

Lusine Hovhannes Melkonyan

✉ lusinemelkonyan@ysu.am



Institute of Pharmacy

Chair of Pharmaceutical Chemistry and Pharmacognosy

Assistant

Education

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| Institution | Armenian State Pedagogical University after Kh. Abovyan |
| Faculty | Faculty of Biology and Chemistry, Department of Bio-ecology |
| Date | 2000 - 2005 |
| Degree name | Qualified specialist |

Scientific Rank/degree

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|------------------------------|---|
| Institution | SPC "Armbiotechnology" NAS RA SNPO |
| Date | 2014 |
| Degree name | Candidate |
| Specialty | Biological sciences |
| Scientific Supervisor | Avetisova Gayane Ye. |
| Research Topic | "Obtaining of Highly Active Strain-Producers of L-alanine and Development of Biosynthesis Technology" |

Language skills

English

Work experience

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|-----------------------|-------------------------------------|
| Institution | SPC "Armbiotechnology" NAS RA, SNPO |
| Period of time | 2018 till now |
| Rank/degree | Senior Researcher |

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| Institution | Institute of Pharmacy, Yerevan State University |
| Period of time | 2017 till now |
| Rank/degree | Assistant Professor |

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| Institution | Armenian State Pedagogical University after Kh. Abovyan, Chair of Human and Animals Physiology |
| Period of time | 2015 - 2016 |
| Rank/degree | Lecturer |

Participation in international conferences and seminars

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| 17/09/2022 - 03/11/2022 | “21T-2I229: Development of a New Multifunctional Biotechnological Preparation as a Biofertilizer, Biostimulant, Biopesticide”, 2021-2024 (funded by the Science Committee of the Ministry of Education, Science, Culture and Sport RA), Project coordinator) Laboratório Nacional de Energia e Geologia, I.P. (LNEG), Lisbon Portugal |
| 02/09/2022 - 16/09/2022 | “BRISK2” Transnational Access (TA) (Grant Agreement nº 731101 - Horizon 2020 project funded by the European Commission), “Lneg4: Advantages of Mutualistic Relationships between Microalgae and Nitrogen-Fixing Bacteria”, grantee Laboratório Nacional de Energia e Geologia, I.P. (LNEG), Lisbon Portugal |
| 16/06/2019 - 18/08/2019 | “Phoenix (H2020-MSCA-RISE-2015 Grant Agreement NUMBER 690925, secondee) Laboratório Nacional de Energia e Geologia, I.P. (LNEG), Lisbon Portugal |
| 19/07/2018 - 21/08/2018 | “Phoenix (H2020-MSCA-RISE-2015 Grant Agreement NUMBER 690925, secondee) Laboratório Nacional de Energia e Geologia, I.P. (LNEG), Lisbon Portugal |
| 07/07/2018 - 14/07/2018 | 43rd FEBS Congress (“FEBS Bursary” grantee) - Czech Republic (the) |
| 09/07/2017 - 13/07/2017 | 7th Congress of European Microbiologists (FEMS) (#203719 “Short Term Conference and Travel Grant” funded by Calouste Gulbenkian Foundation, grantee) - Spain |
| 13/12/2014 - 19/12/2014 | International Conference “Translational Biocatalysis” (#137270 “Short Term Conference and Travel Grant” funded by Calouste Gulbenkian Foundation, grantee) - United Kingdom of Great Britain and Northern Ireland (the) |

Membership

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|-----------------------|---|
| Institution | Federation of European Biochemical Societies (FEBS) |
| Period of time | 2017 till now |
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| Institution | Federation of European Microbiological Societies (FEMS) |
| Period of time | 2016 till now |
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| Institution | Armenian Association of Biochemists |

Period of time 2017 till now

Institution Armenian Microbiological Association

Period of time 2016 till now

Institution Biotechnological Association of Armenia

Period of time 2009 till now

Other information

2005-2009: Post-graduate student (SPC "Armbiotechnology" NAS RA SNPO)

Publications

Article

Obtaining Osmo resistant Mutants in Nitrogen Fixing Bacteria Isolated from Saline Soils

Keleshyan S. K., Karapetyan Z. V., Toplaghalsyan A. G., Avetisova G. Y., Melkonyan L. H.,

Vardanyan A. A., Ghochikyan V. T.

