

# Ashot S Saghyan

## Institute of Pharmacy

Ֆարմաքիայի և ֆարմակագնոզիայի ամբիոն

Professor

☎ 34-10

✉ saghyan@ysu.am



## 🎓 Education

<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Faculty of Chemistry
<b>Date</b>	1973 - 1978
<b>Degree name</b>	Qualified specialist

## 🎓 Scientific Rank/degree

<b>Institution</b>	Yerevan State University
<b>Date</b>	2003
<b>Degree name</b>	Professor
<b>Specialty</b>	Chemical sciences

<b>Institution</b>	Yerevan State University
<b>Date</b>	1997
<b>Degree name</b>	Doctor
<b>Specialty</b>	Chemical sciences
<b>Research Topic</b>	Asymmetric synthesis of non-proteinogenic (S)- and (R)- alpha amino acids via chiral dehydroamino acids complex of Co <sup>3+</sup> and Ni <sup>2+</sup>

<b>Institution</b>	A.N.Nesmeyanov Institute of Organoelement Compounds of Russian Academy of Sciences
<b>Date</b>	1985
<b>Degree name</b>	Postgraduate
<b>Scientific Supervisor</b>	Yu. N Belokon
<b>Research Topic</b>	Synthesis and reactivity of complexes of Schiff bases of dehydroamino acids with Co(III) and Ni(II) ions

## 🌐 Language skills

Русский English

## 📖 Publications

Article

**Synthesis of enantiomerically enriched  $\beta$ -N-amino (S)- $\alpha$ -alanine analogs via sequential reactions on a chiral Ni(ii) complex**

Emma A. Khachatryan, Lala A. Stepanyan, Hasmik R. Gevorgyan, Armen S. Sargsyan, Anahit M. Hovhannisyan, Anna F. Mkrtchyan, Andrei V. Malkov, Ashot S. Saghyan  
Organic & Biomolecular Chemistry 2026 2026

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*Article*

**Binding of G-quadruplex DNA and serum albumins by synthetic non-proteinogenic amino acids: Implications for c-Myc-related anticancer activity and drug delivery**

Hayarpi Simonyan, Satenik Petrosyan, Lusine Sahakyan, Gagik Melikyan, Ashot Sagyan, Rosanna Palumbo, Caterina Vicidomini, Pasqualina Liana Scognamiglio, Giovanni N. Roviello  
Molecular Therapy Nucleic Acids 2025 102478

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*Article*

**Synthesis of Nonnatural Amino Acid Derivatives with Ni Complexes and Investigation of the Antifungal Activity of Their Dipeptide Derivatives**

Tatevik H. Sargsyan, Ashot S. Saghyan, Hegine I. Hakobyan, Nune Khachatryan, Sona Gevorgyan, Yuri M. Danghyan, Zorayr Z. Mardiyan, Armen Zakarian  
Synlett 2025 925-929

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*Article*

**Sequential Michael addition, cross-coupling and [3 + 2] cycloaddition reactions within the coordination sphere of chiral Ni(ii) Schiff base complexes derived from dehydroamino acids: pathways to the asymmetric synthesis of structurally diverse O-substituted**

Emma A. Khachatryan, Lusine Yu. Sahakyan, Anna S. Tovmasyan, Gagik S. Melikyan, Henrik A. Panosyan, Anna F. Mkrtchyan, Norio Shibata, Andrei V. Malkov, Ashot S. Saghyan  
RSC Advances 2025 10558-10564

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*Article*

**Synthesis and Antifungal Activity of Fmoc-Protected 1,2,4-Triazolyl- $\alpha$ -Amino Acids and Their Dipeptides Against Aspergillus Species**

Tatevik Sargsyan, Avetis Tsaturyan, Nelli Hovhannisyan, Anna Mkrtchyan, Ashot Saghyan, Giovanni N. Roviello, Caterina Vicidomini, Lala Stepanyan, Henrik Panosyan, Heghine Hakobyan, Monika Israyelyan  
Biomolecules 2025 2-21

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*Article*

**Glaser Heterocoupling Reaction for the Synthesis of Enantiomerically Enriched Unnatural  $\alpha$ -Amino Acids Incorporating Asymmetric Diyne Moieties: Mechanistic Insights and Optimization**

Liana Hayriyan, Anna Tovmasyan, Anna Grigoryan, Karapet Ghazaryan, Barbara Biondi, Olgert L. Dallakyan, Mikayel S. Chobanyan, Hayk Zaqaryan, Ashot Saghyan, Anna Mkrtchyan  
ACS Omega 2025 A-G

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*Article*

**Synthesis and Biological Activity of Ultrashort Antimicrobial Peptides Bearing a Non-Coded Amino Acid**

Cristina Peggion, Andrea Schivo, Martina Rotondo, Simona Oancea, Lucia-Florina Popovici, Teodora Călin, Anna Mkrtchyan, Ashot Saghyan, Liana Hayriyan, Emma Khachatryan, Fernando Formaggio, Barbara Biondi

*Article*

**Strategy for synthesizing O-protected (S)- $\alpha$ -substituted serine analogs via sequential Ni(ii)-complex-mediated cross-coupling and cycloaddition reactions**

Anna S. Tovmasyan, Anna F. Mkrtchyan, Avetis H. Tsaturyan, Peter Langer, Andrei V. Malkov,

Ashot S. Saghyan

New Journal of Chemistry 2025 11640-11645

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*Article*

**A3-Mannich coupling reaction via chiral propargylglycine Ni(ii) complex: an approach for synthesizing enantiomerically enriched unnatural  $\alpha$ -amino acids**

Liana Hayriyan, Anna Grigoryan, Hasmik Gevorgyan, Avetis Tsaturyan, Armen Sargsyan, Peter Langer,

Ashot Saghyan, Anna Mkrtchyan

RSC Advances 2025 35379-35387

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*Article*

**Synthesis and Antitumor and Antibacterial Activity of Sulfanyl-Substituted 3-(m-tolyl)-3H-spiro[benzo[h]quinazoline-5,1'-Cycloheptane]-4(6H)-ones (Синтез, противоопухолевая и антибактериальная активность сульфанилзамещенных 3-(м-толил)-3H-спиро[бензо[h]x**

Markosyan A.I., Vardapetyan S.M., Hovhannisyan A.M., Bekjanyan R.A., Hakopyan, Kh. S.,

Gabrielyan S.H., Dangyan, M. Yu., Arakelyan H.H., Arsenyan F.H., Sagyan A.S.

