio-hydrogen Production and F0F1-ATPase Activity of Rhodobacter Sphaeroides**  
Lilit Hakobyan, Lilit Gabrielyan, Armen Trchounian  
NATO Science for Peace and Security Series C: Environmental Security, Black Sea Energy Resource Development and Hydrogen Energy Problems  
2013 165-177  
<http://www.springer.com/us/book/9789400761513>

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Conference

**New sources and optimized conditions for hydrogen production by Rhodobacter sphaeroides**  
Lilit Gabrielyan, Lilit Hakobyan, Harutyun Sargsyan, Armen Trchounian

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Conference

**Воздействие миллиметровых волн низкой интенсивности на росте фотовыделение H2 пурпурной бактерией Rhodobacter sphaeroides**  
Габриелян Л.С., Саргсян А.Г., Оганян В.А., Трчунян А.А.

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Conference

**Comparative Effects of Cu(II) and Ni(II) Ions Low Concentrations on Rhodobacter sphaeroides Growth Characteristics and Hydrogen Production**  
L. Gabrielyan, A. Trchounian

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Conference

**Photofermentative Hydrogen Production by Rhodobacter sphaeroides Using Ethanol Fermentation Waste**  
L.Gabrielyan, H. Sargsyan, A. Trchounian

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Conference

**Advantages of mixed carbon fermentation in biological hydrogen production by Rhodobacter sphaeroides**  
Lilit Hakobyan, Lilit Gabrielyan, Armen Trchounian

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Conference

**Окислительно-восстановительный потенциал и фотовыделение H2 Rhodobacter sphaeroides: влияние ингибитора нитрогеназной активности.**  
Габриелян Л.С.

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Conference

**Oxidizer and reducer different effects on proton-translocating FoF1-ATPase activity of Rhodobacter sphaeroides membrane vesicles**  
L. Gabrielyan, L. Hakobyan, A. Trchounian

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Conference



**Combination of dark- and photo-fermentative bacteria to enhance hydrogen production from ethanol (distillers grains) waste**

Harutyun Sargsyan, Lilit Gabrielyan, Armen Trchounian

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*Conference*

**Metabolic cross-talk between nitrogenase and hydrogenase in Rhodobacter sphaeroides during photofermentation and hydrogen production**

Lilit Gabrielyan, Armen Trchounian

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*Conference*

**Inhibitor studies on hydrogen photoproduction by Rhodobacter sphaeroides**

Lilit Gabrielyan, Harutyun Sargsyan, Armen Trchounian

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*Conference*

**Effect of iron and magnesium ions combination on hydrogen photoproduction by Rhodobacter sphaeroides**

L. Gabrielyan, A. Trchounian

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*Conference*

**Redox regulation of FoF1-ATPase activity of membrane vesicles of Rhodobacter sphaeroides**

Lilit Hakobyan, Lilit Gabrielyan, Armen Trchounian

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*Conference*

**Distiller's grains in bio-hydrogen production by Rhodobacter sphaeroides**

Lilit Gabrielyan, Harutyun Sargsyan, Armen Trchounian

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*Conference*

**Light/dark duration as a tool to enhance bio-hydrogen production by Rhodobacter sphaeroides**

Lilit Hakobyan, Lilit Gabrielyan, Armen Trchounian

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*Conference*

**Developing hydrogen production biotechnology: cheap substrates, effective strains and optimized fermentative conditions**

K.Trchounian, A. Poladyan, L. Gabrielyan, A. Trchounian

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*Conference*

**Effects of light/dark duration on hydrogen production by green microalgae Chlorella pyrenoidosa**

L. Gabrielyan, L. Hakobyan, A. Trchounian

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*Conference*

**BIOENERGETICS OF PHOTOFERMENTATION: EFFECT OF PROTONOPHORES ON MEMBRANE-ASSOCIATED ATPASE ACTIVITY IN RHODOBACTER SPHAEROIDES**

H. Sargsyan, L. Gabrielyan, A. Trchounian

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*Conference*

**Hydrogen cycle in purple non-sulfur bacteria: relationship between nitrogenase and hydrogenase**

L. Gabrielyan, H. Sargsyan, L. Hakobyan, A. Trchounian

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*Conference*

**Membrane conductance of Rhodobacter sphaeroides and the input of FOF1- ATPase in its formation**

L. Hakobyan, L. Gabrielyan, A. Trchounian

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*Conference*

**The role of FOF1-ATPase in biological hydrogen production by Rhodobacter sphaeroides during mixed carbon fermentation**

