

Meri Karen Iskandaryan

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Research Institute of Biology

Group for Biochemical Conversion of Organic Waste and Microbiological Production

Junior Researcher

Education

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

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

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

Scientific Rank/degree

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

Language skills

Հայերեն Русский English

Work experience

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

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-BETAINE 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 H₂ metabolism of *Ralstonia eutropha* H16 and *Escherichia coli*

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

Tatiana Semashko

Conference

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

Meri Iskandaryan, Liana Mnatsakanyan, Anna Poladyan

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 Anatanikian

Conference

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

Meri Iskandaryan, Anna Poladyan

Conference

Evaluation of an H₂ fuel cell electrochemical system powered by microbial cells

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

Conference

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

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