Химико-фармацевтический журнал (Pharmaceutical Chemistry Journal) 2025 529-533

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*Article*

**Biomacromolecular interactions and antioxidant properties of novel synthetic amino acids targeting DNA and serum albumin**

Tatevik Sargsyan, Heghine Hakobyan, Hayarpi Simonyan, Tigran Soghomonyan, Avetis Tsaturyan,

Anahit Hovhannisyan, Siranush Sardaryan, Ashot Saghyan, Giovanni N. Roviello

Journal of Molecular Liquids 2025 1-13

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*Article*

**Unnatural Phosphorus-Containing  $\alpha$ -Amino Acids and Their N-FMOC Derivatives: Synthesis and In Vitro Investigation of Anticholinesterase Activity**

Ani S. Dadayan, Anna F. Mkrtchyan, Atravazd S. Poghosyan, Slavik A. Dadayan, Lala A. Stepanyan,

Monika H. Israyelyan, Anna S. Tovmasyan, Avetis H. Tsaturyan, Nona A. Hovhannisyan,

Vigen O. Topuzyan, Tatevik H. Sargsyan, Ashot S. Saghyan

ChemistrySelect 2024 1-10

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*Article*

**BSA Binding and Aggregate Formation of a Synthetic Amino Acid with Potential for Promoting Fibroblast Proliferation: An In Silico, CD Spectroscopic, DLS, and Cellular Study**

Hayarpi Simonyan, Rosanna Palumbo, Satenik Petrosyan, Anna Mkrtchyan, Armen Galstyan,

Ashot Saghyan, Pasqualina Liana Scognamiglio, Caterina Vicidomini, Marta Fik-Jaskólka,

Giovanni N. Roviello

Biomolecules 2024 579

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*Article*

**The Synthesis and in vitro Study of 9-fluorenylmethoxycarbonyl Protected Non-Protein Amino**

### **Acids Antimicrobial Activity**

T.H. Sargsyan, L.A. Stepanyan, M.H. Israyelyan, H.I. Hakobyan, S.M. Jamgaryan, A.A. Gasparyan,

A.S. Saghyan

Eurasian Chemico-Technological Journal 2024 235-240

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#### *Article*

### **Synthesis and evaluation of new mono- and binuclear salen complexes for the C $\alpha$ -alkylation reaction of amino acid substrates as chiral phase transfer catalysts**

Anahit M. Hovhannisyanyan, Anna S. Tovmasyan, Anna F. Mkrtchyan, Karapet R. Ghazaryan,

Ela V. Minasyan, Olgert L. Dallakyan, Mikayel S. Chobanyan, Hayk Zakaryan, Giovanni N. Roviello,

Ashot S. Saghyan

Molecular Catalysis 2024 114618

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#### *Article*

### **Ion-chromatographic determination of common anions in drinking water in some regions of the Republic of Armenia**

Avetis Tsaturyan, Lusine Sahakyan, Lusine Hayrapetyan, Ela Minasyan, Ani Chakhoyan,

Sergey Hayrapetyan, Ashot Saghyan

Pharmacia 2024 e135658

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#### *Article*

### **Synthesis of enantiomerically enriched $\beta$ -substituted analogs of (S)- $\alpha$ -alanine containing 1-phenyl-1H-1,2,3-triazole groups**

Artavazd S. Poghosyan, Ashot S. Saghyan, Peter Langer, Ela V. Minasyan, Karapet R. Ghazaryan,

Anahit M. Hovhannisyanyan, Anna F. Mkrtchyan, Volodya Mirzoyan, Emma A. Khachatryan

Amino Acids 2024 67

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#### *Article*

### **Synthesis, Characterization, and Study of Catalytic Activity of Chiral Cu(II) and Ni(II) Salen Complexes in the $\alpha$ -Amino Acid C- $\alpha$ Alkylation Reaction**

Anna S. Tovmasyan, Anna F. Mkrtchyan, Hamlet N. Khachatryan, Mary V. Hayrapetyan,

Robert M. Hakobyan, Artavazd S. Poghosyan, Avetis H. Tsaturyan, Ela V. Minasyan, Viktor I. Maleev,

Vladimir A. Larionov, Armen G. Ayvazyan, Norio Shibata, Giovanni N. Roviello, Ashot S. Saghyan

Molecules 2023 1180

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#### *Article*

### **Development of the technology for producing water-soluble melanin from waste of vinery production and the study of its physicochemical properties**

Armen E. Aghajanyan, Artur A. Hambardzumyan, Ela V. Minasyan, Avetis H. Tsaturyan, Ani M. Paloyan,

Sona V. Avetisyan, Anichka S. Hovsepyan, Ashot S. Saghyan

European Food Research and Technology 2022 485-495

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#### *Article*

### **Sequential Heck Cross-Coupling and Hydrothiolation Reactions Taking Place in the Ligand Sphere of a Chiral Dehydroalanine Ni(II) Complex: Asymmetric Route to $\beta$ -Aryl Substituted Cysteines**

