

# Syuzanna Suren Blbulyan

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## Faculty of Biology

Chair of Biochemistry, Microbiology, and Biotechnology

Lecturer on an hourly basis

## Education

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<b>Institution</b>	Russian-ARMENIA UNIVERSITY
<b>Faculty</b>	Faculty of Medical Biochemistry and Biotechnology
<b>Date</b>	2010 - 2015
<b>Degree name</b>	Applicant

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<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Faculty of Biology
<b>Date</b>	2007 - 2009
<b>Degree name</b>	Masters

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<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Faculty of Biology
<b>Date</b>	2003 - 2007
<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>	2019
<b>Degree name</b>	Candidate
<b>Specialty</b>	Biological sciences
<b>Scientific Supervisor</b>	Trchounian Armen Hambardzum
<b>Research Topic</b>	THE CHARACTERIZATION OF ATP-ASE ACTIVITY OF SOME BACTERIA UPON GLYCEROL AND GLUCOSE OXIDATION CONDITIONS

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## Language skills

Русский English

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## Work experience

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<b>Institution</b>	The RA Ministry of Education, Science, Culture and Sports Higher Education and Science Committee
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**Period of time** 2023 till now  
**Rank/degree** Assistant of the Chairman

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**Institution** Yerevan State University  
**Period of time** 2021 till now  
**Rank/degree** Assistant professor at the chair

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**Institution** THE MINISTRY OF EDUCATION, SCIENCE, CULTURE AND SPORTS OF THE  
REPUBLIC OF ARMENIA  
**Period of time** 2021 - 2023  
**Rank/degree** Assistant of Deputy Minister

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**Institution** Yerevan State University  
**Period of time** 2012 - 2021  
**Rank/degree** senior laboratory assistant, secretary

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**Institution** Russian-Armenian University  
**Period of time** 2010 - 2012  
**Rank/degree** laboratory assistant

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**Institution** Yerevan State University  
**Period of time** 2008 - 2009  
**Rank/degree** laboratory assistant

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## Publications

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*Article*

**L-amino acids affect the hydrogenase activity and growth of *Ralstonia eutropha* H16**

Meri Iskandaryan, Syuzanna Blbulyan, Mayramik Sahakyan, Anait Vassilian, Karen Trchounian,

Anna Poladyan

AMB Express 2023 33

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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*

**BIOMASS AND BIOHYDROGEN PRODUCTION BY *ESCHERICHIA COLI* UPON CONSUMPTION OF MEAT INDUSTRY AND LIGNOCELLULOSIC CORN WASTES MIXTURE**

Syuzanna Blbulyan, Satenik Mirzoyan, Karen Trchounian, Anna Poladyan

Proceedings of the YSU B: Chemical and Biological Sciences 2021 224-231

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*Article*

**Application of organic waste glycerol to produce crude extracts of bacterial cells and microbial hydrogenase—the anode enzymes of bio-electrochemical systems**

Anna Poladyan, Syuzanna Blbulyan, Tatiana Semashko, Volha Dziameshka, Liudmila Zhukouskaya,

Armen Trchounian

FEMS Microbiology Letters 2020 1-7

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*Article*

**Growth of the facultative chemolithoautotroph *Ralstonia eutropha* on organic waste materials: Growth characteristics, redox regulation and hydrogenase activity**

Anna Poladyan, Syuzanna Blbulyan, Mayramik Sahakyan, Oliver Lenz, Armen Trchounian

Microbial Cell Factories 2019 1-13

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*Article*

**GLUCOSE CONCENTRATION DEPENDENT ATP-ASE ACTIVITY IN ESCHERICHIA COLI DURING FERMENTATION AND THE ROLE OF HYDROGENASE 4**

S.S.Blbulyan

Հայաստանի կենսաբանական հանդես 2016 85-91

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

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*Article*

**Redox stress in geobacilli from geothermal springs: Phenomenon and membrane-associated response mechanisms**

Astghik Ghazaryan, Syuzanna Blbulyan, Anna Poladyan, Armen Trchounian

Bioelectrochemistry 2015 1-6

<http://www.journals.elsevier.com/bioelectrochemistry>

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*Article*

**Impact of membrane-associated hydrogenases on the FOF1-ATPase in *Escherichia coli* during glycerol and mixed carbon fermentation: ATPase activity and its inhibition by N,N0-dicyclohexylcarbodiimide in the mutants lacking hydrogenases**

