

# Babken Arthur Hovhannisyan

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## Institute of Physics

Chair of Radiophysics and Electronics

Assistant

## Education

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<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Faculty of Radiophysics
<b>Date</b>	2019 - 2022
<b>Degree name</b>	PhD student

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<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Faculty of Radiophysics
<b>Date</b>	2017 - 2019
<b>Degree name</b>	Masters

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<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Faculty of Radiophysics
<b>Date</b>	2013 - 2017
<b>Degree name</b>	Bachelor

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## Scientific Rank/degree

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<b>Institution</b>	Yerevan State University
<b>Date</b>	2022
<b>Degree name</b>	Candidate
<b>Specialty</b>	Physico-mathematical sciences
<b>Scientific Supervisor</b>	Armen Makaryan
<b>Research Topic</b>	INVESTIGATION OF BIOLOGICAL SIGNALS USING HIGHER-ORDER SPECTRAL ANALYSIS

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## Language skills

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Հայերեն Русский English

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## Work experience

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<b>Institution</b>	YSU
<b>Period of time</b>	2022 till now

**Rank/degree** lecturer

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**Institution** Institute of Radiophysics and Electronics

**Period of time** 2022 till now

**Rank/degree** Junior Researcher

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**Institution** Russian-Armenian University

**Period of time** 2022 till now

**Rank/degree** Lecturer

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**Institution** Aviation University named after A. Khanperyants

**Period of time** 2020 - 2021

**Rank/degree** Lecturer

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**Institution** National instruments

**Period of time** 2019 till now

**Rank/degree** engineer

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**Institution** LT-Pyrkal

**Period of time** 2016 - 2019

**Rank/degree** engineer

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## Scientific interests

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- Digital processing of biological signals
  - Statistical Signal Analysis
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## Membership

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**Institution** Council of Young Scientists of RA National Academy of Sciences

**Period of time** 2022 till now

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**Institution** Member of YSU Board of Trustees

**Period of time** 2017 - 2022

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**Institution** Member of academic council of Radiophysics Faculty

**Period of time** 2014 - 2022

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## State awards and honorary titles

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2021 "Annual educational award for the best students in the field of IT" in the "Best PhD" category

2019 YSU "Best Student-2019"

2019 "Bronze medal" from Yerevan State University

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## Publications

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*Article*

### **Biosignal processing using machine learning methods**

A. Mkoyan, A. Manasyan, A. Makaryan, B. Hovhannisyan, T. Hovhannisyan, S. Khachunts

International Conference on Microwave & THz Technologies, Wireless Communications and OptoElectronics (IRPhE 2022)  
2023 22987012/ 4-6

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*Article*

### **Biosignal processing using machine learning methods**

T. Hovhannisyan, A. Makaryan, B. Hovhannisyan, S. Khachunts, A. Mkoyan, A. Manasyan

International Conference on Microwave & THz Technologies, Wireless Communications and OptoElectronics (IRPhE 2022)  
2023 3

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*Article*

### **Registration of Brain Radio Signals and Their Bispectral Analysis**

B. A. Hovhannisyan, H.L. Ayvazyan, S.V. Antonyan, A. H. Makaryan, E. R. Sivolenko, G. A. Tsaturyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2022 87-90

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*Article*

### **Extracting Human Brain Signals from the EEG Records Using LabVIEW and Advanced Signal Processing**

Babken Hovhannisyan, Eduard Sivolenko, Armen Makaryan, Hamlet Ayvazyan, Andrei Medvedev,

Valentina Temkina

Springer Proceedings in Physics (International Youth Conference on Electronics, Telecommunications and Information Technologies)  
2022 183-190

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*Article*

### **РЕГИСТРАЦИЯ РАДИОСИГНАЛОВ МОЗГА И ИХ БИСПЕКТРАЛЬНЫЙ АНАЛИЗ**

Г.Л. АЙВАЗЯН, С.В. АНТОНЯН, А.О. МАКАРЯН, Б.А. ОГАНЕСЯН, Э.Р. СИВОЛЕНКО, Г.А. ЦАТУРЯН

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2022  
125-130

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*Article*

### **Study of Brain Radio Signals Using Bispectral Analysis**

B.A. Hovhannisyan

Armenian Journal of Physics 2021 138-141

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*Article*

### **ЧАСТОТНО-ВРЕМЕННОЙ АНАЛИЗ ЭЛЕКТРОКАРДИОГРАММ**

Б.А. ОГАНЕСЯН, А.О. МАКАРЯН, Т.Н. ОГАНЕСЯН

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2020  
575-581

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*Conference*

**AM signal finding in the environment full of micro doppler shifts using bispectral analysis.**

Babken Hovhannisyán, Sivolenko Eduard, Andrey Medvedev

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