Zalina T. Gugkaeva, Zorayr Z. Mardiyan, Alexander F. Smol'yakov, Artavazd S. Poghosyan,,

Ashot S. Saghyan, Victor I. Maleev, Vladimir A. Larionov

Organic Letters 2022 6230–6235

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Article

**SYNTHESIS OF (S)-ALANYL-(S)- $\beta$ -(THIAZOL-2-YL-CARBAMOYL)- $\alpha$ -ALANINE, DIPEPTIDE CONTAINING IT AND IN VITRO INVESTIGATION OF THE ANTIFUNGAL ACTIVITY**

TATEVIK SARGSYAN, HEGHINE HAKOBYAN, ZORAYR MARDIYAN, NUNE KHACHATURYAN, SONA GEVORGYAN, SILVA JAMGARYAN, ENZHENA GYULUMYAN, YURI DANGHYAN, ASHOT SAGHYAN  
Farmacia 2022 1148-1154

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Article

**Synthesis of enantiomerically enriched non-protein  $\alpha$ -amino acids and their study as aldose reductase inhibitors**

Anna F. Mkrtchyan, Liana A. Hayriyan, Armen S. Sargsyan, Ani M. Paloyan, Anna S. Tovmasyan, Ani J. Karapetyan, Artur A. Hambardzumyan, Nelli A. Hovhannisyan, Henrik A. Panosyan, Hamlet N. Khachatryan, Ani S. Dadayan, Ashot S. Saghyan  
Synthetic Communications 2021 1433-1450

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Article

**Synthesis of Biomimetic Polymers Based on Nonproteinogenic  $\alpha$ -Amino Acids**

Nino Zavrashvili, Giuli Otinashvili, David Tugushi, Tengiz Kantaria, Temur Kantaria, Nino Kupatadze, Ekaterina Chkhaidze, Nino Neparidze, Ashot Saghyan, Anna Mkrtchyan, Artavazd Poghosyan  
Bulletin of the Georgian National Academy of Sciences 2021 41-47

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Article

**New Cationic Polymers Composed of Non-Proteinogenic  $\alpha$ -Amino Acids**

NINO ZAVRADASHVILI, GIULI OTINASHVILI, TEMUR KANTARIA, NINO KUPATADZE, DAVID TUGUSHI, ASHOT SAGHYAN, ANNA MKRTCHYAN, SERGEY POGHOSYAN, RAMAZ KATSARAVA  
Advanced Materials, Polymers, and Composites: New Research on Properties, Techniques, and Applications  
2021 277-287

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Article

**Spectroscopic and SEM evidences for G4-DNA binding by a synthetic alkyne-containing amino acid with anticancer activity**

Marta A. Fik-Jaskółka, Anna F. Mkrtchyan, Ashot S. Saghyan, Rosanna Palumbo, Agnieszka Belter, Liana A. Hayriyan, Hayarpi Simonyan, Valentina Roviello, Giovanni N. Roviello  
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY 2020 117884

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Article

**The charge-assisted hydrogen-bonded organic framework (CAHOF) self-assembled from the conjugated acid of tetrakis(4-aminophenyl)methane and 2,6-naphthalenedisulfonate as a new class of recyclable Brønsted acid catalysts**

Saghyan A.S., Svetlana A. Kuznetsova, Alexander S. Gak, Yulia V. Nelyubina, Vladimir Larionov, Han Li, Michael North, Vladimir P. Zhreb, Alexander F. Smol'yakov, Artem O. Dmitrienko, Michael G. Medvedev, Igor S. Gerasimov, Yuri N. Bejokon  
Beilstein Journal of Organic Chemistry 2020 1124-1134

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Article

**Asymmetric synthesis, biological activity and molecular docking studies of some unsaturated  $\alpha$ -amino acids, derivatives of glycine, allylglycine and propargylglycine**

A. F. Mkrtchyan, A. S. Saghyan, L. A. Hayriyan, A. S. Sargsyan, A. J. Karapetyan, A. S. Tovmasyan,

A. H. Tsaturyan, E. V. Minasyan, A. S. Poghosyan, A. M. Paloyan, H. A. Panosyan, Lu. Yu. Sahakyan  
Journal of Molecular Structure 2020 127850

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*Article*

**Biological macromolecule binding and anticancer activity of synthetic alkyne-containing L-phenylalanine derivatives**

Marta A. Fik-Jaskółka, Anna F. Mkrtchyan, Ashot S. Saghyan, Rosanna Palumbo, Agnieszka Belter, Liana A. Hayriyan, Hayarpi Simonyan, Valentina Roviello, Giovanni N. Roviello  
Amino Acids 2020 755–769

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*Article*

**Asymmetric Synthesis of Tailor-Made Amino Acids Using Chiral Ni(II) Complexes of Schiff Bases. An Update of the Recent Literature**

Yupiao Zou, Jianlin Han, Ashot S. Saghyan, Anna F. Mkrtchyan, Hiroyuki Konno, Hiroki Moriwaki, Kunisuke Izawa, Vadim A. Soloshonok  
Molecules 2020 2739

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*Article*

**Using the Ni-[(Benzylpropyl)amino]benzophenone complex in the Glaser reaction for the synthesis of bis  $\alpha$ -amino acids**

Anna F. Mkrtchyan, Liana A. Hayriyan, Ani J. Karapetyan, Anna S. Tovmasyan, Avetis H. Tsaturyan, Victor N. Khrustalev, Viktor I. Maleev, Ashot S. Saghyan  
New Journal of Chemistry 2020 8

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*Article*

**Исследование асимметрического нуклеофильного бис-присоединения дегидроаланиновых комплексов Ni(II)**

Петросян С. Г., Симонян А. М, Мкртчян А. Ф., Саакян Л. Ю., Цатурян А. О., Сагян А. С.  
Հայաստանի քիմիական հանդես 2020 213-222