L. Hakobyan, L. Gabrielyan, A. Trchounian

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*Conference*

**ՄԱՆՐԵԼԵՐԻ ԿԵԼՍԱՏԵԽՆՈԼՈԳԻԱԼԵՐԻ ՄԱԳԻՍՏՐՈՍԱԿԱՆ ՆՈՐ ԾՐԱԳՐԵՐԻ ԴԱՍԱԿԱՆԴՄԱՆ ՍԵԹՈՂԱԲԱՆԱԿԱՆ ՍՈՏԵՑՈՒՄԵՐԸ ԵՐԵՎԱՆԻ ՊԵՏԱԿԱՆ ՀԱՄԱԼՍԱՐԱՆՈՒՄ**

Թռչունյան Կ.Ա., Գաբրիելյան Լ.Ս., Փոլադյան Ա.Ա., Թռչունյան Ա.Հ.

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*Conference*

**Iron Oxide Nanoparticles As Antimicrobial Agents**

L. Gabrielyan, A. Trchounian

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*Conference*

**NEW A PPROACH IN HYDROGEN ENERGY BIOTECHNOLOGY: EFFECTS OF SOLE AND MIXED CARBON SOURCES ON HYDROGEN YIELD IN PURPLE NONSULFUR PHOTOSYNTHETIC BACTERIA AND THEIR SIGNIFICANCE**

Lilit Gabrielyan, Armen Trchounian

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*Conference*

**Регуляция фотовыделения биоводорода пурпурной бактерией Rhodobacter sphaeroides**

Габриелян Л.С., Акопян Л.Ю., Трчунян А.А.

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*Conference*

**Enhancement of biohydrogen production by uncouplers in new green microalga Parachlorella kessleri.**

L. Gabrielyan, A. Trchounian

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*Conference*

**Աճեցման պայմանների ազդեցությունը Ավանի (Հայաստան) աղի հանքից մեկուսացված**

**Haloarcula japonica A2 շտամի ընդհանուր կարոտինոիդների արտադրության վրա**

Ազարյան Ա., Գաբրիելյան Լ., Փանոսյան Հ., Թռչունյան Ա.

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*Conference*

**Влияние электромагнитного излучения крайне высоких частот на состав**

**фотосинтетических пигментов и выделение водорода фототрофными микроорганизмами**

Габриелян Л.С., Блбулян С.С., Трчунян А.А.

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*Conference*

**Overcoming Antibiotic Resistance: Heavy Metal Nanoparticles as Antibacterial Agents against Antibiotic Resistant Escherichia coli Strains**

A. Trchounian, L. Gabrielyan, N. Sahakyan

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*Conference*

**Regulation of hydrogen yield in green microalga *Parachlorella kessleri* by physicochemical factors**

Alexandra Rubtsova, Lilit Gabrielyan, Armen Trchounian

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*Conference*

**Effect of growth conditions on the growth rate, photosynthetic pigments content and pH value of new green microalga *Parachlorella kessleri***

L. Gabrielyan, J. Manoyan, A. Trchounian

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*Conference*

**Optimization of growth conditions and substrates used as a tool altering the mode of metabolism of *Rhodobacter sphaeroides*: the role of membrane bound systems in the mechanisms of regulation.**

L. Hakobyan, L. Gabrielyan, A. Trchounian

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*Conference*

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

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

TRCHOUNIAN Armen

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*Conference*

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

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

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*Conference*

**Перспективы фотоферментативного выделения H<sub>2</sub> пурпурными бактериями при использовании углерод-содержащих продуктов.**

Л.С. Габриелян, Л.Ю. Акопян, А.А. Трчунян

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*Conference*

**Влияние условий культивирования на выделение H<sub>2</sub> зеленой микроводорослью *Parachlorella kessleri*.**

Л.С. Габриелян, Дж.Г. Маноян, А.А. Трчунян

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*Conference*

**Влияние стабилизатора на антибактериальные свойства наночастиц оксида железа.**

Тимотина М.И., Арутюнян А.А., Габриелян Л.С., Трчунян А.А.

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*Conference*

**Изучение антибактериального действия наночастиц серебра на *Salmonella typhimurium* MDC1759.**

Арутюнян А.А., Тимотина М.И., Габриелян Л.С., Трчунян А.А.

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*Conference*

**Перспективы применения отходов алкогольной промышленности в фотовыделении водорода пурпурной бактерией *Rhodobacter sphaeroides*.**

Габриелян Л.С.

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*Conference*

**Антибактериальные свойства наночастиц серебра и мембранотропные механизмы их действия.**

Габриелян Л.С., Трчунян А.А.

