

# Nelli Grant Karapetyan

✉ nelkh@ysu.am



## Research Institute of Physics

Laboratory of Physics of Macromolecules

Senior researcher

## Education

<b>Institution</b>	YSU
<b>Faculty</b>	Faculty of Biology
<b>Date</b>	1976 - 1981
<b>Degree name</b>	Masters

## Scientific Rank/degree

<b>Institution</b>	YSU
<b>Date</b>	2009
<b>Degree name</b>	Associate professor
<b>Specialty</b>	Biological sciences

<b>Institution</b>	YSU
<b>Date</b>	1989
<b>Degree name</b>	Candidate
<b>Specialty</b>	Biological sciences
<b>Scientific Supervisor</b>	Nazaryan K. B.
<b>Research Topic</b>	Physicochemical, catalytic and immunological properties of brain enolase isoenzymes.

## Language skills

Հայերեն Русский English

## Work experience

<b>Institution</b>	YSU
<b>Period of time</b>	1993 till now
<b>Rank/degree</b>	Senior Researcher

## Scientific interests

- Isolation and purification of DNA and proteins. The study of the physical and chemical properties of proteins, enzymes and DNA.

- Study of the complex formation of some potential drugs with DNA and proteins. Study of antitumor and radioprotective properties of new synthesized compounds in vitro and in vivo

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## Publications

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Article

### **Influence of Cu L-Histidinate Schiff Base Derivatives on Structural Features of Irradiated Rat's DNA**

Nelli H. Karapetyan, Samvel G. Haroutiunian, Gayane V. Ananyan

Cell Biochemistry and Biophysics 2024 2557-2565

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Article

### **Binding Parameters of CuTAlIPyP4 and CoTAlIPyP4 Porphyrins to DNA Using Adsorption Isotherms [Параметры связывания CuTAlIPyP4 и CoTAlIPyP4 порфиринов с ДНК по изотермам адсорбции]**

G. V. Ananyan, N. H. Karapetyan, Y. B. Dalyan, R. S. Ghazaryan, S. G. Haroutiunian

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2024 347-352

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Article

### **ANTICANCER EFFECT OF AgTOEPyP4 PORPHYRIN**

N. H. KARAPETYAN, G. V. ANANYAN, S. G. HAROUTIUNIAN

ԵՊՀ գիտական տեղեկագիր. Քիմիա և կենսաբանություն: 2023 41-53

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Article

### **Interaction of MnTOEtPyP4 porphyrin with DNA**

Gayane V. Ananyan, Yeva B. Dalyan, Nelli H. Karapetyan, Vigen G. Barkhudaryan, Ani A. Avetisyan

Journal of Biomolecular Structure and Dynamics 2023 7290-7296

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Article

### **FLAP Collaboration: Tasks and Perspectives. Study of Fundamentals and New Applications of Controllable Generation of Electromagnetic Radiation by Relativistic Electrons Using Functional Materials**

L. Aloyan, A. Avetisyan, Y. Dalyan, L. Grigoryan, N. Karapetyan, V. Kocharyan, A. Mkrtchyan, A. Movsisyan, A. Saharian, A. Shahbazyan, A. Baldin, 37

Physics of Particles and Nuclei Letters 2021 338-353

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Article

### **The structural features of poly(dG-dC).poly(dG-dC) at complexation with some porphyrins**

Gayane V. Ananyan, Nelli H. Karapetyan, Yeva B. Dalyan

Journal of Biomolecular Structure and Dynamics 2021 1-6

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Article

### **Molecular Transformations in DNA under the Influence of UV-radiation**

Vigen G. Barkhudaryan, Gayane V. Ananyan, Nelli H. Karapetyan

Current Applied Polymer Science 2020 1-7

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Article

### **pH-dependent complex formation of Zn-mesotetra(4-N-hydroxyethylpyridyl) porphyrin with**

**cancer DNA**

Nelli H. Karapetyan, Gayane V. Ananyan, Yeva B. Dalyan

Journal of Biomolecular Structure and Dynamics 2020 1-6

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*Article***DNA PROTECTION FROM RADIATION DAMAGE**