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*Article*

**Synthesis of Enantiomerically Enriched Non-Proteinogenic  $\alpha$ -Amino Acids Using the Suzuki Reaction**

Saghyan Ashot, Mkrtchyan Anna, Mardiyan Zorayr, Hayriyan Liana, Yuri N. Belokon, Peter Langer  
ChemistrySelect 2019 4686-4688

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*Article*

**Synthesis of enantiomerically enriched alkynylaryl-substituted  $\alpha$ -amino acids through Sonogashira reactions**

Ashot S. Saghyan, Anna F. Mkrtchyan, Zorayr Z. Mardiyan, Liana A. Hayriyan, Ani J. Karapetyan, Yuri N. Belokon, Peter Ehlers, Peter Langer  
ChemistrySelect 2019 13806-13809

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*Article*

**SYNTHESIS AND PHARMACOLOGICAL ACTIVITY OF S(-)-2-AMINO-2-METHYL-3-PHENYLPROPANOIC ACID**

S. H. Grigoryan, A. G. Zhamharyan, A. S. Saghyan, A. A. Chitchiyan, L. S. Balyan, A. S. Poghosyan, H. V. Topchyan, M. G. Balasanyan  
Химико-фармацевтический журнал (Pharmaceutical Chemistry Journal) 2019 620-623

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Article

**SYNTHESIS OF N-TERT-BUTYLOXYCARBONYLGLYCYL-(S)-b-[4- ALLYL-3-PROPYL-5-THIOXO-1,2,4-TRIAZOL-1-YL]- $\alpha$ -ALANINE DIPEPTIDE AND STUDY OF ITS ANTIFUNGAL EFFECT**

T. H. SARGSYAN, Z. Z. MARDIYAN, Yu. M. DANGHYAN, E. A. GYULUMYAN, N. S. KHACHATURYAN,

S. A. GEVORGYAN, H.I. HAKOBYAN, S. M. JAMGARYAN, A. S. SAGHYAN

Chemical Journal of Armenia 2019 495-501

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Article

**СРАВНИТЕЛЬНОЕ ИЗУЧЕНИЕ АНТИОКСИДАНТНОЙ АКТИВНОСТИ  $\beta$ -ГЕТЕРОЦИКЛИЧЕСКИ ЗАМЕЩЕННЫХ АНАЛОГОВ  $\alpha$ -АМИНОМАСЛЯНОЙ КИСЛОТЫ И НЕКОТОРЫХ ЭНДОГЕННЫХ АНТИОКСИДАНТОВ**

Саакян Л.Ю., Симонян Г.М., Симонян Р.М., Симонян М.А., Секоян Э.С., Сагян А.С.

Տեսական և կիրառական բժշկություն հարցեր 2018 3-6

<http://pananarm.info/>

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Article

**Synthesis of Optically Pure (S,E)-2-Amino-5-arylpent-4-enoic Acids by Heck Reactions of Nickel Complexes**

Mkrtchyan Anna F, Saghyan Ashot S, Mardiyani Zorayr Z, Parpart Silvio, Ehlers Peter, Petrosyan Andranik,

Langer Peter

Synlett 2018 A-F

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Article

**The Elaboration of a General Approach to the Asymmetric Synthesis of 1,4-Substituted 1,2,3-Triazole Containing Amino Acids via Ni(II) Complexes**

Ashot S. Saghyan, Hovhannes V. Adonts, Vladimir A. Larionov, Zalina T. Gugkaeva,

Alexander F. Smol'yakov, Mansur S. Miftakhov, Svetlana A. Kuznetsova, Victor I. Maleev, Yuri N. Belokon

ChemistrySelect 2018 3107- 3110

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Article

**СИНТЕЗ ЭНАНТИОМЕРНО ОБОГАЩЕННОЙ (S)-2-АМИНО-5-(4-ФТОРФЕНИЛ)ПЕНТ-4-ЕНОВОЙ КИСЛОТЫ И ЕЕ  $\alpha$ -АЛЛИЛЗАМЕЩЕННОГО АНАЛОГА**

А. С. САГЯН, З. З. МАРДИЯН, А. Ф. МКРТЧЯН, А. О. ЦАТУРЯН

Химический Журнал Армении 2018 107-116

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Article

**Self-Assembled Ionic Composites of Negatively Charged Zn(salen) Complexes and Triphenylmethane Derived Polycations as Recyclable Catalysts for the Addition of Carbon Dioxide to Epoxides**

Svetlana A. Kuznetsova, Yuri N. Belokon, Ashot S. Saghyan, Michael North, Han Li, Victor I. Maleev,

Yan V. Zubavichus, Alexander F. Smol'yakov, Vladimir A. Larionov, Yuri A. Rulev

ChemCatChem 2018 10

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Article

**Механизмы мембранопротекторного действия нового  $\beta$ -гетероциклически замещенного синтетического аналога  $\alpha$ -аминомасляной кислоты при оксидативно-нитрозативном стрессе**

Л.Ю. Саакян, Р.М. Симонян, Г.М. Симонян, М.А. Симонян, Э.С. Секоян, А.С. Сагян

Տեսական և կիրառական բժշկություն հարցեր 2018 26-31

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Article

**СИНТЕЗ N-ТРЕТ-БУТОКСИКАРБОНИЛ-(S)-АЛАНИЛГЛИЦИЛ-(S)-β-(3-ИЗОБУТИЛ-4-АЛЛИЛ-5-ТИОКСО-1,2,4-ТРИАЗОЛ-1-ИЛ)-α-АЛАНИНА И ИЗУЧЕНИЕ ВОЗДЕЙСТВИЯ ТРИПЕПТИДА НА ЭЛЕКТРИЧЕСКУЮ АКТИВНОСТЬ НЕЙРОНОВ ЧЕРНОЙ СУБСТАНЦИИ В УСЛОВИЯХ МОДЕЛИ БОЛЕЗНИ ПАРКИНСОНА**