Current Microbiology 2022 251

Article

Brevibacterium flavum մանրէի հիման վրա L-տրիպտոֆանի շտամ-արտադրիչի ստացման գենետիկասելեկցիոն մոտեցումները

Ավետիսովա Գ., Մելքոնյան Լ., Ծառուկյան Գ., Ղոչիկյան Վ., Զելեշյան Ս., Կարապետյան Ժ.,

Թովլաղալցյան Ա.

ՀԻՄՆԱՐԱՐ ԵՎ ԿԻՐԱՌԱԿԱՆ ԳԻՏԱԿԱՆ ՀԵՏԱԶՈՏՈՒԹՅՈՒՆՆԵՐ. ԱՐԴԻԱԿԱՆ ԽՆԴԻՐՆԵՐ ԵՎ

ՁԵՆՔԲԵՐՈՒՄՆԵՐ

2022 173-187

Article

Microbial approaches for amino acids production

A. Paloyan, L. Melkonyan, G. Avetisova

Microbial Syntrophy-Mediated Eco-enterprising 2022 177-209

Article

Biostimulant and biopesticide potential of microalgae growing in piggery wastewater

Alice Ferreira, Lusine Melkonyan, Sofia Carapinha, Belina Ribeiro, Daniel Figueiredo, Gayane Avetisova,

Luisa Gouveia

Environmental Advances 2021 100062

Article

Co-cultivation of L-tryptophan-producing strain Brevibacterium flavum and Azotobacter vinelandii as an alternative method for indole-3-acetic acid production

Avetisova G., Melkonyan L., Toplaghalsyan A., Tsarukyan G., Keleshyan S., Karapetyan Z.,

Ghochikyan V.

BIOTECHNOLOGY: SCIENCE AND PRACTICE, INNOVATION AND BUSINESS 2021 6-10

Article

Influence of Vitamins on L-Tryptophan Production by *Brevibacterium flavum*

Melkonyan L., Avetisova G., Tsarukyan G., Keleshyan S., Karapetyan Z., Toplaghalsyan A.,

Ghochikyan V.

BIOTECHNOLOGY: SCIENCE AND PRACTICE, INNOVATION AND BUSINESS 2021 82-86

Article

Production and properties of a novel raw starch hydrolyzing α amylase from *Bacillus amyloliquefaciens* MDC1974

Paloyan A.M., Melkonyan L.H., Sargsyan A.S., Mkhitarayan A.V., Dyukova K.G., Hambardzumyan A.A.

Electronic Journal of Natural Sciences of NAS RA 2020 4-11

Article

***Scenedesmus obliquus* microalga-based biorefinery - from brewery effluent to bioactive compounds, biofuels and biofertilizers - aiming a circular bioeconomy**

A. Ferreira, B. Ribeiro, M.L.A. Tavares, J. Vladic, S. Vidovic, D. Cvetkovic, L. Melkonyan, G. Avetisova, V. Goginyan, L. Gouveia

Biofuels, Bioproducts and Biorefining 2019 1169-1186

Article

Характеристика микрофлоры засоленных почв Армении

С.К. Келешян, Ж. В. Карапетян, А.Г. Топлакалцян, Г.Е. Аветисова, Л.О. Мелконян, В.Т. Кочилян

Хранение и переработка сельхозсырья 2019 76-85

Book

Combining Microalgae-Based Wastewater Treatment with Biofuel and Bio-Based Production in the Frame of a Biorefinery. In: Hallmann A., Rampelotto P. (eds) Grand Challenges in Algae Biotechnology. Grand Challenges in Biology and Biotechnology

Alice Ferreira, Alberto Reis, Senka Vidovic, Jelena Vladic, Spyros Gkelis, Lusine Melkonyan,

Gayane Avetisova, Roberta Congestri, Gabriel Ación, Raul Muñoz, Pierre Collet, Luisa Gouveia

2019 591

Article

Новое биоудобрение «Азоцеовит-1» для органического овощеводства и его испытание на посадках перца и баклажана в Армении

К.М. Сарикян, Г.Ж. Саргсян, Г.Е. Аветисова, Л.О. Мелконян

Неделя науки в Крутах -2017 2017 264-271

Article

НОВЫЙ БИОПРЕПАРАТ «ЭКОБИОФИД+» ДЛЯ ОРГАНИЧЕСКОГО ЗЕМЛЕДЕЛИЯ И ЕГО ИСПЫТАНИЕ НА ПОСАДКАХ ТОМАТОВ В АРМЕНИИ

Мелконян Л.О., Степанян С.Х., Аветисова Г.Е., Сарикян К. М.

