

## CURRICULUM VITAE

### Name (first, mid, last)

Nizami Mikayil Mehdiyev

### Scientific degree and occupation:

Doctor of Phys.-Math. Sciences, prof. (half-time)  
Baku State University-at present

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### BRIEF AUTOBIOGRAPHY:

Was born on December 14, 1949 in Azerbaijan, Nakhchivan Autonomous Republic, Ordubad city. Has high education. Physicist, Professor on Physics. Married, has a son. Azerbaijani. Lives in Baku.

### EDUCATION, SCIENTIFIC DEGREE AND TITLE

1966-1971	Faculty of Physics of Azerbaijan (Baku) State University
1971-1974	Post-graduate student in Institute of Physics, Azerbaijan National Academy of Sciences
1975	Ph.D, “Electroluminescence and switching effect in lamellar crystals $\text{GaCe}$ , $\text{BiCe}$ , $\text{GaC}$ ”, Number of Specialization 01.04.10 –Physics of Semiconductors and Detectors, Baku State University
1991	Doctor of sciences, “Generation-Recombination Processes in High-Anisotropy Selenides $\text{A}^{\text{BYBYBYBY}}$ and $\text{A}^{\text{BYBYBYBYBYBYBYBY}}$ ”
2000	Professor, High Attestation Commission at the President of Azerbaijan Republic

### WORK PLACE AND OCCUPATION

#### Work places:

1971-1974	Post-graduate student in Institute of Physics, Azerbaijan National Academy of Sciences
1975-1997	Senior research assistant, junior researcher, researcher, senior researcher, leading researcher in Institute of Physics, Azerbaijan National Academy of Sciences
Since 1997	Professor of Department of Physics, Azerbaijan State Oil Academy
Since 1995	Give lectures on “Optoelectronics” in the Chair “Physical electronics” of Baku State University
1977-1978	Leningrad Physico-Technical University named after A.F.Ioffe (Laboratory of academician J.I.Alferova, professor Prochukhan)

#### Teaching subjects:

“Optoelectronics”, “Optoelectrical devices, equipments and systems”, “Fiber optics”

Articles- 126

Books – 3.

Patent-1

Supervisor of Candidates – 1

#### Scientific innovation

To study the effects generated in semiconductors and in structures on their basis in consequence of light

action in order to develop energy converters with high efficiency, micro- and nano- measuring detectors and polarized light sources

To apply the mechanism of generation basing on the principles of optical imaging, transmission and reception of data by optoelectronic devices.

### **Brief information on State Awards-**

### **INTERNATIONAL CONFERENCES, WORKSHOPS AND SCHOLLS**

1993	9 <sup>th</sup> ICIMC, August 8-12, Yokohoma (Japan)
1995	10 <sup>th</sup> ICTMC, Stuttgart (Germany)
1997	11 <sup>th</sup> ICTMC, Salford (England)
2000	The 1 <sup>st</sup> Eurasian Conference on Nuclear Science and Its Application, Izmir(Turkey)
2003	E-MRS Spring Meeting, Strasbourg, France
2004, 2006	The 2 <sup>nd</sup> and 3 <sup>th</sup> International Conference on Technical and Physical Problems in Power Engineering, Tabriz (Iran), Ankara (Turkey)
2005	International Conference “Physics-2005”, Baku
2007-2009	I, II, III Республиканская конференция «Проблемы современной физики», БГУ, Баку
2010	Prosendings 6 <sup>th</sup> Technical and physical Problems of Power Engineering, Tabriz, Iran
2010	17 <sup>th</sup> International Conference on Ternary and Multinary Compounds, Baku
2011	European Materials Research Society, Spring Meeting, Strasbourg
2012	The V international conference Perspectives of peaceful use of nuclear energy, Baku
2013	Материалы научной конференции “Актуальные проблемы физики” посвященной 80 летному юбилею Академика Б.М.Аскерова, Баку
2014	19 <sup>th</sup> International Conference on Ternary and Multinary Compounds, Tokio
2015	Материалы VIII Республиканской научной конференции “Актуальные проблемы физики”, Баку
2015	Материалы Республиканской научной конференции «Проблемы современной физики», Баку
2016	XII Международная конференция по аморфным и частично кристаллическим полупроводникам, С-Петербург,
2016	Международный симпозиум по солнечной энергии, Ташкент
2016	The 13 <sup>rd</sup> International Conference on Technical and Physical Problems of Electrical Engineering (ICTPE-2016) Bibao, SPAIN
2017	International Conference on «Energy of the Future»: Challenges and Opportunities
2017	11-я Международная конференция «Ядерная и радиационная физика», г. Алматы, Казахстан
2018	The 14 <sup>th</sup> International Conference on Technical and Physical Problems of Electrical Engineering (ICTPE-2018), Nakhchivan, Azerbaijan
2018	21 <sup>st</sup> International Conference on Ternary and Multinary Compounds, USA

### **FIELD OF INVESTIGATION**

Investigation of Generation and Recombination Mechanisms in High-Anisotropy Semiconductors, Thin Films and Structures on their Basis

### **SCIENTIFIC WORKS**

1. Photodetectors of IR-irradiation on the base of  $CdS_{1-x}Se_x$  films sedimented in solutions. Journal of Applied Physics. 6, p.63-68, 2000.
2. Photodetectors and sources of polarized light on the base of high-anisotropy semiconductors. Journal of Alternative Energy and Ecology, Solar Power Engineering, АЕЕ №10(42) , p. 19, 2006
3. Electrical and photoelectrical properties of solar elements  $CuO_2/Бд_0,43H_0,6C/БдТл$  produced by electrochemical methods. PTS, т.40, №12, с.1476-1478, 2006
4. Switching effect in the films  $H-Бд_{1-x}3H_xC_{1-y}Ce_y$ . Journal of Physics, v. XIV, p.107-108, 2008

5. Preparation and mechanism of current passage in p-GaAs/n-Cd<sub>1-x</sub>Zn<sub>x</sub>S<sub>1-y</sub>Se<sub>y</sub> heterojunction, Azerbaijan journal of Physics, 2010, v XVI №2, p.51-54
6. Фотоплетохроизм и оптические переходы в монокристаллах II-III<sub>2</sub>-VI<sub>4</sub>, Azerbaijan journal of Physics, 2013, v XIX №2, p.71-75
7. Многофункциональные фотоприемники на основе кристаллов n-InSe, ж «Прикладная физика», Москва, 2014, №6, с.76-81
8. Properties of the relaxation processes in photoresistors based on ZnIn<sub>2</sub>Se<sub>4</sub> type anisotropic crystals, Journal of Qafqaz Universiteti-Physics, 2016, volume 4, №1, p.3-8
9. Investigating the dielectric properties and low-frequency relaxation process of TlGaSe<sub>2</sub> crystals, Modern Physics Letters B, World Scientific Publishing 1750134, 2017
10. The study of the influence of gamma radiation on dielectric properties of properties TlGaSe<sub>2</sub> crystals, Journal of Radiation Reserchers, vol 5, №1, p.66-72, 2018

#### **BOOKS**

- 1 "Optoelectronics" for students of High Schools, "Maarif", 2005, 416 p.
- 2 "Elements of quantum Physics" manual for students of High Schools, "BDU", 1999, 76p.
3. "Physics course" manual for students of High Schools, ASUOI, 2015, 600 p.

#### **STATE, INTERNATIONAL PROGRAMS AND GRANTS**