Т. О. САРГСЯН, Ю. М. ДАНГЯН, С. М. ДЖАМГАРЯН, Э. А. ГЮЛУМЯН, Г. А. ПАНОСЯН, М. В. ПОГОСЯН, Дж. С. САРГСЯН, А. С. САГЯН

Chemical Journal of Armenia 2018 368-376

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Article

**TARGETED SYNTHESIS OF 9-FLUORENYLMETHYLOXYCARBONYLGLYCYL-(S)-β-[4-ALLYL-3-PROPYL-5-THIOXO-1,2,4-TRIAZOL-1-YL]-α-ALANINE AND STUDY OF ITS EFFECT ON COLLAGENASE ACTIVITY**

T. H. SARGSYAN, Yu. M. DANGHYAN, S. M. JAMGARYAN, A. S. SARGSYAN, E. A. GYULUMYAN, H. A. PANOSYAN, N. A. HOVHANNISYAN, A. M. HOVHANNISYAN, A. H. TSATURYAN, A. S. SAGHYAN

Chemical Journal of Armenia 2018 571-578

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Article

**Convenient synthesis of thieno[3,2-b]indoles and thieno[3,4-b]indoles by sequential site-selective Suzuki- and double C-N coupling reaction**

Ngo N Pham, Silvio Parpart, Sevak Grigoryan, Thang N Ngo, Tuan T Dang, Taniel V. Ghochikyan, A. S. Saghyan, Peter Ehlers, Peter Langer

European journal of organic chemistry 2017 538-550

[http://onlinelibrary.wiley.com/journal/10.1002/\(ISSN\)1099-0690](http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1099-0690)

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Article

**АНТИОКСИДАНТНАЯ АКТИВНОСТЬ И МЕХАНИЗМЫ МЕМБРАНОСТАБИЛИЗИРУЮЩЕГО ДЕЙСТВИЯ НОВОГО β-ГЕТЕРОЦИКЛИЧЕСКИ ЗАМЕЩЕННОГО АНАЛОГА α-АМИНОМАСЛЯНОЙ КИСЛОТЫ**

Л. Ю. Саакян, Г. М. Симонян, Р. М. Симонян, Э. С. Секоян, А. С. Сагян

Տեսակալան և կլինիկական բժշկութեան հարցեր 2017 64-67

<http://www.pananarm.info/>

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Article

**Five-year achievements in the field of the asymmetric synthesis of unsaturated amino acids**

Saghyan A.S., Belokon, Yu.N., Mkrtchyan, A.F., Langer P, Mardiyan Z.Z.

Chemical Journal of Armenia 2017 54-71

<http://www.flib.sci.am/eng/Qimia/Frame.html>

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Article

**Асимметрический синтез новых гетероциклически замещенных аналогов α-аминомасляной кислоты, содержащих замещенные триазольные группы в боковом радикале**

А.С.Сагян, Л.Ю.Саакян, А.М.Симонян, С.Г.Петросян, А.Ф.Мкртчян, М.А.Самвелян, Т.В.Кочикян,

П.Лангер

Химический Журнал Армении 2017 71-81

<http://www.flib.sci.am/eng/Qimia/Frame.html>

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Article

**Асимметрический синтез новых гетероциклически замещенных аналогов (S)-α-аланина,**

**содержащих 3,4-дизамещенные -5-тиоксо-1,2,4-триазолы в боковом радикале**  
А.М.Симонян, А.С.Сагиян, Л.Ю.Саакян, Н.Н.Багян, А.О.Восканян, Ж.Н.Сарибекян, М.А.Самвелян,

Т.В.Кочикян

Химический Журнал Армении 2017 82-91

<http://www.flib.sci.am/eng/Qimia/Frame.html>

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*Article*

**Синтез ди- и трипептидов, содержащих (S)-2-амино-3-[4-аллил-(3-пиридин-4`- и (S)-2-амино-3-[4-аллил-(3-пиридин-3`-ил)-5-тиоксо-1,2,4-триазол-1-ил]-пропио-новые кислоты**  
Саргсян, Т. О., Цатурян, А. О., Сагиян, А. С., Дангян, Ю. М., Дангян, В. Т., Джемгарян, С. М.,

Гюлумян, Э. А., Паносян, Г. А.

Հայաստանի քիմիական հանդես 2017 92-99

<http://www.flib.sci.am/eng/Qimia/Frame.html>

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*Article*

**Механизмы протекторного действия  $\beta$ -гетероциклически замещенного аналога  $\alpha$ -аминомасляной кислоты на клеточные и субклеточные мембраны**

Л.Ю.Саакян, Р.М.Симонян, Г.М.Симонян, М.А.Симонян, Э.С.Секоян, А.С.Сагян

Տեսական և կիրառական բժշկության հարցեր 2017 16-19

<http://www.panarm.info/>

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*Article*

**ЭКСТРАКТ ИЗ ЛИСТЬЕВ И СЕМЯН РАСТЕНИЯ РАСТОРОПША ПЯТНИСТАЯ КАК ИСТОЧНИК ПОЛУЧЕНИЯ АМИНОКИСЛОТ, МАКРО И МИКРОЭЛЕМЕНТОВ**

С.А. Дадаян, Г.Р. Петросян, А.С. Дадаян, Л.А. Степанян, А.С. Сагян

Տեսական և կիրառական բժշկության հարցեր 2017 55-57

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*Article*

**ВЫДЕЛЕНИЕ ПРОЛИНА ИЗ СМЕСИ АМИНОКИСЛОТ**

А.М. Симонян, А.С. Сагян, Ж.Н. Сарибекян, А.Е. Агаджанян

Հայաստանի քիմիական հանդես 2017 417-429

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*Article*

**Straightforward synthesis of tetraalkynylpyrazines and their photophysical properties**

Andranik Petrosyan, Peter Ehlers, Annette-E. Surkus, Taniel V. Ghochikyan, Ashot S. Saghyan,