INNOVATIVE APPROACHES AND PERSPECTIVE IDEAS OF YOUNG SCIENTISTS IN AGRARIAN SCIENCES. The proceedings of the international scientific-practical conference of young scientist
2017 384-387

Article

Influence of Glutamate Dehydrogenase Activity on L-Proline Synthesis

S.K. Keleshyan, Zh.V. Karapetyan, A.Kh. Chakhalyan, N.A. Hovhannisyanyan, G.Ye. Avetisova,

Article

Изучение ингибирующих свойств новых небелковых аминокислот и отбор эффективных аналогов L-аминокислот для селекции высокоактивных штаммов-продуцентов

А.Х. Чахалян, С.К. Келешян, Ж.В. Карапетян, А.Г. Давтян, Г.Е. Аветисова, Л.О. Мелконян,
А.С. Дадаян, А.С. Сагиян

Прикладная биохимия и микробиология (Applied Biochemistry and Microbiology) 2016 62-67

http://elibrary.ru/title_about.asp?id=7955

Article

The nitrogen-fixing strain for biopreparation

L.H. Melkonyan, G.H. Tepanosyan, G.Ye. Avetisova, A.Kh. Chakhalyan, S.Gh. Keleshyan,

Zh.V. Karapetyan

Biological Journal of Armenia 2016 65-68

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

Conference

BIOTECHNOLOGICAL APPROACHES FOR OBTAINING OF NEW COMPLEX BIOPREPARATION FOR ORGANIC AGRICULTURE

L. Melkonyan, G. Avetisova, A. Chakhalyan, S. Keleshyan, Zh. Karapetyan, S. Stepanyan,

A. Toplaghalsyan, A. Saghyan

Conference

PURIFICATION AND CHARACTERIZATION OF A-AMYLASE FROM BACILLUS AMYLOLIQUIFACIENS

A. Paloyan, L. Melkonyan, A. Mkhitarian, A. Hambardzumyan, A. Saghyan

Conference

Substrate specificity of α -amylase isolated from *B. amyloliquefaciens* strain MDC1974

A. Paloyan, L. Melkonyan, A. Sargsyan, A. Mkhitarian, A. Hambardzumyan

Conference

Effect of " Ecobiofeed+ " Biopreparation on Eggplant (*Solanum Melongena* S.)

G. Avetisova, L. Melkonyan, S. Stepanyan, K. Sarikyan, V. Ghochikyan, S. Keleshyan, Zh. Karapetyan,

A. Toplaghalsyan

Conference

Screening of lactic acid bacteria with a wide spectrum of antifungal activity

A. Toplaghalsyan, S. Keleshyan, Zh. Karapetyan, N. Khachaturian, G. Avetisova, L. Melkonyan,

S. Stepanyan

Conference

Optimization of fermentation condition for α -amylase production

A. Paloyan, L. Melkonyan, A. Sargsyan, T. Arakelyan, M. Izmailyan, G. Avetisova, A. Hambardzumyan,

A. Saghyan

Conference

Study of some metals effect on α -amylase activity of *Bacillus amyloliquefaciens* MDC 1974

strain

L. Melkonyan, A. Paloyan, A. Hambardzumyan, G. Avetisova, A. Mkhitarian, A. Sargsyan, S. Stepanyan, S. Arabachyan, A. Saghyan

*Conference***Study of synthesis of amino acids by Azotobacter vinilandii AV1 strain**

G. Avetisova, L. Melkonyan, A. Paloyan, V. Ghochikyan, A. Tsaturyan, S. Keleshyan, Z. Karapetyan, A. Toplaghalsyan

*Conference***Optimization of fermentation conditions for histidine producers resistant to non-protein amino acids**

