

# Syuzan Ashot Marutyan

✉ syuzan.marutyan@ysu.am



## Research Institute of Biology

Basic and Pathological Biochemistry Laboratory

Junior Researcher

## Education

---

<b>Institution</b>	YSU
<b>Faculty</b>	Biology
<b>Date</b>	2017 - 2019
<b>Degree name</b>	Masters

---

<b>Institution</b>	YSU
<b>Faculty</b>	Biology
<b>Date</b>	2013 - 2017
<b>Degree name</b>	Bachelor

---

## Language skills

Русский English

---

## Work experience

---

<b>Institution</b>	YSU STEM school
<b>Period of time</b>	2023 till now
<b>Rank/degree</b>	teacher

---

<b>Institution</b>	“Royal jelly as a new for radioprotective and antioxidant biochemical drug” 21T-1F300
<b>Period of time</b>	2021 till now
<b>Rank/degree</b>	labourant

---

<b>Institution</b>	YSU Institute of Biology
<b>Period of time</b>	2019 till now
<b>Rank/degree</b>	Senior Laboratory Assistant

---

<b>Institution</b>	N°55 school named after A. Chekhov
<b>Period of time</b>	2017 - 2018
<b>Rank/degree</b>	teacher

---

## Scientific interests

---

- molecular biology, radiation biochemistry
- 

## Publications

---

*Article*

**Changes in ATPase activity, antioxidant enzymes and proline biosynthesis in yeast *Candida guilliermondii* NP-4 under X-irradiation**

Hasmik Karapetyan, Syuzan Marutyan, Anna Muradyan, Hamlet Badalyan, Seda Marutyan,

Karen Trchounian

Journal of Bioenergetics and Biomembranes 2024 1-8

---

*Article*

**Royal Jelly-Mediated Silver Nanoparticles Show Promising Anticancer Effect on HeLa and A549 Cells Through Modulation of the VEGFa/PI3K/Akt/MMP-2 Pathway**

Meri Kocharyan, Syuzan Marutyan, Edita Nadiryan, Mikayel Ginovyan, Hayarpi Javrushyan,

Seda Marutyan, Nikolay Avtandilyan

Applied Organometallic Chemistry 2024 1-11

---

*Article*

**The antimicrobial effects of silver nanoparticles obtained through the royal jelly on the yeasts *Candida guilliermondii* NP-4**

Seda Marutyan, Hasmik Karapetyan, Lusine Khachatryan, Anna Muradyan, Syuzan Marutyan,

Anna Poladyan, Karen Trchounian

Scientific Reports 2024 19163

---

*Article*

**ALTERATION OF TOTAL AND MITOCHONDRIAL ATPASE ACTIVITY IN THE BREAST AND LIVER IN BREAST CANCER-INDUCED RATS**

Seda V. Marutyan, Gayane A. Petrosyan, Anna R. Muradyan, Lilit A. Marutyan, Syuzan A. Marutyan,

Nikolay V. Avtandilyan

Proceedings of the YSU B: Chemical and Biological Sciences 2022 151-160

---

*Article*

**Changes in growth kinetic parameters, morphology and mitotic activity of yeasts *Candida guilliermondii* exposed to the low-intensity waves of 51.8-GHz frequency**

Seda Marutyan, Syuzan Marutyan, Liparit Navasardyan, Karlen Hovnanyan, Armen Trchounian

Archives of Microbiology 2021 3707-3714

---

*Article*

**Ultrastructural investigation of acidocalcisomes and ATPase activity in yeasts *Candida guilliermondii* NP-4 as “complementary” stress-targets**

Marutyan S., Marutyan S., Navasardyan L., Trchounian A., Hovnanyan K., Hovnanyan M.

Letters in Applied Microbiology 2020 413-419

---

*Article*

**ВЛИЯНИЕ РЕНТГЕНОВСКОГО И МИКРОВОЛНОВОГО ИЗЛУЧЕНИЙ НА ДЕЗАМИНИРОВАНИЕ**

## **ПУРИНОВЫХ НУКЛЕОТИДОВ В ДРОЖЖЕВЫХ КЛЕТКАХ CANDIDA GUILLIERMONDII НП-4**

S. Marutyan, G. Petrosyan, S. Marutyan, L. Navasardyan, A. Trchounian

Известия высших учебных заведений. Серия: химия и химическая технология (Izvestiya Vysshikh Uchebnykh Zavedenii, Seriya Khimiya i Khimicheskaya Tekhnologiya)  
2019 48-52

---

*Conference*

### **Влияние микроволнового излучения на рост и ферментативную активность дрожжей Candida guilliermondii НП-4**

Марутян С.В., Петросян Г.А., Марутян С.А., Навасардян Л.А., Трчунян А.А.