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*Conference*

**Antibacterial Activity and Action Mechanisms of Silver Nanoparticles against *Escherichia coli* Wild Type and Drug-resistant Strains and *Salmonella typhimurium***

L. Gabrielyan, N. Mnatsakanyan, A. Trchounian

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*Conference*

**Prospective Trends in Biotechnology for Biohydrogen**

Karen Trchounian, Anna Poladyan, Lilit Gabrielyan, Armen Trchounian

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**Effect of Electromagnetic Radiation on Growth Properties of Green Microalga *Parachlorella Kessleri***

J. Manoyan, L. Gabrielyan, A. Trchounian

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**Biological Hydrogen Generation by Purple Bacteria as a Promising Way of Industrial Waste Treatment**

L. Hakobyan, S. Blbulyan, L. Gabrielyan, A. Trchounian

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**Comparative Investigation of Silver Nanoparticles Action on Growth Peculiarities and Survival of Various Bacteria**

M. Timotina, A. Harutyunyan, L. Gabrielyan, A. Trchounian

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*Conference*

**Prospects of industrial and kitchen wastes application in H<sub>2</sub> production**

Mirzoyan S., Manoyan J., Gabrielyan L., Trchounian K.

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*Conference*

**Antibacterial activity of *Ribes nigrum* extract-mediated synthesized AgNPs**

Hovhannisyan Z., Manoyan J., Petrosyan M., Gabrielyan L., Sahakyan N.

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*Conference*

**Effect of various carbon sources on the growth properties and photosynthetic pigments content of *Spirulina platensis***

A. Harutyunyan, L. Hambaryan, L. Gabrielyan

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**Hydrogen generation in sulfur-deprived green microalgae *Chlorella vulgaris***

L. Hakobyan, J. Manoyan, E. Panosyan, L. Gabrielyan

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

L. Gabrielyan, J. Manoyan, L. Gabrielyan

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

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

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**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

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**THE PHYSICO-CHEMICAL AND ANTIMICROBIAL PROPERTIES OF SILVER NANOPARTICLES SYNTHESIZED BY *Spirulina* BIOMASS**

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

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Conference

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

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

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**The effect of silver nanoparticles synthesized using *Spirulina* biomass on the hydrogen yield and FoF<sub>1</sub>-ATPase activity in *Escherichia coli*.**

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

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Conference

**The case of industrial waste utilization by phototrophic microorganisms: incorporating active learning strategies for effective Biotechnology and Microbiology instruction at the graduate level**

L. Hakobyan, L. Gabrielyan

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Conference

**SPIRULINA-ի ԿԵՆՍԱԶԱՆԳՎԱԾԻՑ ԱՐԾԱԹԻ ՆԱՆՈՍԱՄԱՆԻԿՆԵՐԻ ՍԻՆԹԵԶԸ ԵՎ ԴՐԱՆՑ ՀԱԿԱԲԱԿՏԵՐԻԱԿԱՆ ԱԿՏԻՎՈՒԹՅՈՒՆԸ**

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

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Conference

**CHLORELLACEAE ԸՆՏԱՆԻՔԻ ԶՐԻՍՈՒՈՆԵՐԻ ԱՃՍԱՆ ԲՆՈՒԹԱԳՐԵՐԸ և ԿԵՆՍԱԶՐԱԾԻ ԱՐՏԱԴՐՈՒԹՅՈՒՆԸ ԿԵՆՍԱԾԻՆ ՏԱՐՐԵՐԻ ՍԱԿԱՎՈՒԹՅԱՆ ՊԱՅՄԱՆՆԵՐՈՒՄ**

Մանոյան Զ.Գ., Հակոբյան Լ.ՅոՆ., Մուրավիցկայա Ա.Օ., Դեմիրճիկ Վ.Վ., Գաբրիելյան Լ.Ս.

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Conference

**Оценка продукции биоводорода и цифровой анализ фенотипа водорослей семейства *Chlorellaceae* белорусских и армянских штаммов**

Муравицкая А. О., Светлаков В. И., Бондаренко В. Ю., Самович Т. В., Козел Н. В., Соколик А. И.,

Габриелян Л. С., Маноян Д. Г., Демидчик А. И.

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*Conference*

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

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

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*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

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*Conference*

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

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

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*Conference*

**Application of active learning strategies to improve student engagement**

L. Hakobyan, L. Gabrielyan

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*Conference*

**Enhancement of H<sub>2</sub> production by Chlorella vulgaris using potato peel waste**

J. Manoyan, L. Hakobyan, L. Gabrielyan

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