Stefan Lochbrunnere, Peter Langer

Organic and Biomolecular Chemistry 2016 1442-1449

<http://www.rsc.org/journals-books-databases/about-journals/organic-biomolecular...>

---

*Article*

**Catalitic Properties of Aminoacylase of strain Rhodococcus Armeniensis AM6.1**

A.A. Hambardzumyan, A.V. Mkhitarian, A.M.Paloyan, S.A.Dadayan, A.S.Saghyan

Applied Biochemistry and Microbiology 2016 250-255

<http://www.springer.com/life+sciences/biochemistry+%26+biophysics/journal/10438>

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*Article*

**New generations of optically active non-proteinogenic  $\alpha$ -amino acids, synthesis and study**

Hovhannisyan A. M., Saghyan A. S., Mkrtchyan A. F., Simonyan H. M

Հայաստանի քիմիական հանդես 2016 81-101

<http://www.flib.sci.am/eng/Qimia/Frame.html>

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Article

**ПРОТЕКТОРНЫЙ ЭФФЕКТ ДИМЕТИЛСУЛЬФОКСИДА НА ИЗОФОРМЫ НАДРН-ОКСИДАЗЫ БИОМЕМБРАН**

Р. М. Симонян, Л. Ю. Саакян, Г. М. Симонян, М. А. Симонян, Э. С. Секоян, А. С. Сагиян

Տեսական և կիրառական բժշկության հարցեր 2016 61-64

<http://www.panarm.info/>

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Article

**МОДЕЛИРОВАНИЕ ПОТЕНЦИАЛЬНО БИОЛОГИЧЕСКИ АКТИВНЫХ (S)- $\alpha$ -АЛЛИЛГЛИЦИНСОДЕРЖАЩИХ ПЕПТИДОВ, ВЫЯВЛЕНИЕ ИХ ВОЗМОЖНЫХ БИОЛОГИЧЕСКИХ СВОЙСТВ С ПОМОЩЬЮ ПРОГРАММЫ ПАСС-ОНЛАЙН И ЦЕЛЕВОЙ СИНТЕЗ**

Т. О. САРГСЯН, Ю. М. ДАНГЯН, В. Т. ДАНГЯН, С. М. ДЖАМГАРЯН, Э. А. ГЮЛУМЯН, Г. А. ПАНОСЯН,

А. О. ЦАТУРЯН, А. С. САГЯН

Հայաստանի քիմիական հանդես 2016 320-332

<http://www.flib.sci.am/eng/Qimia/Frame.html>

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

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Article

**Synthesis of enantiomerically enriched amino acids containing acetylenic bond in the side-chain radical**

Hayarpi M. Simonyan, Ashot. S. Saghyan, Anna F. Mkrtchyan, Ani J. Karapetyan, Zorayr Z. Mardiyan,

Liana A. Hayriyan

International Journal of Chemical Engineering and Applications 2016 413-416

<http://www.ijcea.org/>

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Monograph

**Asymmetric Synthesis of Non-Proteinogenic Amino Acids**

Ashot S. Saghyan, Peter Langer

2016 376

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Article

**Synthesis of optically pure (S)-2-amino-5-arylpent-4-ynoic acids by Sonogashira reactions and their potential use as highly selective potent inhibitors of aldose reductase**

Silvio Parpart, Andranik Petrosyan, Syed Jawad Ali Shah, Raji Akeem Adewale, Peter Ehlers,

Tatevik Grigoryan, Anna F. Mkrtchyan, Zorayr Z. Mardiyan, Ani J. Karapetyan, Avetis H. Tsaturyan,

Ashot S. Saghyan, Jamshed Iqbal, Peter Langer

RSC Advances 2015 107400-107412

<http://pubs.rsc.org/en/journals/journalissues/ra?e=1#!subjects>

---

Article

**Синтез положительно заряженных комплексов CoIII и их исследование в качестве хиральных катализаторов в реакциях асимметрического генерирования С-С связи.**

Мкртчян А. Ф., Геолчанян А. В., Симонян А. М., Петросян С. Г., Сагиян А. С., Малеев В. И.,

Белоконь Ю. Н., Хрусталеv В. Н  
Химический Журнал Армении 2015 108-121  
<http://www.flib.sci.am/eng/Qimia/Frame.html>

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*Article*

**АСИММЕТРИЧЕСКИЙ СИНТЕЗ НОВЫХ ЭНАНТИОМЕРНО ОБОГАЩЕННЫХ НЕНАСЫЩЕННЫХ  $\alpha$ -АМИНОКИСЛОТ**

А. Ф. МКРТЧЯН, З. З. МАРДИЯН, А. Ж. КАРАПЕТЯН, А. С. ПОГОСЯН, С. Г. ПЕТРОСЯН, А. М. СИМОНЯН,  
А. О. ЦАТУРЯН, А. С. САГИЯН

Химический Журнал Армении 2015 403-412  
<http://www.flib.sci.am/eng/Qimia/Frame.html>

---

*Article*

**Synthesis of tetraaryl- and tetraalkenylpyrazines by SuzukiMiyaura reactions of tetrachloropyrazine**

Andranik Petrosyan, Peter Ehlers, Sebastian Reimann, Taniel V. Ghochikyan, Ashot S. Saghyan,  
Anke Spannenberg, Stefan Lochbrunner, Peter Langer