A. Toplaghalsyan, S. Keleshyan, Z. Karapetyan, G. Avetisova, L. Melkonyan, A. Vardanyan

*Conference***New α -amylase from Bacillus sp. MDC 3500 strain**

A. Paloyan, L. Melkonyan, A. Hambardzumyan, A. Mkhitarian, G. Avetisova

*Conference***Industrial wastewater-grown Scenedesmus obliquus biomass-to-fuels and biofertilizers production: an integrative approach**

A. Ferreira, B. Ribeiro, J. Vlacic, S. Vidovic, D. Cvetkovic, L. Melkonyan, G. Avetisova, A.F. Ferreira, A. Reis, L. Gouveia

*Conference***Tiny Microalgae For Huge Applications. Biorefinery Approach**

Alice Ferreira, Sofia Carapinha, Jelena Vlacic, Senka Vidovic, Dragoljub Cvetkovic, Lusine Melkonyan, Gayane Avetisova, Luisa Gouveia

*Conference***Agrobacterium sp. as nitrogen-fixing bacteria: effect of osmo-resistant strains on the growth of plants in saline soils of Armenia**

S. Keleshyan, Zh. Karapetyan, A. Toplaghalsyan, G. Avetisova, L. Melkonyan, G. Tsarukyan, V. Ghochikyan

*Conference***New α -amylase with potential to commercialize**

A. Paloyan, L. Melkonyan, A. Mkhitarian, K. Dyukova, A. Hambardzumyan

*Conference***ASSESSMENT OF BIOSTIMULANT AND BIOPESTICIDE POTENTIAL OF MICROALGAE FOLLOWING PIGGERY WASTEWATER TREATMENT**

A. Ferreira, L. Melkonyan, S. Carapinha, B. Ribeiro, D. Figueiredo, G. Avetisova, L. Gouveia

*Conference***Determination of Enzymatic Activity of Nitrogen-Fixing Bacteria Isolated from Saline Soils of Armenia**

Toplaghalsyan A., Keleshyan S., Karapetyan Z., Avetisova G., Melkonyan L., Tsarukyan G.

Conference

BACTERIAS FIJADORAS DE NITRÓGENO COMO ALTERNATIVA AL USO DE FERTILIZANTES QUÍMICOS PARA LA PRODUCCIÓN DE *Chlorella vulgaris*

Ana Sánchez-Zurano, Silvia Villaró Cos, Daniel Figueiredo, Lusiné Melkonian, Francisco Gabriel Acién, Tomás Lafarga, Luísa Gouveia

Conference

ISOLATION AND CHARACTERIZATION OF NITROGEN-FIXING BACTERIA TO CREATE A NEW MULTIFUNCTIONAL BIOTECHNOLOGICAL MEAN FOR ORGANIC AGRICULTURE

Lusine Melkonyan, Zhaneta Karapetyan, Anna Toplaghaltsyan, Luisa Gouveia, Gayane Avetisova

Conference

CREATING A CONSORTIUM OF NITROGEN-FIXING BACTERIUM AND MICROALGA FOR HEALTHIER ORGANIC FOOD

Lusine Melkonyan, Alice Ferreira, Carolina Vela Bastos, Daniel Figueiredo, Gayane Avetisova, Zhaneta Karapetyan, Anna Toplaghaltsyan, Luisa Gouveia

Conference

MICROBIAL PRODUCTION OF THE ESSENTIAL AMINO ACID L-TRYPTOPHAN FOR FOOD AND NUTRITION

Gayane Avetisova, Vahe Ghochikyan, Gevorg Tsarukyan, Susanna Keleshyan, Zhaneta Karapetyan, Anna Toplaghaltsyan, Lusine Melkonyan

Conference

GROWTH DYNAMICS OF NITROGEN-FIXING BACTERIA AT INCREASED SALINITY

Toplaghaltsyan A., Karapetyan Zh., Keleshyan S., Avetisova G., Melkonyan L., Tsarukyan G., Ghochikyan V.

Conference

ENZYMATIC ACTIVITY OF NITROGEN-FIXING SOIL BACTERIA

Toplaghaltsyan A., Karapetyan Zh., Keleshyan S., Avetisova G., Melkonyan L., Tsarukyan G., Ghochikyan V.
