

# CURRICULUM VITAE

**GOGYAN ANAHIT**



## PERSONAL INFORMATION

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Date and place of birth      October 10, 1984, Yerevan, Armenia

Affiliation and official address      Institute for Physical Research, National Academy of Sciences of Armenia, Gitavan-2, 0203 Ashtarak, Armenia

Phone      Work: +374/10/288150; Mobile : +374/55/660955

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Home address      Nor-Nork 7-th massive, 37/45, 0092 Yerevan, Armenia

Marital status      Single

## EDUCATION

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2007-2010      Institute for Physical Research of National Academy of Sciences of Armenia,  
Laboratoire Interdisciplinaire Carnot de Bourgogne, Université de Bourgogne, UMR CNRS 5209, Dijon, France  
*Joint Ph.D. degree (mention très honorable)*

2005-2007      Yerevan State University, Department of Physics  
*Master's degree with honors*

2001-2005      Yerevan State University, Department of Physics  
*Bachelor's degree with honors*

## EMPLOYMENT

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2014 March to Present      Institute for Physical Research, National Academy of Sciences of Armenia  
*Scientific Secretary*

2012 Dec to Present      European commission  
*Evaluator/reviewer of FP7 and H2020 proposals/projects*

2005 Dec to Present      Institute for Physical Research, National Academy of Sciences of Armenia  
*Junior Researcher*

## AWARDS RECEIVED

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- 2010 International Prize "**The Commonwealth of Debuts**", competition among young scientists of the CIS countries  
<http://en.kremlin.ru/events/president/news/9240>
- 2009 **The Prize of the President of the Republic of Armenia**
- 2008 Conference ISQE-2008 Award for "**Best poster presentation of young scientist, selected for oral presentation**", Burgas, Bulgaria
- 2006 Award "**Best Student-2006**", annual competition of Yerevan State University
- 2005 Award "**Best Graduation Paper**", Yerevan State University, department of Physics

## FIELDS OF INTEREST

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Quantum Optics, Quantum Information, Nonlinear Optics, Atomic physics

## CURRENT RESEARCH INTERESTS

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Light-matter interaction in the presence of magnetic field;

Cavity QED studies;

Light propagation in photorefractive medium;

Generation of quantum states

## SCIENTIFIC VISITS

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2014, January, May, October Universite de Bourgogne, Dijon, France

Short-term invited researcher

2012, December, Universite de Bourgogne, Dijon, France

Short-term invited researcher

2012, March-June, University of California, Berkeley, USA

Short-term scientific visit

2011, August, Universite de Bourgogne, Dijon, France

Invited researcher by CNRS (Chercheuse invitée par CNRS)

## PUBLICATIONS

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- ❖ Magnetic field induced absorption reduction as a tool for vector magnetic field measurement  
A. Gogyan, N. Sisakyan, Yu. Malakyan  
[Journal of Physics B \(under submission\) \(2016\)](#)
- ❖ Coherent-state-induced transparency  
A. Gogyan, Yu. Malakyan  
[Physical Review A 93, 043801 \(2016\)](#)

- ❖ Selective reflection of light from Rb<sub>2</sub> molecular vapor  
S. Shmavonyan, A. Khanbekyan, A. Gogyan, M. Movsisyan, A. Papoyan  
[Journal of Molecular Spectroscopy 313, 14–18 \(2015\)](#)
- ❖ Heralded generation of single photons entangled in multiple temporal modes with controllable waveforms  
A. Gogyan, N. Sisakyan, R. Akhmedzhanov and Yu. Malakyan  
[Laser Physics 24, 115204 \(2014\)](#)
- ❖ Deterministic production of N-photon states from a single atom-cavity system  
A. Gogyan, S. Guerin, C. Leroy, Yu. Malakyan  
[Physical Review A 86, 063801 \(2012\)](#)
- ❖ Study of radiofrequency radiation by means of optical effect of electromagnetically induced transparency  
A. Gogyan, N. Sahakyan, Yu. Malakyan  
[J. Cont. Phys., 47, 248 \(2012\)](#)
- ❖ Deterministic generation of indistinguishable single-photon pulses in the single-atom-cavity QED system  
A. Gogyan, S. Guerin, H.-R. Jauslin, and Yu. Malakyan  
[International Journal of Quantum Information, 09, pp 239-249 \(2011\)](#)
- ❖ Deterministic source of a train of indistinguishable single-photon pulses with single-atom-cavity system  
A. Gogyan, S. Guerin, H.-R. Jauslin, and Yu. Malakyan  
[Phys. Rev. A 82, 023821 \(2010\)](#)
- ❖ Shaping coherent excitation of atoms and molecules by a train of ultrashort laser pulses  
A. Gogyan, S. Guerin and Yu. Malakyan  
[Phys. Rev. A 81, 033401 \(2010\)](#)
- ❖ Qubit transfer between photons at telecom and visible wavelengths in a slow-light atomic medium  
A. Gogyan  
[Phys. Rev. A 81, 024304 \(2010\)](#)
- ❖ Quantum beating in uv radiation generation by ultrashort laser pulses via four-wave mixing  
A. Gogyan and Yu. Malakyan  
[Phys. Rev. A 78, 053401 \(2008\)](#)
- ❖ Entanglement-preserving frequency conversion in cold atoms  
A. Gogyan and Yu. Malakyan  
[Phys. Rev. A 77, 033822 \(2008\)](#)
- ❖ Selective excitation of atoms and molecules by ultrashort laser pulses  
A. Gogyan, and Yu. Malakyan  
[Proc. of SPIE, 7027, 70271L \(2008\)](#)
- ❖ Quantum Beats in Stimulated Electronic Raman Scattering of Ultrashort Laser Pulses  
A. Gogyan and Yu. Malakyan  
[Optics and Spectroscopy 101, 751 \(2006\)](#)