Tetrahedron 2015 6803-6812

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*Article*

**Исследование бромсодержащих модифицированных NII-комплексов основания Шиффа аминокислот в асимметрических реакциях C-алкилирования.**

С.А.Дадаян, Н.Ю.Григорян, С.Г. Мангасарян, А.С. Дадаян, А.С. Сагиян

Հայաստանի քիմիական հանդես 2015 137-147

<http://www.flib.sci.am/eng/Qimia/Frame.html>

---

*Article*

**The construction and stereoselective synthesis of new derivatives of 2-aminopropionic acids.**

S.A. Dadayan, N.Yu. Grigoryan, A.S.Dadayan, A.S. Poghosyan, A.S.Saghyan, A.A. Hambardzumyan

Հայաստանի քիմիական հանդես 2015 71-80

<http://www.flib.sci.am/eng/Qimia/Frame.html>

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*Book*

**Ամինաթթուների, պեպտիդների և սպիտակուցների քիմիա**

Ա.Ս. Աաղյան

2015 452

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*Article*

**Thiophenyl-substituted triazolyl-thione L-alanine: asymmetric synthesis, aggregation and biological properties**

Ashot S. Saghyan, Hayarpi M. Simonyan, Petrosyan G. Satenik, Arpine V. Geolchanyan,

Giovanni N. Riovello, Domenica Musumeci, Valentina Roviello

Amino Acids 2014 2325-2332

<http://link.springer.com/journal/726>

---

*Conference*

**Asymmetric synthesis of new enantiomerically enriched  $\alpha$ -amino acids**

A.S. Saghyan, A.F. Mkrtychyan, S.G. Petrosyan, J.A. Yedoyan, A.M. Simonyan, A.V. Geolchanyan,

P. Langer, A.M. Petrosyan

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Conference

**Metallocomplex precursors for the synthesis of 18f-fluorinated aromatic amino acids labelled in alpha fluoromethyl moiety**

A. V. Geolchanyan, A. S. Saghyan, A. F. Mkrtchyan, S. G. Petrosyan, H. M. Simonyan, V. I. Maleev, Yu. N. Belokon, R. Schibli, R. N. Krasikova

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Conference

**Asymmetric synthesis of new enantiomerically enriched  $\alpha$ -amino acids**

A.S. Saghyan, S.Gh. Petrosyan, A.V. Geolchanyan, A.F. Mkrtchyan, Z.Z. Mardiyan

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Conference

**Synthesis and PASS prediction novel biologically active short peptides**

A.Hovhannisyanyan, T.A. Sargsyan, S.M. Jamgaryan, E.A. Gyulumyan, Yu. M. Danghyan, A.H.Tsaturyan, A.S. Saghyan

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Conference

**MODELING OF DIPEPTIDES CONTAINING POTENTIAL BIOLOGICALLY ACTIVE (S)- $\alpha$ -PROPARGYLGYCINE, DISCLOSURE OF POSSIBLE BIOLOGICAL PROPERTIES AND TARGETED SYNTHESIS**

T.H. Sargsyan, A.H. Tsaturyan, A.M. Hovhannisyanyan, A.S. Saghyan

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Conference

**Synthesis and PASS prediction novel biologically active short peptides**

T.H. Sargsyan, N. Hovhannisyanyan, A.S. Saghyan, A.M. Hovhannisyanyan, A.H. Tsaturyan, S.M. Jamgaryan, E. A. Gyulumyan, Yu. M. Danghyan

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Conference

**Efficient method for the synthesis of novel enantiomerically enriched derivatives of propargylglycine**

Anna F. Mkrtchyan, Ashot S Saghyan, Liana A Hayriyan, Ani J Karapetyan, Zorayr Z Mardiyan, Hayarpi M Simonyan, Adonc Hovhannes

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Conference

**Asymmetric synthesis of potential biologically active new heterocyclic analogs of (S)- $\alpha$ -alanine containing 3,4-substituted 5-thioxo-1,2,4- triazoles in the side-chain radical**

H.M. Simonyan, L.Yu. Sahakyan, S.Gh. Petrosyan, A.F. Mkrtchyan, N.N. Baghyan,, J.N. Saribekyan, A.S. Saghyan

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Conference

**Asymmetric synthesis of new heterocyclic analogs of alpha-aminopropionic acid and alpha-aminobutyric acid via Michael nucleophilic addition reactions**

Hayarpi Simonyan, Lusine Sahakyan, Anna Mkrtchyan, Satenik Petrosyan, Ashot Saghyan

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Conference

**Efficient method for the synthesis of novel enantiomerically enriched derivatives of unsaturated amino acids**

Ashot Saghyan, Anna Mkrtchyan, Liana Hayriyan, Zorayr Mardiyan, Hayarpi Simonyan

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Conference

**Asymmetric synthesis of enantiomerically enriched analog of  $\alpha$ -aminobutyric acid containing heterocycle in the side chain radical .**

L.Yu.Sahakyan, A.S. Saghyan, H.M. Simonyan, S.Gh.Petrosyan, A.F.Mkrtchyan

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*Conference*

**Asymmetric synthesis and biological activity of novel heterocycle substituted analogues of  $\alpha$ -aminobutyric acid**

Sahakyan L.Yu., Simonyan H. M, Petrosyan S. Gh., Mkrtchyan A. F., Simonyan M. A., Saghyan A. S.,  
Sekoyan E. S.

