

# Meri Karen Iskandaryan

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## Research Institute of Biology

Group for Biochemical Conversion of Organic Waste and Microbiological Production  
Junior Researcher

## Education

<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Biology / Biochemistry, Microbiology and Biotechnology
<b>Date</b>	2021 - 2024
<b>Degree name</b>	PhD student

<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Biology / Biochemistry, Microbiology and Biotechnology
<b>Date</b>	2019 - 2021
<b>Degree name</b>	Masters

<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Biology / Biochemistry, Microbiology and Biotechnology
<b>Date</b>	2015 - 2019
<b>Degree name</b>	Bachelor

## Scientific Rank/degree

<b>Institution</b>	Yerevan State University
<b>Date</b>	2025
<b>Degree name</b>	Candidate
<b>Specialty</b>	Biological sciences
<b>Scientific Supervisor</b>	Anna Poladyan
<b>Research Topic</b>	The investigation of H <sub>2</sub> -oxidizing Hydrogenase activity and bioenergetic parameters of Cupriavidus necator H16 bacterium under different conditions of heterotrophic growth

## Language skills

Հայերեն Russian English

## Work experience

<b>Institution</b>	Yerevan State University
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<b>Period of time</b>	2023 till now
<b>Rank/degree</b>	Junior researcher

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## Publications

### *Article*

#### **A novel, cost-effective approach for the production of hydrogenase enzymes and molecular hydrogen from recycled whey-based by-products**

Meri Iskandaryan, Lusine Baghdasaryan, Ela Minasyan, Karen Trchounian, Antranikian Garabed,

Anna Poladyan

International Journal of Hydrogen Energy 2025 1191-1202

### *Article*

#### **Development of an H2 fuel cell electrochemical system powered by Escherichia coli cells**

Torgom Seferyan, Lusine Baghdasaryan, Meri Iskandaryan, Karen Trchounian, Anna Poladyan

Electrochemistry Communications 2024 107746

### *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

### *Article*

#### **Valorization of whey-based side streams for microbial biomass, molecular hydrogen, and hydrogenase production**

Anna Poladyan, Karen Trchounian, Ela Minasyan, Meri Iskandaryan, Hayarpi Aghekyan, Sargis Aghayan,

Avetis Tsaturyan, Ani Paloyan, Garabed Antranikian, Lev Khoyetsyan

Applied Microbiology and Biotechnology 2023 4683-4696

### *Article*

#### **THE ROLE OF GLYCINE-BETAIN IN THE GROWTH AND HYDROGENASES ACTIVITY OF RALSTONIA EUTROPHA H16**

Meri K. Iskandaryan

Proceedings of the YSU B: Chemical and Biological Sciences 2023 154-163

### *Article*

#### **THE ROLE OF THIOL GROUPS IN THE EXPRESSION OF THE ACTIVITY OF ARGINASE I AND II ISOENZYMES**

M. K. ISKANDARYAN, E. Kh. BARSEGHYAN

Proceedings of the YSU B: Chemical and Biological Sciences 2021 248-254

### *Conference*

#### **The valorization of whey-based side-streams for microbial biomass, hydrogen and hydrogenase enzyme production**

Anna Poladyan, Hayarpi Aghekyan, Ella Minasyan, Karen Trchounian, Ani Paloyan, Sargis Aghayan, Garabed Antranikian, Meri Iskandaryan, Diana Ghevondyan

*Conference*

**Characteristic effects of gold nanoparticles on growth and H<sub>2</sub> metabolism of Ralstonia eutropha H16 and Escherichia coli**

Anna Poladyan, Tatev Manutsyan, Meri Iskandaryan, Syuzanna Blbulyan, Anait Vassilian,

Tatiana Semashko

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*Conference*

**The role of glycine-betaine in the hydrogen metabolism of Ralstonia eutropha H16**

Meri Iskandaryan, Liana Mnatsakanyan, Anna Poladyan

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*Conference*

**A NOVEL COST-EFFECTIVE APPROACH FOR PRODUCTION OF HYDROGENASE ENZYMES AND MOLECULAR HYDROGEN FROM WHEY-BASED BY-PRODUCTS**

Anna Poladyan, Meri Iskandaryan, Ofelya Karapetyan, Ela Minasyan, Anait Vassilian, Karen Trchounian,

Garabed Anatranikian

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*Conference*

**The impact of oxygen-tolerant hydrogenases on cell energetics of Cupriavidus necator H16**

Meri Iskandaryan, Anna Poladyan

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*Conference*

**Evaluation of an H<sub>2</sub> fuel cell electrochemical system powered by microbial cells**

M. Iskandaryan, A. Poladyan, L. Baghdasaryan, T. Seferyan

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*Conference*

**Effect of glycine on the heterotrophic growth and [NiFe]-hydrogenase activity of Cupriavidus necator H16**

M. Iskandaryan, J. Schoknecht, O. Lenz, A. Poladyan

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