Syuzanna Blbulyan, Armen Trchounian

Archives of Biochemistry and Biophysics 2015 67-72

<https://www.journals.elsevier.com/archives-of-biochemistry-and-biophysics/>

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*Article*

**Hydrogenase activity and proton-motive force generation by *Escherichia coli* during glycerol fermentation**

Karen Trchounian, Syuzanna Blbulyan, Armen Trchounian

Journal of Bioenergetics and Biomembranes 2013 253-260

<http://www.springer.com/chemistry/organic+chemistry/journal/10863>

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*Article*

**Changes in Ion Transport through Membranes, ATPase Activity and Antibiotics Effects in *Enterococcus hirae* after Low Intensity Electromagnetic Irradiation of 51.8 and 53.0 GHz Frequencies**

H. Torgomyan, S. Blbulyan, A. Trchounian, V. Ohanyan

Biophysics 2013 524-529

<http://pleiades.online/en/journal/biophys/>

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*Conference*

**The Combined Effects of Electromagnetic Radiation and Low Concentration of Sulfur Dioxide on Growth and Survival of Wine Lactic Acid Bacteria**

D. Soghomonyan, S. Blbulyan, M. Bagdasaryan, A. Trchounian

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*Conference*

**ESCHERICHIA COLI FOF1-ATPASE ACTIVITY AND ITS COOPERATION WITH HYDROGENASE4 (Hyf) DEPEND ON GLUCOSE CONCENTRATION**

S. Blbulyan, A. Trchounian

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*Conference*

**Glucose concentrations influence on activities of FoF1 ATPase and hydrogenase 4 in Escherichia coli**

A. Poladyan, M. Sahakyan, S. Blbulyan, K. Trchounian, A. Trchounian

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*Conference*

**Influence of glucose concentration on Escherichia coli FOF1-ATPase and hydrogenase 4 (hyf) enzymes activities**

Syuzanna Blbulyan, Armen Trchounian

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*Conference*

**Growth and Bioenergetics Properties of Facultative Chemolithoautotrophic Bacterium Ralstonia Eutropha Upon Organic Waste Materials Utilization**

S. Blbulyan, M. Sahakyan, A. Poladyan, A. Trchounian

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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*

**Redox regulation of the growth, hydrogenase activity and bioenergetic properties of Ralstonia eutropha upon different carbon source utilization**

S. Blbulyan, M. Sahakyan, A. Poladyan, A. Trchounian

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*Conference*

**Lignocellulosic waste as feedstock for bacterial biomass production: enhanced hydrogen evolution and hydrogenase activity**

Anna Poladyan, Syuzanna Blbulyan, Mayramik Sahakyan, Armen Trchounian

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*Conference*

**H<sub>2</sub> - Oxidizing Activity of Escherichia coli Upon Utilization of Different Waste Components**

A. Poladyan, L. Baghdasaryan, S. Blbulyan, A. Trchounian

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*Conference*

**Ethanol Affected Bacterial Growth and molecular Hydrogen Production by Escherichia coli Upon Fermentation of Glycerol**

S. Blbulyan, A. Poladyan, A. Trchounian

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*Conference*

**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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*Conference***Biomass and biohydrogen production by Escherichia coli upon consumption of meat and lignocellulosic waste mixture**

Syuzanna Blbulyan, Anna Poladyan, Satenik Mirzoyan, Liana Mnatsakanyan, Karen Trchounian

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*Conference***WINE GRAPE WASTE APPLICATION FOR ESCHERICHIA COLI BIOMASS AND H<sub>2</sub> PRODUCTION**

Syuzanna Blbulyan, Lusine Baghdasaryan, Satenik Mirzoyan, Anahit Vassilian, Tatiana Semashko,

Anna Poladyan

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