N. H. KARAPETYAN

Proceedings of the YSU B: Chemical and Biological Sciences 2019 86-90

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*Article***ПЛАВЛЕНИЕ ДНК ОПУХОЛЕНОСЯЩИХ КРЫС, ЛЕЧЕННЫХ мезо-ТЕТРА(4-N-ГИДРОКСИЭТИЛПИРИДИЛ)ПОРФИРИНОМ И ЕГО Ag-, Zn-, Co-ПРОИЗВОДНЫМИ**

Н.Г. Карапетян, Г.В. Ананян, Е.Б. Далян, С.Г. Арутюнян

Биофизика (Biophysics) 2017 458-463

[http://elibrary.ru/title\\_about.asp?id=7680](http://elibrary.ru/title_about.asp?id=7680)

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*Article***Investigation of irradiated rats DNA in the presence of Cu(II) chelates of amino acids Schiff bases**

N.H. Karapetyan, A.L. Torosyan, M. Malakyan, S.A. Bajinyan, S.G. Haroutiunian

Journal of Biomolecular Structure and Dynamics 2016 177-183

<http://www.tandfonline.com/action/journalInformation?journalCode=tbsd20#.V25anP...>

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*Article***Influence of Amino Acids Schiff Bases on Irradiated DNA Stability In Vivo**

N. H. Karapetyan, A. L. Torosyan, S. G. Haroutiunian, M. H. Malakyan, S. A. Bajinyan, I. E. Grigoryan

Cell Biochemistry and Biophysics 2013 1137-1145

<http://link.springer.com/journal/12013>

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*Article***DNA damage and anti-tumor activity induced by Zn, Ag and Co containing meso- tetra(4-N-oxyethylpyridyl)porphyrins in vivo**

Nelli H. Karapetyan, Lusya V. Torosyan, Gayane V. Ananyan, Rafael E. Muradyan

Journal of Porphyrins and Phthalocyanines 2010 pp. 349-353

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*Conference***The features of complexformation of poly(dI-dC) 2 with porphyrins**

Gayane V. Ananyan, Nelli H. Karapetyan, Samvel G. Haroutiunian, Yeva B. Dalyan

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*Conference***Лечение опухоленосащих крыс мезо-тетра(4N-гидроксиэтилпиридил) порфиринами H<sub>2</sub>TOEtPyP<sub>4</sub> и AgTOEtPyP<sub>4</sub>**

Карапетян Н.Г., Ананян Г.В., Далян Е.Б., Арутюнян С. Г.

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*Conference***DEVELOPMENT OF POTENTIAL RADIOPROTECTIVE AGENTS FOR USE IN FIELD EXPOSURE SITUATIONS**

N. Karapetyan, M. Malakyan, A. Dallakyan, S. Bajinyan, V.Tonoyan, V.Ayvazyan

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*Conference*

**Molecular alterations in DNA under UV-irradiation**

Gayane V. Ananyan, Nelli H. Karapetyan, Vigen G. Barkhudaryan

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*Conference*

**Effect of Nanoparticles on Erythrocyte Membranes at Irradiation**

N.H. Karapetyan, G.V. Ananyan, R.S. Ghazaryan, T.M. Jomardyan, V.G. Barkhudaryan, V. Kalantaryan

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*Conference*

**Peculiarities of melting DNA from Crocker's sarcoma of a mouse treated with Ag-meso-tetra(4-N-hydroxyethylpyridyl) porphyrin in the presence of Mn<sup>2+</sup> ions**

Nelli H. Karapetyan, Gayane V. Ananyan, Yeva B. Dalyan

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*Conference*

**The futures of complex formation of poly[d(A-C)]. poly[d(G-T)] with porphyrins**

Gayane V. Ananyan, Nelli H. Karapetyan, Yeva B. Dalyan

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