## FEW RECENT CONFERENCE/MEETINGS

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- 2016 June 26 – 66<sup>th</sup> Lindau Nobel Laureate Meeting  
July 1
- 2015 October 6 – 9 A. Gogyan, N. Sisakyan, Sh. Petrosyan, Yu. Malakyan, “Transparency induced by transverse magnetic field as a tool for vector magnetic field measurement”, Laser Physics 2015 (oral)
- 2014 October 29 – 31 A. Gogyan, S. Guerin, H.-R. Jauslin, C. Leroy, Yu. Malakyan, “Deterministic generation of indistinguishable multi-photon states in a single atom-cavity system”, CCQED meeting (Circuit and cavity QED), Aarhus, Denmark (poster)
- 2014 September 22 – 26 A. Gogyan, S. Guerin, C. Leroy, Yu. Malakyan, “Single photon and multi-photon state generation in a single atom-cavity QED system”, QuantArm 2014, Ashtarak, Armenia (oral)
- 2014 September 1 – 5 A. Gogyan, Yu. Malakyan, “Single photon entanglement in multi-temporal modes”, 2nd International Symposium on Optics and its Applications, Yerevan, Armenia (oral)
- 2013 June 30 – July 5 A. Gogyan, “Non-linear faraday effect for the pulsed probe field”, QIPC (Quantum Information Processing and Communication), Florence, Italy (poster)
- 2013 June 16 – 22 A. Gogyan, Generation of N-Photon States From a Single Atom Confined in a Cavity QED, CAMEL IX (Control of Quantum Dynamics of Atoms, Molecules and Ensembles by Light), Nessebar, Bulgaria (oral)
- 2011 June 28 – July 2 A. Gogyan, S. Guerin, Yu. Malakyan, "Efficient generation of Fock states in a single-atom cavity-QED system", EGAS 43 (Conference of the European Group for Atomic Systems), Fribourg, Switzerland (poster)

## GRANTS RECEIVED AS PRINCIPAL INVESTIGATOR

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- 2015 January – December *ANSEF PS-opt-3771*  
2013 January – December *ANSEF PS-opt-3201*  
2012 March – 2013 October *NFSAT TFP-12-03*  
2010 January – November *NFSAT/CRDF ECSP 09-85*

## INVOLVED IN

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- 2009 – 2013 LIA IRMAS International Associated Laboratory  
2011 – 2014 FP7 IPERA grant N295025  
2013 – 2016 FP7 SECURE R2I grant N609534  
2016 – 2019 ISTC grant N A2130

## CONFERENCE ORGANIZATION

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- 2015 October 6 – 9 Laser Physics 2015 – Annual international conference organized by Institute for Physical Research, Ashtarak, Armenia  
Conference Secretary
- 2014 September 22 – 26 QuantArm 2014 – International conference and workshop, Tsaghkadzor, Armenia  
Conference Secretary
- 2013 October 8 – 11 Laser Physics 2013 – Annual international conference organized by Institute for Physical Research, Ashtarak, Armenia  
Local organizing committee
- 2011 September 5 – 9 OPTICS and its applications – International conference, Yerevan-Ashtarak, Armenia  
Local organizing committee

## OTHER ACTIVITIES

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- 2014 September – Present Member of Armenian Territorial Committee of Optics
- 2013 September – December Popularization of Science in schools:  
*Series of seminars on Physics news in distant Armenian regions*

## COMPUTER SKILL

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Wolfram Mathematica

Matlab

COMSOL MULTIPHYSICS

HTML/CSS

## KNOWLEDGE OF LANGUAGES

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Armenian	Native
Russian	Fluent
English	Fluent
French	Basics