---

*Conference*

### **Влияние рентгеновского облучения и микроволн на морфологию дрожжевых клеток C.guilliermondii НП-4**

С.В. МАРУТЯН, С.А. МАРУТЯН, Л.А. НАВАСАРДЯН, К.О. ОБНАНЯН

---

*Conference*

### **Влияние рентгеновского облучения и микроволн на АТФ-азную активность митохондрий дрожжей C.guilliermondii НП-4**

Л.А.Навасардян, С.В. Марутян, С.А. Марутян, Г.А.Петросян

---

*Conference*

### **Influence of Royal Jelly on the Growth of Yeasts Candida guilliermondii Exposed to Electromagnetic Radiation**

S. Marutyan, S.A.Marutyan, S. Gevorgyan, L. Navasardyan, A. Trchounian

---

*Conference*

### **Changes in some metabolic processes of yeasts Candida guilliermondii NP-4 under influence of microwaves with a frequency of 51.8GHz**

Marutyan S.V., Petrosyan G.A., Karapetyan H.M., Marutyan S.A., Khachatryan L.D., Kalantaryan V.P.,

Muradyan A.

---

*Conference*

### **The effect of Royal Jelly (RJ) on the biomass amount and colony forming ability of yeasts C.guilliermondii NP-4**

Navasardyan L.H., Marutyan S.V., Marutyan S.A.

---

*Conference*

### **Influence of silver nanoparticles obtained by the presence of royal jelly on survival of yeasts Candida guilliermondii NP-4 and on the activity of antioxidant enzymes**

S. Marutyan, H. Karapetyan, S. Marutyan, L. Khachatryan

---

*Conference*

### **Influence of X-irradiation on the activity of ATPase and enzymes of antioxidant system in yeasts Candida guilliermondii NP-4**

S. Marutyan, A. Muradyan, H. Karapetyan, V. Khalantaryan, S. Marutyan, L. Khachatryan

---

*Conference*

### **ROYAL JELLY AS A MEANS OF REGULATING PROCESSES DISTURBED BY EXPOSED MILLIMETER WAVES**

Marutyan S.A., Karapetyan H.M., Muradyan A.R., Khachatryan L.D, Kalantaryan V.P., Marutyan S.V.

---

*Conference*

**Influence of UV-irradiation on lipid peroxidation processes and the activity of plasmatic and mitochondrial ATPases of yeasts *Candida guilliermondii* NP-4**

S. Marutyan, H. Karapetyan, S. Marutyan, A. Muradyan, T. Manutsyan

---

*Conference*

**The effect of royal jelly on biomass accumulation and antioxidant enzyme activity of the yeast *C. guilliermondii* NP-4**

Marutyan S., Muradyan A., Karapetyan H., Marutyan S.

---

*Conference*

**The Effect of 51.8 GHz Microwaves on Nucleotide Deamination and ATPase Activity in *C. guilliermondii* NP-4 Yeast in the Presence of Royal Jelly**

Marutyan S.A., Muradyan A., Hayrapetyan M., Marutyan S.V.

---

*Conference*

**The Influence of *Dicranium scoparium* Moss Extract on the Growth of the Yeast *Candida guilliermondii* NP-4**

Gayane Semerjyan, Inesa Semerjyan, Syuzan Marutyan, Hasmik Karapetyan, Hripsime Ter-Sahakyan,

Seda Marutyan

---

*Conference*

**Changes in ATPase and Antioxidant Enzymes Activities in Yeast *Candida guilliermondii* NP-4 Exposed to Millimeter Waves**

Muradyan Anna, Marutyan Syuzan, Hayrapetyan Meri, Karapetyan Hasmik, Marutyan Seda

---

*Conference*

**Royal Jelly Enhances Recovery from UV-Induced Metabolic and Oxidative Stress in *Candida guilliermondii* NP-4**

Syuzan A. Marutyan, Anna Muradyan, Meri Hayrapetyan, Hasmik Karapetyan, Seda V. Marutyan

---

*Conference*

**Effect of Royal Jelly on Antioxidant Enzymes and ATPase Activity of *C. guilliermondii* NP-4 Yeast Exposed to X-Ray Radiation**

Seda Marutyan, Hasmik Karapetyan, Syuzan Marutyan, Anna Muradyan, Mery Hayrapetyan

---