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*Conference*

**Asymmetric synthesis of potential biologically active new analogs of (S)-alanine containing nitrogenous bases in the side-chain radical**

H.M.Simonyan, L.Yu. Sahakjan, A.F.Mkrtchyan, S.Gh.Petrosyan, N.N.Baghyan, A.O.Voskanyan,  
J.N.Saribekyan, A.S.Saghyan

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*Conference*

**Асимметрический синтез новых производных (S)- $\alpha$ -аланина, содержащих 3-замещенные 4-изобутил-5-тиоксо-1,2,4-триазолы в боковом радикале**

А.М.Симонян, Н.Н.Багян, А.О.Восканян, Ж.Н.Сарибекян, Л.Ю.Саакян, А.Ф.Мкртчян, С.Г.Петросян,  
А.С.Сагиян

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*Conference*

**Modeling, synthesis and study of impact of peptides containing unsaturated double bond amino acids on collagenase activity**

T. Sargsyan, T.Khachatryan, A.S. Sargsyan, L.Yu. Danghyan, S.M. Jamgaryan, E.A.Gyulumyan,  
N. A. Hovhannisyan, L.A. Hayriyan, A.M. Hovhannisyan, A. H. Tsaturyan, A.S. Saghyan

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*Conference*

**Asymmetric synthesis of enantiomerically enriched analogs of NiII complexes of (S)-allylglycine**

L.A.Hayriyan, A.F.Mrtchyan, Z.Z.Mardiyan, A.J.Karapetyan, H.V. Adonc, H.M. Simonyan, S.Gh. Petrosyan,  
L.Yu.Sahakyan, A.S. Saghyan

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*Conference*

**Synthesis of optically pure (S)-2-amino-5-(3-fluorophenyl)-2-(prop-2-yn-1-yl)pent-4-yonic acid by using Sonogashira reaction**

Z.Z. Mardiyan, L.A. Hayriyan, A.F.Mkrtchyan, A.X.Tsaturyan, A.J. Karapetyan, H.V. Adonc, H.M. Simonyan,  
S.Gh.Petrosyan, L.Yu.Sahakyan, A.S. Saghyan

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*Conference*

**FIVE-YEAR ACHIEVEMENTS IN THE FIELD OF THE ASYMMETRIC SYNTHESIS OF UNSATURATED AMINO ACIDS**

A. S. Saghyan, L.A. Hayriyan, Z.Z. Mardiyan, A.F. Mkrtchyan

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*Conference*

**THE SYNTHESIS OF POTENTIALLY ACTIVE NEW ENANTIOMERICALLY ENRICHED DERIVATIVES OF GLYCINE THROUGH CLICK REACTION**

H.V. Adonts, A.S. Saghyan, L.A.Hayriyan, A.F. Mkrtchyan

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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. Toplaghalttsyan, A. Saghyan

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Conference

**Asymmetric synthesis of enantiomerically enriched new analogs of Ni II complexes of (S)-propargylglycine**

L. Hayriyan, A. Saghyan, H. Simonyan, A. Karapetyan, Z. Mardiyan, A. Mkrtchyan

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Conference

**PURIFICATION AND CHARACTERIZATION OF  $\alpha$ -AMYLASE FROM BACILLUS AMYLOLIQUIFACIENS**

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

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Conference

**Optimization of fermentation condition for  $\alpha$ -amylase production**

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

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Conference

**Study of some metals effect on  $\alpha$ -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

**Asymmetric synthesis of new enantiomerically enriched  $\alpha$ -amino acids**

A.S. Saghyan, A.F. Mkrtchyan, Z.Z. Mardiyan, L.A. Hayriyan, H.V. Adonts

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Conference

**Synthesis and reactivity of chiral enols coordinated with Ni<sup>2+</sup> ions and a case of a Michael adduct intermediate stabilized by the Ni-C bond**

L. A. Hayriyan, A. F. Mkrtchyan, Y. N. Belokon, A. S. Saghyan

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Conference

**Asymmetric synthesis of enantiomerically enriched new analogs of Ni II complexes which contain unsaturated alkene groups**

L. Hayriyan, A. Mkrtchyan, A. Saghyan

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Conference

**Asymmetric synthesis of optically active derivatives of  $\alpha$ -aminobutyric acid containing triazole groups in the side chain radical**

L.Sahakyan, H.Simonyan, S. Petrosyan, A. Mkrtchyan, A. Saghyan, E. Sekoyan

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Conference

**SYNTHESIS OF A NOVEL HETEROCYCLIC AMINO ACID AND ITS USE FOR THE SYNTHESIS OF SUGAR-AMINO ACID CONJUGATES**

Hayarpi Simonyan, Giovanni Roviello, Anna Mkrtchyan, Lusine Sahakyan, Satenik Petrosyan,

*Conference*

**Modeling, synthesis and study of impact of N-t-BOC-(S)- $\beta$ -[4-allyl-3- (pyridin-3'-yl)-5-thioxo-1,2,4-triazol-1-yl ]- $\alpha$ -alanyl-(S)-alanyl-glycyl- (S)-  $\beta$ -[4-allyl-3-(pyridin-3'-yl)-5-thioxo-1,2,4-triazol**

T. Sargsyan, A. Sargsyan, Yu. Danghyan, S. Jamgaryan, E. Gyulumyan, A. Hovhannisyan,  
N. Hovhannisyan, A. Tsaturyan, A. Saghyan

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*Conference*

**Asymmetric synthesis of new enantiomerally enriched unsaturated  $\alpha$ -amino acids by promotion of cross-coupling reactions**

Liana Hayriyan, Anna Mkrtchyan, Ashot Saghyan

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*Conference*

**Asymmetric synthesis and biological activity of some unsaturated  $\alpha$ -amino acids**

L. Hayriyan, A. Karapetyan, A. Tovmasyan, A. Mkrtchyan, A. Sargsyan, A. Saghyan

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